http://www.oblible.com



wintershall dea

Wintershall Dea Finance B.V.

(The Hague, the Netherlands)

€1,000,000,000 0.452 per cent. notes due 2023, issue price: 100.00 per cent.,
€1,000,000,000 0.840 per cent. notes due 2025, issue price: 100.00 per cent.,
€1,000,000,000 1.332 per cent. notes due 2028, issue price: 100.00 per cent.,
€1,000,000,000 1.823 per cent. notes due 2031, issue price: 100.00 per cent.

each with an unconditional and irrevocable guarantee from

Wintershall Dea GmbH

(Celle, Federal Republic of Germany)

Wintershall Dea Finance B.V., its business address at Bogaardplein 47, 2284DP Rijswijk, The Netherlands, a private limited liability company (*besloten vennootschap met beperkte aansprakelijkheid*) under the laws of the Netherlands, with its corporate seat (*statutaire zetel*) at The Hague, the Netherlands (the "Issuer") and a wholly-owned finance subsidiary of Wintershall Dea GmbH, a private limited liability company (*Gesellschaft mit beschränkter Haftung*) with its business address at Friedrich-Ebert-Straße, 160, 34119 Kassel, Germany and its registered seat in Celle, Germany (the "Guarantor" or the "Company"), and together with its consolidated subsidiaries, "we", "us", "our", "Wintershall Dea" or the "Group") will issue on or about 25 September 2019 (the "Issue Date") €1,000,000,000 0.452 per cent. notes due 2023 (the "2023 Notes"), €1,000,000,000 0.840 per cent. notes due 2025 (the "2025 Notes"), €1,000,000,000 1.332 per cent. notes due 2028 (the "2028 Notes") and €1,000,000,000 1.823 per cent. notes due 2031 (the "2031 Notes", and together with the 2023 Notes, the 2025 Notes and the 2028 Notes, the "Notes" and each a "Series of Notes"), each in a denomination of €100,000.

The Notes will be unsecured and unsubordinated obligations of the Issuer and will rank equally in right of payment with the Issuer's existing and future unsecured and unsubordinated obligations. The Notes will be unconditionally and irrevocably guaranteed by the Guarantor pursuant to unconditional and irrevocable guarantees (each of these guarantees, a "Guarantee", and collectively, the "Guarantees"). The Guarantees will be unsecured and unsubordinated debt obligations of the Guarantor and will rank equally in right of payment with all existing and future unsecured and unsubordinated obligations of the Guarantor.

The Notes and the Guarantees will be governed by the laws of the Federal Republic of Germany ("Germany").

The 2023 Notes will bear interest on their outstanding amount from and including 25 September 2019 to but excluding 25 September 2023 at a rate of 0.452 per cent. per annum, payable annually in arrear on 25 September, commencing on 25 September 2020. Unless previously redeemed or repurchased, the 2023 Notes will be redeemed at their specified denomination on 25 September 2023.

The 2025 Notes will bear interest on their outstanding amount from and including 25 September 2019 to but excluding 25 September 2025 at a rate of 0.840 per cent. per annum, payable annually in arrear on 25 September, commencing on 25 September 2020. Unless previously redeemed or repurchased, the 2025 Notes will be redeemed at their specified denomination on 25 September 2025.

The 2028 Notes will bear interest on their outstanding amount from and including 25 September 2019 to but excluding 25 September 2028 at a rate of 1.332 per cent. per annum, payable annually in arrear on 25 September, commencing on 25 September 2020. Unless previously redeemed or repurchased, the 2028 Notes will be redeemed at their specified denomination on 25 September 2028.

The 2031 Notes will bear interest on their outstanding amount from and including 25 September 2019 to but excluding 25 September 2031 at a rate of 1.823 per cent. per annum, payable annually in arrear on 25 September, commencing on 25 September 2020. Unless previously redeemed or repurchased, the 2031 Notes will be redeemed at their specified denomination on 25 September 2031.

The Issuer may, at its option, redeem each Series of Notes separately in whole or in part on the terms set forth in §4 of the terms and conditions of each Series of Notes (together the "Terms and Conditions").

Each Series of Notes will initially be represented by a temporary global note in bearer form (each a "Temporary Global Note"). Interests in the Temporary Global Note shall be exchanged, in whole or in part, for interest in a permanent global note (each a "Permanent Global Note" and, together with the Temporary Global Notes, each a "Global Note") on or after the date 40 days after the later of the commencement of the offering and the Issue Date (the "Exchange Date"), upon certification as to non-U.S. beneficial ownership. The Global Notes will be deposited prior to the Issue Date with a common safekeeper for Clearstream Banking S.A., Luxembourg and Euroclear Bank SA/NV.

This offering memorandum (the "Offering Memorandum") is not an offer to sell nor is it an offer to buy any Notes in any jurisdiction where such offer or sale is not permitted or to any person or entity to whom it is unlawful to make an offer or sale.

AN INVESTMENT IN THE NOTES INVOLVES CERTAIN RISKS. PROSPECTIVE INVESTORS SHOULD HAVE REGARD TO THE FACTORS DESCRIBED UNDER THE SECTION HEADED "RISK FACTORS" BEGINNING ON PAGE 21.

This Offering Memorandum does not constitute a prospectus within the meaning of Regulation (EU) No 1129/2017 of the European Parliament and of the Council of 14 June 2017 (as amended, the "Prospectus Regulation").

Neither the Luxembourg Financial Supervisory Authority (Commission de Surveillance du Secteur Financier, or "CSSF"), nor any other "competent authority" (as defined in the Prospectus Regulation) has approved this Offering Memorandum or reviewed information contained in this Offering Memorandum.

This Offering Memorandum constitutes a prospectus for the purpose of the Luxembourg Law of 16 July 2019 on Prospectuses for Securities, as amended. Application has been made to list the Notes on the official list (the "Official List") of the Luxembourg Stock Exchange and for admission to trading of the Notes on the Euro MTF Market operated by the Luxembourg Stock Exchange, which is a multilateral trading facility for the purposes of Directive 2014/65/EU of the European Parliament and of the Council on markets in financial instruments, as amended, ("MiFID II"), and, therefore, not an EU-regulated market.

The Notes and the Guarantees have not been and will not be registered under the United States Securities Act of 1933, as amended (the "U.S. Securities Act") or with any securities regulatory authority of any State or other jurisdiction of the United States of America (the "United States"), and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons (as defined in Regulation S under the U.S. Securities Act ("Regulation S") except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the U.S. Securities Act. The Notes are being offered and sold outside the United States to non-U.S. persons in reliance on Regulation S under the U.S. Securities Act ("Regulation S"). For a description of these and certain further restrictions on offers, sales and transfers of the Notes and the distribution of this Offering Memorandum, see "*Subscription and Sale—Selling Restrictions*".

Joint Lead Managers and Joint Bookrunners

BARCLAYS **BofA MERRILL LYNCH** **J.P. MORGAN** **SOCIÉTÉ GÉNÉRALE CORPORATE & INVESTMENT BANKING**

Joint Bookrunners

Citigroup **Commerzbank** **Crédit Agricole CIB** **Credit Suisse** **Deutsche Bank AG** **Goldman Sachs International**

HSBC **ING** **Mizuho Securities** **Morgan Stanley** **MUFG** **UniCredit Bank**

The date of this Offering Memorandum is 19 September 2019.

http://www.oblible.com

RESPONSIBILITY STATEMENT

Each of the Issuer and the Guarantor accepts responsibility for the information contained in this Offering Memorandum and hereby declares that, to the best of their knowledge, the information contained in this Offering Memorandum is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its import.

Each of the Issuer and the Guarantor further confirms that (i) this Offering Memorandum contains all information with respect to the Issuer, the Guarantor, the Group, the Notes and the Guarantees, which is material in the context of the issue and offering of the Notes, including all information which, according to the particular nature of the Issuer, the Guarantor, the Notes and the Guarantees, is necessary to enable investors and their investment advisers to make an informed assessment of the assets and liabilities, financial position, profits and losses, and prospects of the Issuer, the Guarantor and the Group and of the rights attached to the Notes and the Guarantees; (ii) the information contained in this Offering Memorandum relating to the Issuer, the Guarantor, the Group, the Notes and the Guarantees is accurate and complete in all material respects and not misleading; (iii) any opinions and intentions expressed herein are honestly held and based on reasonable assumptions; (iv) there are no other facts in relation to the Issuer, the Guarantor, the Group, the Notes or the Guarantees, the omission of which would, in the context of the issue and offering of the Notes and the Guarantees, make this Offering Memorandum as a whole or any of such information or the expression of any such opinions or intentions misleading; and (v) reasonable enquiries have been made by the Issuer and the Guarantor to ascertain all such facts for the purposes aforesaid.

NOTICE TO INVESTORS

THE NOTES ARE OF A SPECIALIST NATURE AND SHOULD ONLY BE BOUGHT AND TRADED BY INVESTORS WHO ARE PARTICULARLY KNOWLEDGEABLE IN INVESTMENT MATTERS. AN INVESTMENT IN THE NOTES IS SPECULATIVE, INVOLVES A HIGH DEGREE OF RISK AND MAY RESULT IN THE LOSS OF ALL OR PART OF THE INVESTMENT.

No person is authorised to give any information or to make any representations other than those contained in this Offering Memorandum and, if given or made, such information or representations must not be relied upon as having been authorised by or on behalf of the Issuer, the Guarantor, Barclays Bank PLC, J.P. Morgan Securities plc, Merrill Lynch International and Société Générale (together, the "Joint Lead Managers") or Citigroup Global Markets Limited, Commerzbank Aktiengesellschaft, Crédit Agricole Corporate and Investment Bank, Credit Suisse Securities (Europe) Limited, Deutsche Bank AG, Goldman Sachs International, HSBC Bank plc, ING Bank N.V., Mizuho Securities Europe GmbH, Morgan Stanley & Co. International plc, MUFG Securities (Europe) N.V. and UniCredit Bank AG (and together with the Joint Lead Managers, the "Joint Bookrunners"). Neither the delivery of this Offering Memorandum nor any offering, sale or delivery of any Notes made hereunder shall, under any circumstances, create any implication that (i) the information in this Offering Memorandum is correct as of any time subsequent to the date hereof or, as the case may be, subsequent to the date on which this Offering Memorandum has been most recently supplemented; (ii) there has been no adverse change in the financial situation of the Issuer, the Guarantor or the Group which is material in the context of the issue and sale of the Notes since the date of this Offering Memorandum or, as the case may be, the date on which this Offering Memorandum has been most recently supplemented, or the balance sheet date of the most recent consolidated financial statements of the Group which are included in this Offering Memorandum; or (iii) any other information supplied in connection with the issue of the Notes is correct at any time subsequent to the date on which it is supplied or, if different, the date indicated in the document containing the same.

TO THE EXTENT PERMITTED BY THE LAWS OF ANY RELEVANT JURISDICTION, NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, IS MADE BY THE JOINT BOOKRUNNERS AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SET FORTH IN THIS OFFERING MEMORANDUM, AND NOTHING CONTAINED IN THIS OFFERING MEMORANDUM IS, OR SHALL BE RELIED UPON AS, A PROMISE OR REPRESENTATION, WHETHER AS TO THE PAST OR THE FUTURE.

EACH PERSON RECEIVING THIS OFFERING MEMORANDUM ACKNOWLEDGES THAT SUCH PERSON HAS NOT RELIED ON THE JOINT BOOKRUNNERS OR ANY OF THEIR RESPECTIVE AFFILIATES OR ANY PERSON ACTING ON THEIR BEHALF IN CONNECTION WITH ITS INVESTIGATION OF THE ACCURACY OR COMPLETENESS OF SUCH

INFORMATION OR ITS INVESTMENT DECISION. EACH PERSON CONTEMPLATING MAKING AN INVESTMENT IN ANY SECURITIES MUST MAKE ITS OWN INVESTIGATION AND ANALYSIS OF THE CREDITWORTHINESS OF THE ISSUER, THE GUARANTOR AND THE GROUP AND ITS OWN DETERMINATION OF THE SUITABILITY OF ANY SUCH INVESTMENT, WITH PARTICULAR REFERENCE TO ITS OWN INVESTMENT OBJECTIVES AND EXPERIENCE, AND ANY OTHER FACTORS WHICH MAY BE RELEVANT TO IT IN CONNECTION WITH SUCH INVESTMENT.

NONE OF THE JOINT BOOKRUNNERS ACCEPTS ANY RESPONSIBILITY WHATSOEVER FOR THE CONTENTS OF THIS OFFERING MEMORANDUM OR FOR ANY OTHER STATEMENT MADE OR PURPORTED TO BE MADE BY IT, OR ON ITS BEHALF, IN CONNECTION WITH THE ISSUER, THE GUARANTOR, THE GROUP, THE NOTES AND THE GUARANTEES. TO THE EXTENT PERMITTED BY THE LAWS OF ANY RELEVANT JURISDICTION, EACH OF THE JOINT BOOKRUNNERS ACCORDINGLY DISCLAIMS ALL AND ANY LIABILITY WHETHER ARISING IN TORT, CONTRACT OR OTHERWISE WHICH IT MIGHT OTHERWISE HAVE IN RESPECT OF THIS OFFERING MEMORANDUM OR SUCH STATEMENT.

The Issuer reserves the right to withdraw Offering at any time prior to the Issue Date, and the Issuer and the Joint Bookrunners reserve the right to reject any commitment to subscribe for any Notes in the whole or in part and to allot to any purchaser of the Notes less than the full amount subscribed by such purchaser.

This Offering Memorandum should be read and understood in conjunction with any supplement hereto.

The legally binding language of this Offering Memorandum is English. Any part of this Offering Memorandum in German language constitutes a legally non-binding translation, except for the Terms and Conditions. The legally binding language of the Terms and Conditions is German.

In this Offering Memorandum, unless otherwise specified, all references to "€", "EUR" or "Euro" are to the currency introduced at the start of the third stage of the European economic and monetary union, and as defined in Article 2 of Council Regulation (EC) No 974/98 of 3 May 1998 on the introduction of the Euro, as amended, and references to "$" or "USD" or "U.S. Dollar" refer to the legal currency of the United States.

This Offering Memorandum may only be used for the purpose for which it has been published.

The offer, sale and delivery of the Notes and the distribution of this Offering Memorandum in certain jurisdictions are restricted by law. Persons into whose possession this Offering Memorandum comes are required by the Issuer and the Joint Bookrunners to inform themselves about and to observe any such restrictions.

This Offering Memorandum does not constitute, and may not be used for the purpose of, an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorised or to any person to whom it is unlawful to make such an offer or solicitation. For the avoidance of doubt, the content of any website referred to in this Offering Memorandum does not form part of this Offering Memorandum.

NOTICE TO RESIDENTS OF THE UNITED STATES

The Notes and the Guarantees have not been, and will not be, registered under the U.S. Securities Act. The Notes and the Guarantees may not be offered, sold or delivered within the United States or to U.S. persons. The Notes and the Guarantees are being offered and sold outside the United States in reliance on Regulation S.

THE NOTES AND THE GUARANTEES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION, ANY STATE SECURITIES COMMISSION IN THE UNITED STATES OR ANY OTHER U.S. REGULATORY AUTHORITY, NOR HAS ANY OF THE FOREGOING AUTHORITIES PASSED UPON OR ENDORSED THE MERITS OF THE OFFERING OF NOTES OR THE ACCURACY OR THE ADEQUACY OF THIS OFFERING MEMORANDUM. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENCE IN THE UNITED STATES.

PROHIBITION OF SALES TO EEA RETAIL INVESTORS

The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("EEA"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in Directive 2014/65/EU (as amended, "MiFID II") or (ii) a customer within the meaning of Directive 2016/97/EU (as amended, the "Insurance Distribution Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II. Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

MIFID II PRODUCT GOVERNANCE/PROFESSIONAL INVESTORS AND ELIGIBLE COUNTERPARTIES ONLY TARGET MARKET

Solely for the purposes of the product approval process conducted by each Joint Bookrunner that is a manufacturer for the purposes of EU Delegated Directive 2017/593, the target market assessment in respect of the Notes has led to the conclusion that, as of the date of this Offering Memorandum: (i) the target market for the Notes is eligible counterparties and professional clients only, each as defined in MiFID II, and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "Distributor") should take into consideration the manufacturers' target market assessment; however, a Distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels.

NOTICE TO PROSPECTIVE INVESTORS IN THE UNITED KINGDOM

This Offering Memorandum is only being distributed to and is only directed at (i) persons who are outside the United Kingdom (ii) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (iii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). The Notes are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such Notes will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this Offering Memorandum or any of its contents.

NOTICE TO PROSPECTIVE INVESTORS IN CANADA

The Notes may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemption*s or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the Notes must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this Offering Memorandum (including any amendment thereto) contains a misrepresentation, *provided* that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the Joint Bookrunners are not required to comply with the disclosure requirements of National Instrument 33-105 regarding underwriter conflicts of interest in connection with this Offering.

NOTICE TO PROSPECTIVE INVESTORS IN HONG KONG

Each Joint Bookrunner has represented and agreed in this Offering Memorandum that:

(i) it has not offered or sold and will not offer or sell in Hong Kong, by means of any document, any Securities other than (i) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (ii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong (the "C(WUMP)O)" or which do not constitute an offer to the public within the meaning of the C(WUMP)O; and

(ii) it has not issued or had in its possession for the purposes of issue, and will not issue nor have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Notes, which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance.

NOTICE TO PROSPECTIVE INVESTORS IN JAPAN

The Notes have not been, and will not be, registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended, the "FIEA"). Each Joint Bookrunner has represented and agreed in this Offering Memorandum that it has not offered or sold and will not offer or sell any Securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, a resident of Japan except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEA and any other applicable laws, regulations and ministerial guidelines of Japan.

NOTICE TO PROSPECTIVE INVESTORS IN SINGAPORE

Solely for the purposes of its obligations pursuant to sections 309B(1)(a) and 309B(1)(c) of the Securities and Futures Act (Chapter 289 of Singapore) (the "SFA"), the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A of the SFA) that the Notes are "prescribed capital markets products" (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018).

For a further description of certain restrictions on offerings and sales of the Notes and distribution of this Offering Memorandum (or of any part thereof) see "*Subscription and Sale—Selling Restrictions.*"

STABILISATION

IN CONNECTION WITH THE ISSUE OF THE NOTES, MERRILL LYNCH INTERNATIONAL (OR PERSONS ACTING ON ITS BEHALF) MAY OVER-ALLOT NOTES OR EFFECT TRANSACTIONS WITH A VIEW TO SUPPORTING THE MARKET PRICE OF THE NOTES AT A LEVEL HIGHER THAN THAT WHICH MIGHT OTHERWISE PREVAIL. HOWEVER, STABILISATION MAY NOT NECESSARILY OCCUR. ANY STABILISATION ACTION MAY BEGIN ON OR AFTER THE DATE ON WHICH ADEQUATE PUBLIC DISCLOSURE OF THE TERMS OF THE OFFER OF THE NOTES IS MADE AND, IF BEGUN, MAY CEASE AT ANY TIME, BUT IT MUST END NO LATER THAN THE EARLIER OF 30 DAYS AFTER THE ISSUE DATE OF THE NOTES AND 60 DAYS AFTER THE DATE OF THE ALLOTMENT OF THE NOTES. ANY STABILISATION ACTION OR OVER-ALLOTMENT MUST BE CONDUCTED BY THE RELEVANT STABILISATION MANAGER(S) (OR PERSON(S) ACTING ON BEHALF OF ANY STABILISATION MANAGER(S)) IN ACCORDANCE WITH ALL APPLICABLE LAWS, DIRECTIVES, REGULATIONS AND RULES OF ANY RELEVANT JURISDICTION.

FORWARD LOOKING STATEMENTS

This Offering Memorandum includes certain "*forward-looking statements*". All statements other than statements of historical facts included in this Offering Memorandum, including, without limitation, those regarding the Issuer's, the Guarantor's and the Group's financial positions, business strategies, plans and objectives of management for future operations, are forward-looking statements. These forward-looking statements can be identified by the use of forward-looking terminology, including the terms *"aim",*

"anticipate", "believe", "continue", "could", "estimate", "expect", "forecast", "guidance", "intend", "may", "plan", "project", "probability", "target", "goal", "objective", "should" or "will" or, in each case, their negative, or other variations or comparable terminology. Such forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause the actual results, performance or achievements of the Issuer, the Guarantor or the Group, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such forward-looking statements are based on numerous assumptions regarding the Issuer's, the Guarantor's or the Group's, as applicable, present and future business strategies and the environment in which the Issuer, the Guarantor or the Group, as applicable, will operate in the future. In addition, even if their financial condition, results of operations and cash flows, and the development of the industry in which they operate, are consistent with the forward-looking statements contained in this Offering Memorandum, those results or developments may not be indicative of results or developments in subsequent periods.

Factors that could cause such differences in actual results include (but are not limited to): hydrocarbon prices, the quantity and quality of the Group's reserves and resources, operational risks inherent in the Group's exploration, production and transportation activities, competition in the oil and gas industry, policy changes and shifts towards alternative energy, among other factors, also discussed in "*Risk Factors*".

The foregoing factors should not be construed as exhaustive. Other sections of this Offering Memorandum describe additional factors that could adversely affect the Issuer's, the Guarantor's or the Group's business, financial condition or results of operations. Moreover, they operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time and it is not possible to predict all such risk factors. The Issuer, the Guarantor and the Group cannot assess the impact of all risk factors on their business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. Given these risks and uncertainties, you should not place undue reliance on forward-looking statements as a prediction of actual results.

Any forward-looking statements in this Offering Memorandum speak only as of the date on which they are made. The Issuer, the Guarantor and the Group expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement contained herein to reflect any change in their respective expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

TABLE OF CONTENTS

	Page
PRESENTATION OF FINANCIAL AND OTHER INFORMATION	vii
SUMMARY	1
RISK FACTORS	21
USE OF PROCEEDS	46
CAPITALISATION	47
SELECTED AND OTHER FINANCIAL INFORMATION	48
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	66
UNAUDITED PRO FORMA FINANCIAL INFORMATION OF THE GROUP	101
DESCRIPTION OF THE ISSUER	123
DESCRIPTION OF THE GUARANTOR	125
INDUSTRY OVERVIEW	127
BUSINESS OF THE GROUP	138
REGULATORY OVERVIEW	178
MANAGEMENT	195
TERMS AND CONDITIONS OF THE 2023 NOTES	202
TERMS AND CONDITIONS OF THE 2025 NOTES	234
TERMS AND CONDITIONS OF THE 2028 NOTES	266
TERMS AND CONDITIONS OF THE 2031 NOTES	298
FORM OF GUARANTEES	330
TAXATION	334
SUBSCRIPTION AND SALE	340
INDEPENDENT AUDITORS	344
INDEPENDENT PETROLEUM ENGINEERS	345
GENERAL INFORMATION	346
KEY DEFINITIONS AND GLOSSARY OF TECHNICAL TERMS	348
INDEX TO FINANCIAL STATEMENTS	F-1

PRESENTATION OF FINANCIAL AND OTHER INFORMATION

General

Investors should only rely on the information in this Offering Memorandum. No person has been authorised to give any information or to make any representations in connection with the offer, sale or delivery of the Notes, other than those contained in this Offering Memorandum and, if given or made, such information or representations must not be relied upon as having been authorised by or on behalf of the Issuer, the Company, the Group, or any of the Joint Bookrunners. In making an investment decision, prospective investors should rely upon your own examination of the terms of the Notes and the Guarantee and the financial data and other information contained in this Offering Memorandum.

The contents of this Offering Memorandum are not to be construed as legal, business or tax advice. Each prospective investor should consult his or her own lawyer, financial adviser or tax adviser for legal, financial or tax advice. In making an investment decision, each investor must rely on their own examination, analysis and enquiry of the Company and the terms of the offer and sale of the Notes and the Guarantee, including the merits and risks involved.

This Offering Memorandum is not intended to provide the basis of any credit or other evaluation and should not be considered as a recommendation by any of the Company, the Group, or any of the Joint Bookrunners or any of their representatives that any recipient of this Offering Memorandum should purchase the Notes. Prior to making any decision as to whether to purchase the Notes, prospective investors should read this Offering Memorandum. Investors should ensure that they read the whole of this Offering Memorandum carefully and not just rely on key information or information summarised within it.

Financial information

Historical financial information

The Group was formed on 1 May 2019 through the combination of:

- the oil and gas business (including the gas transportation business) of BASF SE, a European stock corporation (*Societas Europaea, SE*) (“BASF” and together with its subsidiaries, the “BASF Group” or “BASF”), which business was held in Wintershall; and
- the oil and gas business of LetterOne Holdings S.A., a Luxembourg public limited company (*société anonyme*) (“LetterOne”) comprising Dea and its subsidiaries.

BASF holds 67 per cent. of the Company’s 156,716,500 ordinary shares (*Stammgeschäftsanteile*), each with a nominal value (*Nennbetrag*) of €1.00 (together, the “Ordinary Shares” and each an “Ordinary Share”) as well as all of the Company’s 32,721,027 non-voting preference shares (*Vorzugsgeschäftsanteile*), each with a nominal value (*Nennbetrag*) of €1.00 (together, the “Preference Shares” and each a “Preference Share”), translating into an overall participation of BASF in the registered share capital of the Company of 72.7 per cent. LetterOne indirectly holds the remaining 33 per cent. of the Ordinary Shares and 27.3 per cent. of the registered share capital of the Company. LetterOne and BASF together hold 100 per cent. of the shares in the Company.

As a result of the Merger, Wintershall and Dea adopted a short fiscal year, running from 1 January 2019 to 30 April 2019 to allow for the termination of fiscal unity with their respective former parent companies and the creation of a new fiscal unity between Wintershall and Dea as of 1 May 2019. The losses that Wintershall and Dea had in the short fiscal year ended 30 April 2019 were absorbed by their respective shareholders, in accordance with German GAAP. Wintershall Dea will also have a short fiscal year from 1 May 2019 to 31 December 2019 and has prepared unaudited condensed consolidated interim financial statements for the two months period from 1 May 2019 to 30 June 2019. From 1 January 2020, Wintershall Dea will have a 12 month fiscal year with a 31 December year end.

This Offering Memorandum includes the following consolidated historical financial information:

- Consolidated financial statements for Wintershall (i) as of and for each of the years ended 31 December 2016, 2017 and 2018, together with the notes thereto, which are derived from Wintershall’s audited consolidated financial statements as of and for the years ended 31 December 2017 and 2018, and (ii) as of and for the four months ended 30 April 2019, which is derived from Wintershall’s audited consolidated financial statements as of and for the short fiscal year ended 30 April 2019, together with the notes thereto (together, the “Wintershall Historical Financial Information”).

- Consolidated financial information of Dea (i) as of and for the year ended 31 December 2016, which is derived from Dea's audited consolidated financial statements as of and for the year ended 31 December 2017, together with the notes thereto, (ii) as of and for the years ended 31 December 2017 and 2018, which is derived from Dea's audited consolidated financial statements as of and for the year ended 31 December 2018, together with the notes thereto and (iii) as of and for the four months ended 30 April 2019, which is derived from Dea's audited consolidated financial statements as of and for the short fiscal year ended 30 April 2019, together with the notes thereto (together, the "Dea Historical Financial Information").
- Consolidated financial information of the Group as of and for the two months ended 30 June 2019, which is derived from the Group's unaudited condensed consolidated interim financial statements for the two months ended 30 June 2019 (the "Interim Financial Information").

The Wintershall Historical Financial Information, the Dea Historical Financial Information and the Interim Financial Information have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board and adopted by the European Union ("IFRS"). The Wintershall Historical Financial Information has been prepared in thousands of Euros, but is presented in this Offering Memorandum in millions of Euros. The audited financial statements for each of Wintershall and Dea were originally issued in German. The English language financial statements included elsewhere in this Offering Memorandum are translations and in the event of a discrepancy, the German language version will prevail. See "*Risk Factors—As a result of the Merger, the historical financial information contained in this Offering Memorandum is not comparable*."

Adjustments to the Dea Historical Financial Information

Dea's consolidated income statement and consolidated cash flow statement for the year ended 31 December 2017 included for comparative purposes in the audited consolidated financial statements as of and for the year ended 31 December 2018 have been adjusted due to the reporting of discontinued operations in accordance with IFRS 5. Discontinued operations are reported when a component of an entity that either has been disposed of, or is classified as "held for sale" represents a separate major line of business or geographical area of operations. In the consolidated income statement, the result from discontinued operations is reported separately from the result from continuing operations. In the consolidated cash flow statement, the cash flows from discontinued operations are presented separately from cash flows of continuing operations. Previous periods are, in each case, presented on a comparable basis.

Pro forma financial information

The unaudited *pro forma* consolidated income statement information presented in this Offering Memorandum has been prepared solely to show how the Merger would have impacted Wintershall's and Dea's income statements for the twelve months ended 31 December 2018 and the four months ended 30 April 2019 (together, the "Pro Forma Financial Information") had the Merger occurred on 1 January 2018. The Pro Forma Financial Information has been prepared for illustrative purposes only and does not purport to represent what the Group's actual results of operations would have been if the Merger had actually occurred on 1 January 2018, nor does it purport to project the Group's income statement at any future date or for any future period. The Pro Forma Financial Information is based on available information and certain assumptions and estimates that the Group believes are reasonable and may differ materially from the actual amounts that would have been achieved had the Merger occurred on 1 January 2018.

The Pro Forma Financial Information does not include all information required for financial statements under IFRS and should be read in conjunction with the audited consolidated financial statements of Wintershall and Dea and the unaudited condensed consolidated interim financial statements of the Group, in each case with the notes thereto, included elsewhere in this Offering Memorandum. In connection with the preparation of the Pro Forma Financial Information, certain adjustments were made to the audited statutory accounts of Wintershall and Dea in order to align their accounting policies and principles. As of the date of this Offering Memorandum, there are no new standards or interpretations implemented which had a significant impact on the Group's financial statements.

The unaudited *pro forma* financial information has not been prepared in accordance with Article 11 of Regulation S-X under the U.S. Securities Act, the Prospectus Regulation, IFRS or any GAAP.

http://www.oblible.com

Aggregated financial information

For the convenience of the reader, this Offering Memorandum also contains certain aggregated financial information which combines information extracted from the Pro Forma Financial Information and aggregates it with items from the Interim Financial Information. In particular, the presentation of EBITDAX for the 12 months ended 30 June 2019 was produced using the following components:

(a) The pro forma financial information for the year ended 31 December 2018, was split into "Total aligned financial information" and "Total pro forma adjustments" (for further detail please see "*Unaudited Pro forma financial information of the Group*");

(b) The financial information for the six months ended 30 June 2018 for Wintershall and Dea was derived from the management accounts of the respective company. The same reclassifications were performed for the period from January to June 2018 as for the preparation of the pro forma financial information for the year ended 31 December 2018 (for further detail please see "*Unaudited Pro forma financial information of the Group*");

(c) Aggregated financial information for the period from 1 July to 31 December 2018 was calculated as ("Total aligned financial information" for the pro forma financial information for the year ended 31 December 2018) less (b) above;

(d) Based on the result from (c) above, the same pro forma adjustments were applied to the aggregated financial information for the period from 1 July to 31 December 2018 as described in the notes (for further detail please see "*Unaudited Pro forma financial information of the Group*");

(e) The result from (d) above was added to the pro forma financial information for the short fiscal year ended 30 April 2019 and to the Interim financial information for the two months ended 30 June 2019;

(f) Based on the aggregated financial information calculated per (e) above, EBITDAX was calculated as set out below under "*Non-IFRS financial measures.*"

The aggregated financial information set out in this Offering Memorandum is provided solely for the convenience of the reader and is not indicative of the actual performance of the Group during any historical period or a projection of its operations or performance at any future date or for any future period.

Non-IFRS financial measures

This Offering Memorandum contains non-IFRS measures and ratios, including EBITDAX, Capex (including and excluding M&A), free cash flow, total debt, net debt and net debt to EBITDAX that are not required by, or presented in accordance with, IFRS.

The non-IFRS measures and ratios may not be comparable to other similarly titled measures of other companies and have limitations as analytical tools and should not be considered in isolation or as a substitute for analysis of the operating results of Wintershall, Dea or the Group as reported under IFRS. The Group's management uses these items to measure operating performance and liquidity in presentations to its management board and as a basis for strategic planning and forecasting, as well as monitoring certain aspects of our operating cash flow and liquidity. The Group presents non-IFRS measures and ratios because it believes that they and similar measures are widely used by certain investors, securities analysts and other interested parties as supplemental measures of performance and liquidity. Non-IFRS measures such as EBITDAX are not measurements of the Group's performance or liquidity under IFRS and should not be considered as alternatives to operating profit, profit for the year, or any other performance measures derived in accordance with IFRS or as alternatives to cash flow from operating, investing or financing activities.

EBITDAX is derived from the result before taxes or result from continuing operations before taxes or earnings before income taxes, as applicable, adjusted by the following items:

(a) Interest income and expenses and income from investments shown as financial income and financial expenses in the income statement but adjusted for interest effects regarding pension provisions and pension plan assets which are shown separately under (g) "Income from pension plan assets, interest expenses, service costs or other charges attributable to a post-employment benefit scheme";

(b) Income and expenses attributable to exploration, but excluding depletion/depreciation/amortisation, impairment losses and reversal of impairment losses, interest income and expenses, currency effects and pension items for exploration, since these are adjusted in separate line items;

(c) Depletion, depreciation, amortisation and impairment losses as shown in the income statement less reversal of impairment losses;

(d) Acquisition, disposal and restructuring costs as well as further extraordinary items. This represents all fees, costs and expenses, stamp duty, registration and other taxes incurred by the company in connection with an acquisition or a disposal and material items of an unusual or non-recurring nature as explained for every period (e.g. resulting from restructuring activities, payments from insurance claims, acquisition costs, change-of-control fees, gains and losses from the deconsolidation of subsidiaries, merger transaction costs);

(e) Realised and unrealised foreign exchange gains and losses (including hedging results);

(f) Gains over book value or losses on book value arising from the disposal of any fixed assets (other than the sale of trading stock); and

(g) Income from pension plan assets, interest expenses, service costs or other charges attributable to a post-employment benefit scheme ("Pension items").

Capex (excluding M&A) for Wintershall consists of payments for property, plant and equipment and payments for intangible assets as shown in the consolidated cash flow statements of Wintershall. Capex (excluding M&A) for Dea consists of cash outflows for additions to intangible assets, property, plant and equipment and investment property as shown in the consolidated cash flow statements of Dea. Capex (excluding M&A) for the Group consists of payments for intangible assets, property, plant and equipment and investment property as shown in the consolidated statement of cash flows of the Group.

Capex (including M&A) for Wintershall consists of payments for property, plant and equipment, payments for intangible assets and payments for acquisitions as shown in the consolidated cash flow statements of Wintershall. Capex (including M&A) for Dea consists of cash outflows for additions to intangible assets, property, plant and equipment and investment property and cash outflows for acquisitions as shown in the consolidated cash flow statements of Dea. Capex (including M&A) for the Group consists of payments for intangible assets, property, plant and equipment and investment property and payments for acquisitions as shown in the Consolidated statement of cash flows of the Group.

Free cash flow for Wintershall comprises the cash flow from operating activities and the cash flow from investing activities but excludes payment for acquisitions as shown in the consolidated cash flow statement of Wintershall. Free cash flow for Dea comprises the cash flow from operating activities and the cash flow from investment activities but excludes cash outflows for acquisitions as stated in the consolidated cash flow statement of Dea; the free cash flow 2018 is net of cash inflows earmarked for acquisitions that were made as a repayment of financial receivables from related parties as explained in the consolidated financial statements as of and for the year ended 31 December 2018. Free cash flow for the Group comprises the cash flow from operating activities and the cash flow from investing activities but excludes payments for acquisitions as shown in the consolidated statement of cash flows of the Group.

Total debt consists of liabilities to banks and interest bearing financial liabilities towards related parties as well as leasing liabilities (which comprise capitalised rights of use from leases under IFRS 16) of Wintershall, Dea or the Group, respectively. Leasing liabilities are included only for periods that start at or after 1 January 2019 in line with the first-time application of IFRS 16. Total debt excludes shareholder loans.

Net debt for Wintershall consists of Total debt less cash and cash equivalents. Net debt for Dea consists of Total debt less cash and cash equivalents plus restricted cash and cash equivalents, as shown in the consolidated balance sheet or the notes of the consolidated financial statements. Net debt for the Group consists of Total debt less cash and cash equivalents and less interest bearing financial receivables from related parties.

The Group presents a reconciliation of each of the non-IFRS measures to the most directly comparable measure calculated and presented in accordance with IFRS. For a reconciliation of these non-IFRS measures, refer to "Selected and other financial information."

Presentation

Prospective investors should consult their own professional advisors for an understanding of the differences between (i) IFRS, (ii) accounting principles generally accepted in Germany ("German GAAP"), (iii) the basis of preparation of the financial data included in this Offering Memorandum, and (iv) accounting principles accepted in other relevant jurisdictions. Prospective investors should also consult their own professional advisors for an understanding of the different bases of preparation of the financial information included in this Offering Memorandum, and how potential differences could affect the financial data and other information contained in this Offering Memorandum. The financial data and other information for prior periods is not necessarily indicative of the results to be expected for any future period.

Certain numerical figures and percentages set out in this Offering Memorandum, including financial data presented in billions or millions, have been subject to rounding adjustments and, as a result, the totals of the data in this Offering Memorandum may vary slightly from the actual arithmetic totals of such information. Percentages and amounts reflecting changes over time periods relating to financial and other data set forth in "*Management's discussion and analysis of financial condition and results of operations*" are calculated using the numerical data in relevant financial statements or the tabular presentation of other data (subject to rounding) contained in this Offering Memorandum, as applicable.

Certain reserves, resources and production information

Reserves and resources

Certain of the Group's gas and oil reserves and resources data presented in this Offering Memorandum has been prepared by the Group's management and, where applicable, audited by:

- RPS Energy Consultants Limited ("RPS"), with respect to certain assets in Germany, Norway, Egypt, Mexico and Algeria;
- Ryder Scott Petroleum Consultants ("Ryder Scott"), with respect to certain assets in Russia;
- Gaffney, Cline & Associates ("Gaffney Cline"), with respect to certain assets in Argentina;
- AGR Petroleum Services ("AGR"), with respect to certain assets in Norway, and

in each case, in accordance with the Petroleum Resource Management System ("PRMS") revised June 2018, sponsored by the Society of Petroleum Engineer's ("SPE"), as well as standards developed by the World Petroleum Council ("WPC"), the American Association of Petroleum Geologists ("AAPG"), the Society of Petroleum Evaluation Engineers ("SPEE"), the Society of Exploration Geophysicists ("SEG"), the Society of Petrophysicists and Well Log Analysts ("SPWLA") and the European Association of Geoscientists and Engineers ("EAGE").

The reserves and resources information presented in this Offering Memorandum is categorized as follows:

- "1P reserves," or "proved reserves," are those quantities of petroleum, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations. If deterministic methods are used, the term reasonable certainty is intended to express a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90 per cent. probability that the quantities actually recovered will equal or exceed the estimate.
- "2P reserves," or "proved plus probable reserves," are 1P reserves plus those additional reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than 1P reserves. It is equally likely that actual remaining quantities recovered will be greater than or less than the estimated 2P reserves. In this context, when probabilistic methods are used, there should be at least a 50 per cent. probability that the actual quantities recovered will equal or exceed the 2P reserves estimate.
- "2C resources" or "contingent resources," are those quantities of petroleum which are estimated, on a given date, to be potentially recoverable from known accumulations by application of development projects but which are not currently considered to be commercially recoverable owing to one or more contingencies, of the same technical confidence as probable, but not commercially matured to reserves.

Estimated reserves presented herein may differ from estimates made in accordance with guidelines and definitions used by other companies in the industry or by the SEC.

As of 31 December 2018, 93 per cent. of the Group's 2P reserves were audited by RPS, Ryder Scott, Gaffney Cline and AGR, with the remaining 7 per cent. derived from the Group's internal estimates and not audited externally.

Typical to the industry in which the Group operates, there are a number of uncertainties inherent in estimating quantities of 1P and 2P reserves and 2C resources. Therefore, the reserves and resources information in this Offering Memorandum represents only estimates. Reserves and resources assessment is a subjective process of estimating underground accumulations of oil and gas that cannot be measured in an exact manner. The accuracy of any reserves or resources estimate is a function of a number of variable factors and assumptions, many of which are beyond the Group's control.

Prospective investors should not place undue reliance on the ability of the estimates of 1P and 2P reserves and 2C resources to predict actual 1P and 2P reserves and 2C resources or on comparisons of similar reports concerning other companies, and this Offering Memorandum should be accepted with the understanding that our financial performance subsequent to the date of the estimates may necessitate revision of the 1P and 2P reserves and 2C resources information set forth herein. See "*Risk Factors—The oil and gas reserves and resources data presented in this Offering Memorandum are estimates that may vary significantly from the actual quantities that may be recovered*."

Potential investors should note that reserves data included in this Offering Memorandum have not been estimated under the standards of reserves measurement applied by the SEC (the "SEC Basis"). The SEC Basis differs from PRMS.

Unless otherwise indicated, all production and reserves figures contained in this Offering Memorandum are presented on a net basis to the Group's working interest. Working interest is the Group's percentage ownership in a project which corresponds to the percentage of operating costs for the project that it is required to pay.

Forecasts of production for the Group's individual assets are derived from internal production estimates and those included in the Group's reserve reports. The Group's legal interest and effective working interest in the relevant fields and license areas are separately disclosed. See "*Our Business—Material Agreements Relating to Our Assets*" for a more detailed discussion of the terms of the agreements governing the Group's interests. In licenses governed by production sharing contracts, the reserves the Group is entitled to may be lower than the working interest volumes presented herein. The reserves data presented in this Offering Memorandum excludes all reserves associated with the Group's onshore assets in Libya.

Hydrocarbon data

The reports referenced in this Offering Memorandum use the following estimates:

- oil and gas condensate in standard millions of barrels ("MMbbl") (a barrel being the equivalent of 42 U.S. gallons);
- natural gas in billions of cubic feet ("bcf") and trillions of cubic feet ("tcf") at standard temperature and pressure bases;
- natural gas liquids ("NGL") and liquefied petroleum gas ("LPG") in millions of barrels ("MMbbl"); and
- liquid in standard millions of barrels of oil equivalent ("MMboe").

This Offering Memorandum presents certain production and reserves-related information on an "equivalency" basis. The Group's conversion of data for tonnes into barrels and from cubic feet into boe may differ from that data used by other companies. The Group has assumed a conversion rate of 5.600 bcf to 1 MMboe for all Wintershall assets, and a conversion rate of 6.114 bcf to MMboe for all Dea assets, in each case as of 31 December 2018. These conversions were based on an energy equivalency conversion method primarily applicable at the burner tip and do not represent value equivalencies at the wellhead. Although these conversion factors are an industry accepted convention, they are not reflective of price or market value differentials between product types.

Presentation in reserve auditor reports

RPS has carried out assessments of certain fields in the Group's asset base in Germany, Norway, Egypt, Mexico and Algeria on a historical basis and provided its independent estimate as of 31 December 2018 in reports and related appendices latest dated 27 February 2019 (the "RPS Report").

Ryder Scott has carried out assessments of certain fields in the Group's asset base in Russia on a historical basis and provided its independent estimate as of 31 December 2018 in reports and related appendices dated 8 July 2019 (the "Ryder Scott Report").

Gaffney Cline has carried out assessments of certain fields in the Group's asset base in Argentina on a historical basis and provided its independent estimate as of 31 December 2018 in reports and related appendices dated 29 May 2019 (the "Gaffney Cline Report").

AGR has carried out assessments of certain fields in the Group's asset base in Norway on a historical basis and provided its independent estimate as of 31 December 2018 in reports and related appendices dated 7 June 2019 (the "AGR Report").

The technical personnel responsible for preparing the independent estimate of reserves and resources of selected assets at each of RPS, Ryder Scott, Gaffney Cline and AGR meet the requirements regarding qualifications, independence, objectivity and confidentiality set forth by the SPE. Each of RPS, Ryder Scott, Gaffney Cline and AGR is an independent consultancy and does not own an interest in the Group's properties and is not employed on a contingent fee basis.

Aggregation of reserves and resource data

Reserves and resources data as at 31 December 2018 provided in this Offering Memorandum aggregates data from various sources including the RPS Report, Ryder Scott Report, Gaffney Cline Report, AGR Report and internal information.

For 2018, aggregation of data was carried out given the following priorities:

- Independent estimates of the auditor as contracted by the operator (applies only with respect to Nova, where more than one audit report is available)
- Independent estimates of auditor (in all other cases, where only one audit report was produced)
- Internally derived reserves and resources estimates (where no audit is available).

Internal reserves estimates of former Wintershall are based on SPE PRMS "project maturity" subclassification of reserves. This differs from the reserves status sub-classification as applied by former Dea and contracted auditors and provided in this Offering Memorandum. For the purposes of this Offering Memorandum, the following proxy is assumed for former Wintershall internal estimates: developed reserves are derived from the project maturity sub-classes "Producing Reserves" and "Approved for Development Reserves", undeveloped reserves from "Justified for Development Reserves".

Commercial partners

In this Offering Memorandum, when describing activities in relation to licenses and assets in which the Group holds interests, references to "we," "our" and similar words mean, depending on the context, the Group and its commercial partners with interests in such licenses and assets.

To the extent not otherwise indicated, the information contained in this Offering Memorandum on the market environment, market developments, market and economic growth rates, market trends and competition in the markets in which the Group operates is based on the Issuer's and the Guarantor's assessments and estimates. These assessments are, in turn, based on publicly available sources, including, but not limited to, third-party studies or estimates that are also primarily based on data or figures from publicly available sources.

Market and Industry Data

The following third-party sources of industry and market data were used in the preparation of this Offering Memorandum:

- BP Statistical Review of World Energy 2019;
- U.S. Energy Information Administration;

- International Energy Agency Oil Market Report July 2019;
- Oil & Gas UK's 2018 Economic Report;
- Oil & Gas Authority; and
- OPEC World Oil Outlook September 2018.

The information from third-party sources that is cited in this Offering Memorandum has been reproduced accurately. As far as the Issuer and the Guarantor are aware and are able to ascertain from information published by such third parties, no facts have been omitted that would render the reproduced information included in this Offering Memorandum inaccurate or misleading. Prospective investors should nevertheless consider this information carefully. This Offering Memorandum also contains estimates of market data and information derived from these estimates that is not available from publications issued by market research firms or from any other independent sources. This information is based on the Group's internal estimates and, as such, may differ from the estimates made by its competitors or from data collected in the future by market research firms or other independent sources. To the extent the Group derived or summarised the market information contained in this Offering Memorandum from a number of different studies, an individual study is not cited unless the respective information can be taken from it directly.

The Issuer and the Guarantor have not independently verified the market data and other information on which third parties have based their studies or the external sources on which their own estimates are based. Therefore, the Issuer and the Guarantor assume no responsibility for the accuracy of the information on the market environment, market developments, growth rates, market trends and the competitive situation presented in this Offering Memorandum from third-party studies or the accuracy of the information on which the own estimates of the Issuer and the Guarantor are based. Market studies and analyses are frequently based on information and assumptions that may not be accurate or technically correct themselves, and their methodology is, by nature, forward-looking and speculative.

Currency exchange rate information

The table below shows the high and low European Central Bank ("ECB") rates for the Euro versus the U.S. dollar for each respective month and year and the rate at the end of the year. The average amounts set forth below under "Average" are calculated as the average of the ECB rates for the Euro versus the U.S. dollar on the last business days of each month for each respective month and year.

Period	Average	End	High	Low
August 2019	1.1126	1.1036	1.1222	1.1036
July 2019	1.1218	1.1151	1.1349	1.1115
June 2019	1.1380	1.129	1.1139	1.1189
May 2019	1.1185	1.1157	1.1245	1.1134
April 2019	1.1238	1.1218	1.1321	1.1123
March 2019	1.1303	1.1235	1.3870	1.1122
February 2019	1.1357	1.1416	1.1471	1.1260
January 2019	1.1416	1.1488	1.1535	1.1341
2018	1.1895	1.1450	1.2493	1.1261
2017	1.1300	1.1993	1.2060	1.3850
2016	1.1069	1.0541	1.1569	1.0364

SUMMARY

This summary highlights certain information about the Group's business and the offering of the Notes described elsewhere in this Offering Memorandum. This summary is not complete and does not contain all the information you should consider before investing in the Notes. This summary is qualified in its entirety by, and should be read in conjunction with, the more detailed information included in this Offering Memorandum. You should carefully read the entire Offering Memorandum to understand the Group's business, the nature and terms of the Notes and the tax and other considerations which are important to your decision to invest in the Notes, including the risks discussed under the caption "Risk Factors".

Overview of the Group

The Group is the leading European independent gas and oil company with full lifecycle capabilities across exploration, development and production activities, as well as a stable, cash-generative European midstream and transportation business with investments in European gas transportation assets.

The Group comprises Wintershall Dea GmbH and its subsidiaries, including Wintershall Dea Deutschland AG (formerly DEA Deutsche Erdoel AG, "Dea"). The Group was formed on 1 May 2019 through the combination of:

- the oil and gas business (including the gas transportation business) of BASF which business was held in Wintershall Holding GmbH (as the Company was named until the Merger, hereinafter "Wintershall") and its subsidiaries; and
- the oil and gas business of LetterOne, comprising Dea and its subsidiaries, (the "Merger").

The Merger created the largest independent European exploration and production ("E&P") company based on production and 2P reserves. The Group's primary mission is the secure, efficient, environmentally-conscious and sustainable production of natural gas and crude oil. It connects cost-effective energy sources from its balanced, long-life asset portfolio to strategic OECD markets.

The Group's core production, development and exploration assets are located in Northern Europe, Russia, North Africa, the Middle East and Latin America. Its material assets in North Africa, Russia, and its investment in Ogarrio, Mexico, benefit from investment guarantees provided by the Federal Republic of Germany. The Group operates predominantly via a partnership model with long-term joint venture arrangements with some of the world's leading oil and gas companies. Its hydrocarbon products are priced on varying bases, including Brent linked and fixed gas prices, with approximately 50 per cent. of its production priced pursuant to contracted and/or regulated prices and the remainder priced pursuant to Brent/liquids or European spot gas prices. Additionally, the Group has economic interests in onshore and offshore natural gas transportation pipelines in Northern Europe, including the transportation network of GASCADE and Nord Stream 1, and its onshore connecting pipelines OPAL and NEL, and finances an additional offshore gas pipeline project, Nord Stream 2. Headquartered in Kassel and Hamburg, Germany, the Group had approximately 2,830 full time equivalent ("FTE") employees as of 30 June 2019.

The Group's average aggregated working interest production during the 12 months ended 31 December 2018 was 589 mboe/d and 645 mboe/d during the six months ended 30 June 2019. The Group targets production of approximately 750 mboe/d by 2023. As of 31 December 2018, the Group had 1P reserves of 3.0 billion boe and 2P reserves of 3.7 billion boe (a 1P to 2P ratio of 82 per cent.) with a 2P reserve life of 18 years. The Group's 2P reserves consisted of 73 per cent. gas and 27 per cent. liquids, with 63 per cent. located in Russia, 24 per cent. in Europe, 7 per cent. in Latin America and 5 per cent. in North Africa and the Middle East. Its 1P reserves consist of 1.2 billion boe of undeveloped reserves and 1.9 billion boe of developed reserves. In addition to its reserves base, the Group also had 2C resources of 2.6 billion boe. For the 12 months ended 31 December 2018, its *pro forma* sales revenues were €6.3 billion and its aggregated EBITDAX was €3.6 billion, in each case giving *pro forma* effect for the Merger as though it has occurred on 1 January 2018. Following the Merger, the Group targets synergies of at least €200 million per year by year three following the Merger, which are intended to be approximately evenly divided between operating synergies and capital expenditure and production-related synergies.

Our strengths

The Group believes that the below strengths help to differentiate us from our competitors.

Leading European independent gas and oil company with a large and diversified portfolio

The Group believes that the quality, scale and diversification of its portfolio positions it as the leading European independent gas and oil company and provides a solid foundation to compete with larger U.S. and international major players globally. The Group has a large, diverse portfolio of assets balanced across production, development and exploration in multiple geographies, including production assets in Germany, Norway, Russia, Egypt and Argentina and exploration and development projects in the UAE, Mexico and Brazil. As at 31 December 2018, the Group had net working interest 1P reserves of 3.0 bn boe, net working interest 2P reserves of 3.7 bn boe and net contingent resources of 2.6 bn boe. 73 per cent. of the Group's 2P reserves are gas. The 1P reserve life of the Group's assets as at 31 December 2018 was 15 years. The Group has interests in assets across four principal regions (Northern Europe, Russia, Middle East & North Africa and Latin America) and production is diversified across these four principal regions. As of 30 June 2019, the Group's production averaged 645 mboe/d (on a working interest basis), with 45 per cent. sourced from Russia, 32 per cent. from Northern Europe, 12 per cent. from Latin America and 11 per cent. from the Middle East & North Africa. The Group has a long history of activity in each country of operation and has interests in a number of world-class assets, including:

- Achimov 1A, 4A and 5A
    - Block 1A of the Achimov formation of the Urengoy oil, gas and condensate field (hereinafter referred to as "Achimov I") (Russia) contributes natural gas and condensate from the Achimov formation in the Urengoy field which was the largest field in the world at the time of discovery, with 96 mboe/d production in 2018 and an estimated project life of approximately 40 years.
    - Block 4A and 5A Achimov formation of the Urengoy oil, gas and condensate field (hereinafter referred to as "Achimov IV & V") (Russia) represents the next milestone in the successful development of Achimov formation. The first construction phase started in 2018 with 40 production wells. The second phase is expected to include over 100 production wells, with production start-up readiness at the end of 2020 and significant production in 2021.
- Yuzhno Russkoye (Russia) is the largest producing field in the Group's portfolio, with 150 mboe/d net annualized production in 2018, currently extracting gas principally from the Cenomanian deposit with 142 wells. Production from the Turonian deposit is expected to extend plateau production with over 100 further wells. The estimated project life is 40 years.
- Aasta Hansteen (Norway) is a newly developed gas production center in the emerging Voering basin in the Norwegian Sea, which uses a SPAR concept unique in the North Sea region. The project area also encompasses a number of undeveloped discoveries in which the Group has participating interests. Production started in December 2018.
- Mittelplate (Germany) is the largest and most productive oil field in Germany delivering more than 50 per cent. of domestic oil production. Mittelplate is 100 per cent. owned and operated by the Group and we have successfully established safe and uninterrupted production since 1987 and abides by stringent environmental standards. Production in 2018 was 21 mboe/d.
- CMA-1 (Argentina) is the largest and most prolific gas producing license in Argentina, delivering around 20 per cent. of total domestic gas production, with 51 mboe/d production in 2018. The shallow water gas assets contain world class reservoirs producing from approximately 150 wells. There is a project pipeline of several development projects for the coming years.
- Zama (Mexico) was acquired through the acquisition of Sierra Oil and Gas. The field has an estimated 400 to 800 MMboe of recoverable gross resources making this field the largest shallow water discovery in recent years. Together with its partners, the Group is looking to achieve FID for this world class discovery in 2021.
- Ghasha Concession (Abu Dhabi) is the largest undeveloped gas and condensate hub in the UAE. Production start-up is currently expected in 2022 and is expected to continue well into the 2040's.

We believe that the combination of our high quality asset base and significant near-term development pipeline, positions us well to pursue our strategy.

The Group's investments in its North African and Russia assets, as well as its investment in Ogarrio, Mexico, benefit from investment guarantees provided by the Federal Republic of Germany for direct investments made by German companies in developing and emerging countries. These investment

guarantees provide protection against a number of political risks, including expropriation, nationalization, civil wars, wars or other armed conflicts and payment embargoes or moratoria, under certain conditions.

Our portfolio is primarily gas weighted, with gas volumes accounting for approximately 66 per cent. of our production for the year ended 31 December 2018. We believe that our highly diversified product offering, with approximately 50 per cent. of our total production volumes sold at fixed and/or regulated prices, mainly in Russia and Argentina, enables us to benefit from delivering low cost gas to attractive energy markets, while diversifying our exposure away from the volatility associated with traditional oil benchmark linked and market-based pricing. Approximately 36 per cent. of our 2018 production was contracted in Russia and sold based on an agreed price formula. Approximately 15 per cent. of our current production is sold through gas contracts domestically in Egypt (4 per cent.) and through regulated prices in Argentina (11 per cent.). The remaining portion of our current production is sold at European spot gas prices (15 per cent.) and oil linked market prices (34 per cent.).

Resilience through industry leading operating costs

The Group's portfolio of low-cost assets provides it with a competitive advantage throughout the commodity price cycle, enabling resilience in a low-price environment and enhancing net cash flow when commodity prices are higher. In recent years, the Group been successful in further reducing its already low average unit production costs, which averaged $4.5/boe over the period from 2016-2018. The Group has principally achieved this through cost saving initiatives, realizing economies of scale and increased utilization of technology, innovation and digitalization to optimise its overall production performance. The Group's combined unit production costs decreased by 39 per cent. from $7.1/boe in 2014 to $4.3/boe for the six months ended 30 June 2019, positioning its portfolio amongst the lowest unit cost producing portfolios in the industry. As a result, the Group has achieved attractive cash margins from our producing assets and has generated aggregated free cash flow from continuing operations of €1,182 million in the year ended 31 December 2018.

The Group expects to be able to extract further synergies following the Merger, targeting €200 million per annum by the third year post Merger completion. Key areas identified for additional costs savings are the combination of its operating capabilities in Germany and Norway, as well as through joint procurement costs. The Group is committed to continuing to upgrade our portfolio and focus on low-cost, high-margin assets, with the ultimate goal of optimising its capital allocation and cash flow generation.

Strong partnerships with world class partners

Over 80 per cent. of the Group's assets are either operated through long-term joint venture partnerships or directly operated. The Group has a strong track record of establishing mutually beneficial partnerships with large, international holders of resources in valuable energy markets, including Gazprom in Russia, Equinor, Lundin and Aker BP in Norway, BP in Egypt and Total in Argentina, as well as constructive relationships with key national oil companies, including EGPC in Egypt, Pemex in Mexico and ADNOC in Abu Dhabi.

The Group seeks to maintain and grow its operating capabilities in countries where it can add value through the deep knowledge and experience in engineering, reservoir management, execution and operations of its in-house technical and operating team. The Group's world class environmental management and drilling expertise at the wholly owned and operated Mittelplate field in Germany is an example of its leadership and operating track record. The asset has over 30 years history of safe and uninterrupted production and is located in the Wadden Sea, a UNESCO World Heritage site. It was developed with a mix of onshore extended reach drilled production wells and offshore multilateral wells from an artificial island, as well as onshore and offshore pipelines and processing facilities.

The Group's in-house drilling knowledge, particularly our expertise in extended reach drilling, combined with third party expertise in these areas, has contributed to its world class drilling expertise and strong production performance over the last five years. This has allowed us to deliver industry leading levels of production efficiency and cost control. The above is valid for the operated Brage field in the Norwegian North Sea, where it has successfully drilled several over eight kilometers of stepout wells from the platform.

High visibility on medium term profitable growth

The Group believes it is well placed to deliver-medium term sustainable growth from its existing portfolio of both producing and undeveloped assets. The Group currently expects its production at the end of 2019 to be 635 mboe/d and to grow to approximately 750 mboe/d by 2023, underpinned by identified projects within its 1P and 2P reserve inventory.

The principal assets expected to contribute to this increase in production include Achimov IV & V in Russia, the Njord, Ærfugl, Dvalin and Nova fields in Norway, the Ghasha project in the UAE, and the start-up of unconventional production at the Group's Aguada Federal and Bandurria Norte projects in Argentina. These development assets are currently in various stages of development with the majority of them expected to come onstream in 2020-2021.

In addition to the assets already in development, the Group expects to complete FID Fenix and Aguada Federal & Bandurria Norte in 2019-2020, with production to commence in 2021 onwards. For Zama, we expect to select a preferred development concept by the end of 2019 and submit for and investment decision in 2020; the production is expected to come onstream in 2024.

Major European pipeline distribution network providing stable and highly visible cash flows

The Group believes that its exposure to the non-cyclical European gas infrastructure network provides it with a key differentiating factor compared to many of its European competitors. As Germany continues to gain increasing importance as the largest European gas market and distribution hub in Europe, the midstream business, including a network of strategic access point pipelines into Germany and elsewhere in Northern and Central Europe, plays an instrumental role in securing the region's security of supply. In 2018, approximately 36 per cent. of Europe's gas supply was sourced from Russia. With gas supply from other European countries expected to further decrease in the medium term and pipeline gas from Russia providing a competitive source of gas with a low carbon intensity compared to LNG alternatives, the European reliance on gas imports from Russia is expected to remain strong.

The Group's economic interest in the low risk midstream business generated over €200 million of reliable stable cash in 2018, representing approximately 17 per cent. of the overall free cash flow.

The participation of the Group's unbundled subsidiaries in the German regulated gas pipeline network provides revenue from stable fixed tariffs over each regulatory period without exposure to volume or price risks. While the Group's subsidiaries own and operate both regulated and partly regulated onshore pipelines, the long-term nature of the capacity sale contracts, including the GASCADE network and both Nord Stream 1 onshore connecting pipelines, OPAL and NEL, provides an attractive investment proposition, with no exposure to volume or price risks and a return protection mechanism. This is also true for the Group's unregulated Nord Stream AG offshore shareholding.

The Group's financing of the Nord Stream 2 project, together with the EUGAL pipeline engagement of the Group's subsidiary, GASCADE, shows its commitment to participating in new infrastructure developments, given their importance to addressing the increasing demand for natural gas in Europe. While the Group's participation in Nord Stream 2 as financing partner is expected to generate attractive cash returns, the structure of its financing commitments eliminates our equity risk and volume exposure. The EUGAL project has been confirmed by the FNA as being in line with expected demand and has been regulatorily accepted by way of an investment measure.

Robust financial policy underpinned by commitment to Baa2/BBB credit rating and disciplined capital allocation framework

The Group is committed to ensure financial stability through its long-term commitment to a Baa2/BBB credit rating. Its net debt as of 30 June 2019 was €5.7 billion, implying a net debt to EBITDAX ratio of 1.63x, based on our LTM EBITDAX of €3,474 million. The Group targets a net debt to EBITDAX ratio of 1.5-2.0x in the medium term. The Group will continue to monitor its business performance with the aim to provide a long-term balance between shareholder returns and profitable growth, whilst maintaining a conservative financial profile and a strong balance sheet through the commodity cycle. The Group's robust balance sheet is reinforced by its strong free cash flow generation. The Group generated EBITDAX of €3.6 billion during and the year ended 31 December 2018 and €1.0 billion during the four months ended 30 April 2019, on a *pro forma* aggregated basis. The EBITDAX for 2018 was derived from the sale of gas and oil products in Northern Europe (63 per cent., including Other which mainly comprises Corporate

functions), Russia (12 per cent.), Latin America (11 per cent.) and Middle East & North Africa (6 per cent.), as well as from the midstream gas transportation business (8 per cent.).

The Group generated free cash flow of €1.2 billion during and the year ended 31 December 2018 and €151 million during the six months ended 30 June 2019 (excluding M&A). The Group expects its gas and oil production to further increase in the medium term and we will continue to focus on cost control and cash management. As a result, operating cash flow and free cash flow are expected to continue to grow going forward.

In order to ensure the Group's ratings commitment, its capital distribution framework will prioritize distributions as follows: (i) maintenance capital to sustain production, (ii) balance sheet strength and maintaining investment grade rating, (iii) shareholder returns and (iv) profitable organic/inorganic growth. The Group's investment and M&A plans will be in line with its commitment to its rating target.

Highly experienced management team with strong corporate governance

The Group's senior management team has a wealth of experience in the oil and gas industry, with an average of more than 20 years of industry experience individually. The members of the Management Board in particular have extensive international industry experience at a wide range of global oil and gas companies as well as within legacy Wintershall and Dea.

The leadership team brings a broad range of oil and gas industry specific, business, financial, commercial and other relevant experience, which we believe is vital to managing an expanding international company. The Group believes that its leadership team with its extensive experience and proven track record provides a strong platform to deliver sustainable performance and long-term, value-generating growth.

In addition, the Group's governance structure provides the appropriate level of representation and oversight from its Management and Supervisory Boards, as well as its shareholders, to further ensure the company explores for and produces gas and crude oil worldwide in the most efficient and responsible way. The Group is committed to work closely with its stakeholders to meet future energy demand in a sustainable manner and have set high internal ESG standards to drive a number of initiatives with focus on climate change and operational stewardship, such as its progressive No-Flare policy and ambition to contribute to the world's energy transition.

Our strategy

The Group's strategy is to reinforce its position as the leading European independent upstream gas and oil company. The Group will seek to grow its business through active portfolio management, supported by disciplined cash prioritization and a prudent financial framework.

Continue to demonstrate strong financial discipline to maintain a Baa2 / BBB credit rating

Moody's and Fitch recently awarded us strong investment grade corporate credit ratings of Baa2 and BBB, respectively with a stable outlook. The Group's financial strategy aims to provide a long-term balance between shareholder returns and profitable growth, whilst maintaining a conservative financial profile and balance sheet strength through the commodity price cycle. The Group will aim to ensure financial stability through its long-term commitment to a Baa2/BBB credit rating.

The Group is focused on maintaining cashflow discipline and active cash management will be a priority.

The Group will manage capital commitments to generate positive cash flow from operation to sustain its dividend, investment capacity and create financial flexibility through the economic cycles. The Group's capital distribution framework will prioritize distributions as follows: (i) maintenance capital to sustain production, (ii) balance sheet strength and maintaining investment grade rating, (iii) shareholder returns and (iv) profitable organic/inorganic growth.

Enhance the value of the business through balanced profitable growth and sustainable shareholder distributions

The Group expects our existing portfolio will enable it to reach production of approximately 750 mboe/d by 2023. The Group has a strong project pipeline which we expect to organically enhance its production levels over the next three years. Much of this pipeline is front-weighted, with a significant number of major developments due to come on-stream within the next 18-24 months. To that end, the Group is also focused on ensuring our portfolio is balanced across all its core geographies and end-markets. The Group has six major development projects in Norway, in Russia it has one major development and one producing field

undergoing further development, and additional development projects in Egypt, and pre-FID development projects in Argentina, UAE and Mexico.

In all the Group's exploration and development activities, it seeks to focus on high quality opportunities in well-established E&P geographies. Beyond its existing established production and development portfolio in Germany, Russia, Norway, Argentina and Egypt, the Group has significant growth opportunities through our portfolio of exploration and appraisal assets in the UAE, Mexico, and Brazil. The Group's exploration activities focus on what it considers to be attractive regions, including Mexico and Brazil, as well as opportunities for mainly infrastructure-led exploration in Norway.

The Group may consider select bolt-on acquisitions which are believed to be value-enhancing. Additionally, the Group will continue to actively manage its portfolio, including taking advantage of opportunities to streamline it through select divestments, particularly in relation to very mature assets. Following the Merger, the size of our existing portfolio allows it to selectively reduce our asset base, including through partnership arrangements, to ensure that it maintains the most efficient and high value portfolio. As part of this strategy, the Group recently signed an agreement for the farm-down to ConocoPhillips of 45 per cent. of the Aguada Federal block and 50 per cent. of the Bandurria Norte block in Argentina. While it will retain a 45 per cent. and 50 per cent. share, respectively, as well as operatorship of the blocks, the Group believes that the shale experience of ConocoPhillips, combined with our local expertise, will allow it to expedite the development of the two blocks.

In addition to the profitable growth from the existing and future development projects, as well as the Group's exploration and M&A activities, its shareholders are expected to receive a competitive return on their investment through cash dividends. The Group will establish a long-term, dividend policy commensurate with its long-term commitment to a Baa2/BBB credit rating.

Continued focus on operational excellence and corporate social responsibility

The Group has established a strong operational track-record through decades of delivering major projects across multiple geographies. Since the year 2000, the Group has delivered more than 15 major projects across Europe, Russia, the Middle East & North Africa and Latin America. Operating in multiple geographies, often in challenging conditions, has enabled the Group to develop a strong and highly capable technical organization. The Group aims to deploy this expertise across our operations as it works to maintain, and where possible enhance, its operating and technical performance. The use of advanced imaging and digital modelling, as well as big data analysis will be employed more regularly and it expects that this will help it to make faster and better-informed decisions, leading to a reduction in time to first oil and enhanced efficiency through reduced and optimised opex costs. The Group's aggregated production costs decreased by 39 per cent. between 2014 and the six months ended 30 June 2019 and now have one of the lowest production costs bases in its industry. Going forward, the Group will continue to focus on low-cost and high value operations and endeavouring to optimise its production costs.

The Group is committed to exploring, developing, producing and transporting gas and oil in an efficient and responsible way. The Group strives to create trust through transparency, constantly minimizing its ecological and operational footprint, using resources efficiently, enforcing high social standards in all we do and engaging actively with our stakeholders. The Group has integrated an ESG framework encompassing economic, environmental and social responsibility, into our corporate strategy and endeavour to address these issues across all its activities. The Group reports on its ESG performance regularly, guided by the international recommendations of the Global Reporting Initiative, as well as by the oil and gas industry guidance on voluntary sustainability reporting developed by IPIECA. We support the UN Global Compact, a voluntary initiative based on company commitments to implement universal sustainability principles and to advance UN goals such as the Sustainable Development Goals. In Germany, the Group is also a member of the EITI (Extractive Industries Transparency Initiative) multi-stakeholder group for improving financial transparency, representing the oil and gas industry.

The Group is committed to reducing the environmental impact of our operations as it seeks to meet future energy demands in a sustainable manner. The Group believes that natural gas will play a crucial role in future energy supply and support the development of innovative natural gas technologies. For example, the Group is one of the partners of the innovation Award of the German Gas Industry and the founders of the "Zukunftswerkstatt Erdgas" project which serves to promote new hydrogen solutions from natural gas.

Throughout the Group's operations it plans to continue to maintain a strong focus on its health and safety performance and constantly work with our partners and industry bodies to ensure that best practice and

the most up-to-date processes are implemented across our Group. The Group is committed to maintaining a safe working environment and constantly seeks to identify, understand and manage any safety or security risks that could impact its employees and operations. Moreover, the Group works towards aligning its internal guidelines and processes with the UN Guiding Principles on Business and Human Rights. The Group has an inclusive culture with over 60 nationalities represented by its workforce and its share of female employees is over 30 per cent. which is above the industry average.

In addition to the Group's technical, development and operational expertise, its extensive focus on high ESG and HSEQ standards supports its operating success. The Group is committed to operating responsibly and have an integrated ESG and HSEQ framework in place which underpins its cultural development and policies. The Group is committed to constant improvement in minimizing our ecological footprint and use of resources. Over 70 per cent. of its current equity production is from cleaner, low-carbon gas and we have no routine flaring in our operations. Additionally, the Group is an active member of the Methane Emission Group. The Group had strong HSEQ performance levels in 2018, including a Lost Time Incident Frequency Rate ("LTIF") of 0.2 LTIF, well below the 0.7 LTIF levels in Europe by the International Association of Oil & Gas Producers over the same period.

Maintain reputation as partner of choice across global energy markets

Partnerships are critical to the success of the Group's business model. The majority of the Group's portfolio in terms of equity production in 2019 is JV-operated and 67 per cent. of its production in 2018 came through JV-operated entities. The Group is proud of its history and track-record of maintaining these critical partnerships, not least its relationship with Gazprom, which it has maintained for over 30 years. This partnership extends beyond the Group's significant upstream and midstream operations and encompasses technological and scientific R&D, as well as collaboration on talent development issues, including training. A central component of the Group's strategy is to maintain and enhance its existing partnerships as we believe they enable it to operate and grow our portfolio most efficiently, as well as to attract new business opportunities. The strong partnerships in the Group's existing markets with large holders of resource position it well for future development and exploration opportunities and provide it with a competitive advantage.

Additionally, the Group believes its midstream business is a key differentiator for the Group. By connecting low cost gas resources with Europe's gas end-markets, we further reinforce the Group's relationships with regional partners.

Management is committed to replicating this partnership model across a number of the Group's new geographies and has already built beneficial relationships with a number of key resource holders in our core and growth business units, including ADNOC in the UAE and Pemex in Mexico. The Group believes that these relationships will allow it access to further opportunities in these regions.

Meeting global energy demand growth and facilitating the energy transition

Despite gains in energy efficiency, global primary energy demand is expected to continue to grow. The Group recognizes the need to meet this demand, as well as the increasing focus from governments, the investor community and communities around the world on reducing the impact of climate change and the importance of the decarbonisation agenda.

In the future, as many countries and regions look to reduce CO_2 emissions, the importance and scale of renewable energy as part of the power generation mix will grow significantly. However, the Group believes that hydrocarbons will also be required for the foreseeable future. We believe that natural gas in particular, with its lower-emissions, compared to coal, will be required to replace coal and nuclear generation in the mid-term. The Group believes that it is uniquely positioned to be able to supply this future gas demand, through the composition of our reserve base, with gas comprising 73 per cent. of its 2P reserves.

Recent Developments

Trading update

Commodity prices decreased slightly in July 2019. During July, Brent traded at an average price of 64.04 USD/bbl, whereas NBP traded at an average price of 3.70 USD/mcf. Production was slightly below the first six months of the year due to lower production in Russia, as expected, given that summer is planned maintenance period in Russia due to weather conditions. In addition, technical limitations occurred in July 2019 due to high outside temperatures, but which has been caught up in the following weeks. This was partially offset by higher production in Norway, due to the ramp-up of production in the fields Aasta Hansteen and Maria, and North Africa, resulting in a slightly lower EBITDAX compared to the average of the first six months of the year.

Overview of the Notes and Guarantees

The following overview contains basic information about the Notes and the Guarantees and is not intended to be complete. It does not contain all the information that is important for making a decision to invest in the Notes. For a more complete description of the Notes and the Guarantees, please refer to the sections "Terms and Conditions for the 2023 Notes", "Terms and Conditions for the 2025 Notes", "Terms and Conditions for the 2028 Notes" and "Terms and Conditions for the 2031 Notes" of this Offering Memorandum and to the section "Forms of Guarantees" of this Offering Memorandum. For information on the Issuer and the Guarantor, their businesses and their financial condition and results of operations, please refer to the sections "Description of the Issuer," "Description of the Guarantor" and "Business of the Group", respectively, of this Offering Memorandum. Terms used in this overview and not otherwise defined have the meanings given to them in the Terms and Conditions.

Issuer	Wintershall Dea Finance B.V.
Guarantor	Wintershall Dea GmbH
2023 Notes	€1,000,000,000 0.452 per cent. notes due 2023 (the "2023 Notes");
	ISIN XS2054209320
	Common Code 205420932
	WKN: A2R75A
2025 Notes	€1,000,000,000 0.840 per cent. notes due 2025 (the "2025 Notes");
	ISIN XS2054209833
	Common Code 205420983
	WKN: A2R75B
2028 Notes	€1,000,000,000 1.332 per cent. notes due 2028 (the "2028 Notes");
	ISIN XS2054210252
	Common Code 205421025
	WKN: A2R75C
2031 Notes	€1,000,000,000 1.823 per cent. notes due 2031 (the "2031 Notes" and together with the 2023 Notes, the 2025 Notes and the 2028 Notes, the "Notes" and each a "Series of Notes")
	ISIN XS2055079904
	Common Code 205507990
	WKN: A2R75D
Joint Lead Managers	Barclays Bank PLC
	J.P. Morgan Securities plc
	Merrill Lynch International
	Société Générale
Joint Bookrunners	Citigroup Global Markets Limited
	Commerzbank Aktiengesellschaft
	Crédit Agricole Corporate and Investment Bank
	Credit Suisse Securities (Europe) Limited
	Deutsche Bank AG
	Goldman Sachs International

	HSBC Bank plc
	ING Bank N.V.
	Mizuho Securities Europe GmbH
	Morgan Stanley & Co. International plc
	MUFG Securities (Europe) N.V.
	UniCredit Bank AG
Principal Paying Agent	Deutsche Bank Aktiengesellschaft
Calculation Agent	Conv-Ex Advisors Limited
Issue Price	2023 Notes: 100.00 per cent.
	2025 Notes: 100.00 per cent.
	2028 Notes: 100.00 per cent.
	2031 Notes: 100.00 per cent.
Issue Date of the Notes	25 September 2019
Specified Denomination	€100,000
Form of Notes	Each Series of Notes will initially be represented by a temporary global note in bearer form (each a "Temporary Global Note"). Each Temporary Global Note shall be exchanged, in whole or in part on or after the day that is 40 days after the later of the commencement of the offering and the Issue Date for a permanent global Note (each a "Permanent Global Note") (each Temporary Global Note and each Permanent Global Note, a "Global Note") without interest coupons upon certification as to non-U.S. beneficial ownership. The right of the Noteholders to require the issue and delivery of definitive notes or interest coupons is excluded. The Global Notes will be deposited prior to the Issue Date with a common safekeeper for Clearstream Banking S.A., Luxembourg and Euroclear Bank SA/NV. The Global Notes will be in New Global Note ("NGN") format.
Eurosystem Eligibility	The Notes are intended to be held in a manner which would allow Eurosystem eligibility. This does not necessarily mean that any Series of Notes will be recognized as eligible collateral for Eurosystem monetary policy and intraday credit operations by the Eurosystem either upon issue or at any or all times during their life. Such recognition will depend upon the European Central Bank being satisfied that the Eurosystem eligibility criteria have been met.
Status of the Notes	The obligations under the Notes constitute unsubordinated and, subject to the respective Guarantee, unsecured obligations of the Issuer ranking *pari passu* among themselves and, in the event of the insolvency, dissolution or liquidation of the Issuer or any proceeding to avoid insolvency of the Issuer, *pari passu* with all other present and future unsubordinated and unsecured obligations of the Issuer, save for such obligations which may be preferred by applicable law.

Guarantees and Status of the Guarantees	The Guarantor will give full, unconditional and irrevocable guarantees for the due payment of principal of, and interest on, and any other amounts expressed to be payable under each Series of Notes. Each Guarantee constitutes a contract for the benefit of the holders of the relevant series of Notes from time to time as third-party beneficiaries in accordance with section 328 paragraph 1 of the German Civil Code (*Bürgerliches Gesetzbuch*), giving rise to the right of each Noteholder to require performance of the relating Guarantee directly from the Guarantor and to enforce such Guarantee directly against the Guarantor. The Guarantees will constitute direct, unconditional, unsubordinated and unsecured obligations of the Guarantor ranking, in the event of the dissolution, liquidation or insolvency of the Guarantor or any proceeding to avoid insolvency of the Guarantor, *pari passu* with all other present and future unsubordinated and unsecured obligations of the Guarantor, save for such obligations which may be preferred by applicable law.
Interest on the Notes	The 2023 Notes will bear interest on their outstanding principal amount from and including 25 September 2019 to but excluding 25 September 2023 at the rate of 0.452 per cent. per annum, such interest being payable in arrear on 25 September in each year, commencing on 25 September 2020. The 2025 Notes will bear interest on their outstanding principal amount from and including 25 September 2019 to but excluding 25 September 2025 at the rate of 0.840 per cent. per annum, such interest being payable in arrear on 25 September in each year, commencing on 25 September 2020. The 2028 Notes will bear interest on their outstanding principal amount from and including 25 September 2019 to but excluding 25 September 2028 at the rate of 1.332 per cent. per annum, such interest being payable in arrear on 25 September in each year, commencing on 25 September 2020. The 2031 Notes will bear interest on their outstanding principal amount from and including 25 September 2019 to but excluding 25 September 2031 at the rate of 1.823 per cent. per annum, such interest being payable in arrear on 25 September in each year, commencing on 25 September 2020.
Maturity	Unless previously redeemed or repurchased, the 2023 Notes will be redeemed at par on 25 September 2023. Unless previously redeemed or repurchased, the 2025 Notes will be redeemed at par on 25 September 2025. Unless previously redeemed or repurchased, the 2028 Notes will be redeemed at par on 25 September 2028. Unless previously redeemed or repurchased, the 2031 Notes will be redeemed at par on 25 September 2031.
Redemption at the Option of the Issuer	Each Series of Notes can be redeemed at the option of the Issuer at their Principal Amount plus any accrued and unpaid

	interest at any time upon the occurrence of a Gross-up Event or if 80 per cent. or more of the aggregate principal amount of the relevant Series of Notes initially issued have been redeemed or repurchased and cancelled.
Make-Whole Call	Each Series of Notes can further be redeemed at the option of the Issuer at the higher of (i) their Principal Amount and (ii) the Present Value of such Series of Notes, in each case together with accrued interest to, but excluding, the Call Redemption Date as follows: • 2023 Notes: at any date during the period from and including their issue date to but excluding 25 June 2023; • 2025 Notes: at any date during the period from and including their issue date to but excluding 25 June 2025; • 2028 Notes: at any date during the period from and including their issue date to but excluding 25 June 2028; • 2031 Notes: at any date during the period from and including their issue date to but excluding 25 June 2031. The "Present Value" will be the sum of (a) the Principal Amount to be redeemed which would otherwise become due on the relevant maturity date, discounted to the Call Redemption Date; and (b) the remaining interest payments which would otherwise become due on each Interest Payment Date falling after the Call Redemption Date to and including the relevant maturity date (excluding any interest accrued to but excluding the redemption date), each discounted to the Call Redemption Date. The Calculation Agent will calculate the Present Value in accordance with market convention on a basis which is consistent with the calculation of interest.
Par Call	The 2023 Notes can be redeemed at the option of the Issuer with effect as of any date during the period from and including 25 June 2023 to but excluding the maturity date of the 2023 Notes at their Principal Amount plus any accrued and unpaid interest. The 2025 Notes can be redeemed at the option of the Issuer with effect as of any date during the period from and including 25 June 2025 to but excluding the maturity date of the 2025 Notes at their Principal Amount plus any accrued and unpaid interest. The 2028 Notes can be redeemed at the option of the Issuer with effect as of any date during the period from and including 25 June 2028 to but excluding the maturity date of the 2028 Notes at their Principal Amount plus any accrued and unpaid interest. The 2031 Notes can be redeemed at the option of the Issuer with effect as of any date during the period from and including 25 June 2031 to but excluding the maturity date of the 2031 Notes at their Principal Amount plus any accrued and unpaid interest.
Change of Control	The Notes provide for the option of holders to demand an early redemption of the Notes at 101 per cent. of their principal amount together with accrued interest to, but excluding, the relevant redemption date in the event of a

	change of control in respect of the Guarantor which has a negative rating impact on the Notes (Put Event).
Events of Default	The Notes provide for events of default entitling holders to demand redemption of Notes at their specified denomination plus accrued interest.
Negative Pledge	The Notes contain a negative pledge undertaking of the Issuer. The Guarantees contain a negative pledge of the Guarantor and its Subsidiaries.
Taxation	All payments of principal and interest in respect of the Notes (including payments by the Guarantor under a Guarantee) will be made free and clear of, and without withholding or deduction at source for any present or future taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by way of deduction or withholding by or on behalf of any jurisdiction in which the Issuer or Guarantor, as applicable, is organized, engaged in business, resident for tax purposes or generally subject to tax on a net income basis, or through or from which payments on the Notes or the Guarantees, as applicable, is made, or any political subdivision or any authority therein or thereof having power to tax, unless the Issuer or the Guarantor is required by law to make such deduction or withholding. In the case that such deduction or withholding by the Issuer or the Guarantor is required by law, the Issuer or the Guarantor will pay such additional amounts as will result in receipt by the Noteholders of the same amounts that the Noteholders would have received if no such deduction or withholding had been required, subject to exceptions set out in the Terms and Conditions.
German Act on Issues of Debt Securities (*Schuldverschreibungsgesetz*)	The Notes will be subject to the German Act on Issues of Debt Securities (*Gesetz über Schuldverschreibungen aus Gesamtemissionen*, "SchVG").
Governing Law	The Notes and the Guarantees will be governed by German law.
Clearance and Settlement	Payments and transfers of the Notes will be settled through Clearstream Banking S.A., Luxembourg and Euroclear Bank SA/NV.
Listing and admission to trading	Application has been made for the Notes to be listed on the Official List of the Luxembourg Stock Exchange and to be admitted to trading on the Euro MTF Market of the Luxembourg Stock Exchange. The Euro MTF Market is an unregulated market for purposes of MiFID II.
Selling Restrictions	The offer and the sale of the Notes and the distribution of offering materials are subject to specific restrictions. The relevant restrictions are set out under "*Subscription and Sale*" of this Offering Memorandum.
Availability of Offering Memorandum	The Offering Memorandum will be published on the website of the Luxembourg Stock Exchange (*www.bourse.lu*).
Risk Factors	Investing in the Notes involves risks. Investors should carefully consider the information under the caption "*Risk Factors*" set forth on pages 21 through 45 of this Offering Memorandum.

Use of Proceeds	At closing, the Issuer will on-lend the net proceeds to the Guarantor and Wintershall Norge AS which will, in turn, use it to refinance Facility A under the Syndicated Credit Facilities Agreement, to finance transaction costs incurred in connection with the take-out financing and for general corporate purposes. Each of the Joint Bookrunners acts as a Lender under Facility A under the Syndicated Credit Facilities Agreement and, consequently, will receive a portion of the proceeds of the Offering.

Summary Financial, Operating and Other Data

The following summary financial, operating and other information is derived from the Wintershall Historical Financial Information, the Dea Historical Financial Information, the Interim Financial Information, the Pro Forma Financial Information, as well as other financial and operating information prepared by the Group. For further information on the Wintershall Historical Financial Information, the Dea Historical Financial Information and the Interim Financial Information for Wintershall, please see "*Selected Financial and Other Financial Information*". For further detail on the calculation and preparation of this information please see "*Presentation of financial and other information*".

Certain income statement data of the Group

The following table sets out financial information derived from (1) the unaudited *pro forma* income statement information of the Group for the year ended 31 December 2018, (2) the unaudited *pro forma* income statement information of the Group for the short fiscal year ended 30 April 2019 and (3) the unaudited condensed consolidated interim financial statements of the Group for the two months ended 30 June 2019 and aggregates (2) and (3) for the six months ended 30 June 2019 solely for the convenience of the reader. The pro forma income statements are provided for informational purposes only and do not purport to represent what the Group's results of operations would have been had the Merger actually occurred on 1 January 2018. The pro forma income statements set out below should be read in conjunction with the unaudited pro forma financial information contained in "*Unaudited pro forma financial information*" elsewhere in the Offering Memorandum, which also contains the basis of this presentation. The following aggregated information has been prepared for illustrative and convenience purposes only and does not purport to represent the Group's actual performance or results at any historic date or for any historic period or project its operation or results as at any future date or for any future period.

	Year ended 31 December 2018[1]	Short fiscal year ended 30 April 2019[2]	Two months ended 30 June 2019[3]	Six months ended 30 June 2019[4]
	(millions €) (unaudited)			
Sales revenues gas and oil	5,666	1,732	724	2,456
Sales revenues gas transport/midstream	237	73	39	112
Sales revenues other	365	182	81	263
Net income from equity-accounted investments: gas and oil	25	17	3	20
Net income from equity-accounted investments: gas transport/midstream	104	44	21	65
Other operating income	341	9	44	53
	6,738	2,057	912	2,969
Production and operating expenses	(2,272)	(797)	(325)	(1,122)
Production and similar taxes	(227)	(67)	(33)	(100)
Depreciation and amortisation	(1,397)	(494)	(300)	(794)
Net impairments on assets	(351)	(1,281)	—	(1,281)
Cost of sales gas transport/midstream	(54)	(10)	(6)	(16)
Exploration expenses	(221)	(63)	(35)	(98)
General and administration expenses	(308)	(440)	(44)	(484)
Result from operating activities	1,907	(1,095)	169	(926)
Financial income	6	41	31	72
Financial expenses	(164)	(32)	(38)	(70)
Financial result	(158)	9	(7)	2
Result before taxes	1,749	(1,086)	162	(924)
Income taxes	(936)	97	(29)	68
Net result	813	(989)	133	(856)
Net result attributable to shareholders	800	(1,007)	123	(884)
Net result attributable to non-controlling interests	12	18	10	28

Notes:

(1) Unaudited pro forma income statement of the Group for the year ended 31 December 2018. See also "*Unaudited Pro forma Financial Information*".

(2) Unaudited pro forma income statement of the Group for the short fiscal year ended 30 April 2019. See also "*Unaudited Pro forma Financial Information*."

(3) Unaudited consolidated statement of income for the Group for the two months ended 30 June 2019.

(4) Income statement data for the six months ended 30 June 2019 has been prepared by aggregating (i) the unaudited *pro forma* income statement of the Group for the short fiscal year ended 30 April 2019 and (ii) the unaudited consolidated statement of income for the Group for the two months ended 30 June 2019. This aggregated information has been prepared for illustrative and convenience purposes only and does not purport to represent the Group's actual performance or results at any historic date or for any historic period or project its operation or results as at any future date or for any future period.

Consolidated balance sheet of the Group

	As at 30 June 2019 (millions €) (unaudited)
Assets	
Goodwill	3,016
Exploration assets	1,808
Other intangible assets	3,290
Property, plant and equipment and investment property	10,595
Investments valued at equity	2,131
Other financial assets	5
Financial receivables	942
Derivative instruments	28
Other receivables	77
Deferred tax assets	433
Non-Current assets	22,325
Inventories	234
Financial receivables	938
Trade and other receivables	1,242
Derivative instruments	73
Income tax assets	13
Cash and cash equivalents	977
Current assets	3,477
	25,802
Subscribed capital	189
Capital reserves	7,411
Retained earnings and other comprehensive income	1,903
Shareholder's equity	9,503
Non-controlling interests	164
Equity	9,667
Pension provisions	598
Decommissioning provisions	2,480
Other provisions	208
Financial debt	2,676
Derivative instruments	2
Income tax liabilities	17
Other liabilities	45
Deferred tax liabilities	3,913
Non-Current liabilities	9,939
Decommissioning provisions	52
Other provisions	403
Financial debt	4,250
Trade and other payables	1,170
Derivative instruments	70
Income tax liabilities	251
Current liabilities	6,196
	25,802

Non-IFRS financial information—aggregated

	Year ended 31 December 2018[1]	Six months ended 30 June 2019[2]	As at and for the 12 months to 30 June 2019[3]
		(millions €) (unaudited)	
EBITDAX[4]	3,591	1,515	3,474
Northern Europe	2,355	887	—
Russia	419	277	—
North Africa/Middle East	235	109	—
Latin America	397	169	—
Midstream	282	158	—
Other	(98)	(84)	—
Net debt/EBITDAX	—	—	1.63

Note:

(1) Calculated from the unaudited pro forma income statement of the Group for the year ended 31 December 2018.

(2) Calculated from (i) the unaudited pro forma income statement of the Group for the short fiscal year ended 30 April 2019 and (ii) the unaudited consolidated statement of income for the Group for the two months ended 30 June 2019.

(3) For an explanation of the calculation these figures, please see "*Presentation of financial and other information*".

(4) For an explanation of EBITDAX, please see "*Presentation of financial and other information*."

	As at and for the year ended 31 December 2018	As at and for the six months ended 30 June 2019
	(millions €) (unaudited)	
Capex (excluding M&A)[1]	1,570	783
Capex (including M&A)[2]	1,887	1,522
Total debt[3]	—	6,665
Net debt[4]	—	5,675

Notes:

(1) The following table sets out the calculation of Capex (excluding M&A) for the Group for the periods indicated:

	Year ended 31 December 2018	Short fiscal year ended 30 April 2019	Two months ended 30 June 2019	Six months ended 30 June 2019
		(millions €) (unaudited)		
Wintershall				
Payments for property, plant and equipment	588	169		
Payments for intangible assets	34	1		
Dea				
Cash outflow for additions to intangible assets, property, plant and equipment and investment properties	948	342		
Group				
Payments for intangible assets, property, plant and equipment and investment property			270	
Capex (excluding M&A) (unaudited)	1,570	512	270	783

(2) The following table sets out the calculation of Capex (including M&A) for the Group for the periods indicated:

	Year ended 31 December 2018	Short fiscal year ended 30 April 2019	Two months ended 30 June 2019	Six months ended 30 June 2019
		(millions €) (unaudited)		
Wintershall				
Payments for property, plant and equipment	588	169		
Payments for intangible assets	34	1		
Payments for acquisitions	135	—		
Dea				
Cash outflow for additions to intangible assets, property, plant and equipment and investment properties	948	342		
Cash outflows for acquisitions	182	740		
Group				
Payments for intangible assets, property, plant and equipment and investment property			270	
Payments for acquisitions			—	
Capex (including M&A) (unaudited)	1,887	1,252	270	1,522

(3) The following table sets out the calculation of Total debt for the Group for the periods indicated:

	30 June 2019
	(millions €)
Liabilities to banks	6,089
Interest bearing financial liabilities towards related parties	416
Leasing liabilities	160
Total debt (unaudited)	6,665

(4) The following table sets out the calculation of Net debt for the Group for the periods indicated:

	30 June 2019
	(millions €)
Total debt	6,665
less interest bearing financial receivables from related parties	(13)
less cash and cash equivalents	(977)
Net debt (unaudited)	5,675

Consolidated income statement—Wintershall

	Years ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €)	
Net revenue	3,108	3,662	4,707	1,531
Cost of conversion and purchase costs of the services rendered to generate the revenue	(2,513)	(2,716)	(2,911)	(972)
Gross earnings from revenue	595	946	1,797	560
Distribution costs	(116)	(80)	(94)	(60)
General administrative expenses	(67)	(81)	(68)	(36)
Research costs	(38)	(45)	(26)	(8)
Exploration costs	(94)	(104)	(112)	(75)
Other operating income	249	387	118	48
Other operating expenses	(143)	(337)	(450)	(1,441)
Equity result	104	248	128	61
Result from operating activities	491	934	1,294	(952)
Income from other participating interests	12	4	4	—
Expenses from other participating interests	(5)	(3)	(0)	—
Net investment income	6	1	3	—
Interest income	51	57	72	36
Interest expenses	(141)	(106)	(68)	(25)
Net interest income	(90)	(49)	4	11
Miscellaneous financial income	44	39	251	132
Miscellaneous financial expenses	(54)	(40)	(305)	(151)
Miscellaneous financial result	(10)	(1)	(54)	(18)
Financial result	(93)	(49)	(46)	(7)
Earnings before income taxes	397	885	1,247	(959)
Income taxes	7	(158)	(577)	108
Net income for the year	404	727	671	(851)
Non-controlling interests	(76)	(41)	(55)	(18)
Net income after non-controlling interests	328	686	616	(869)

Consolidated income statement—Dea

	Years ended 31 December			Short fiscal year ended 30 April
	2016	2017[1]	2018	2019
			(millions €)	
Sales and other operating revenues	1,483	1,427	1,892	458
Cost of sales	(1,101)	(728)	(759)	(304)
Gross profit	382	699	1,133	154
Exploration costs	(119)	(122)	(111)	12
General and administration expenses	(149)	(123)	(125)	(213)
Net impairment of assets	(70)	(100)	(168)	(75)
Net impairment of operating receivables	—	—	1	(4)
Operating result	44	354	730	(126)
Financial income	129	87	109	22
Financial expenses	(224)	(260)	(89)	(33)
Net impairment of financial receivables	—	—	9	8
Result from continuing operations before taxes	(51)	181	759	(129)
Income taxes	18	(174)	(478)	(8)
Result from continuing operations	(33)	7	281	(137)
Result from discontinued operations	(3)	14	53	—
Net result	(36)	21	334	(137)
Thereof attributable to:				
Shareholders of the parent company	(39)	18	330	(137)
Non-controlling interests	3	3	4	—

Note:

(1) Due to the reporting of discontinued operations, the comparative prior figures have been adjusted.

Other aggregated operational data

The following table sets out certain operational data for the periods indicated. For further detail on the preparation of the Group's reserves information, please see "*Presentation of financial and other information*".

	Year ended 31 December			Six months ended 30 June[4]
	2016	2017	2018	2019
		(unaudited)		
1P Reserves[1] (MMboe)	—	—	3,032	—
2P Reserves[1] (MMboe)	—	—	3,707	—
Production (mboe/d)				
Wintershall	461	456	468	—
liquids	141	141	149	—
gas	320	314	319	—
Dea	138	125	121	—
liquids	61	50	49	—
gas	77	75	72	
Group	—	—	—	645
liquids	—	—	—	199
gas	—	—	—	446
Production costs ($/boe)[2]				
Wintershall	4.1	4.8	4.7	—
Dea	7.4	7.7	7.1	—
Group	—	—	—	4.3
Average realised $/boe liquids[3]				
Wintershall	27.60	34.53	44.68	
Dea	39.79	48.23	65.26	
Group	—	—	—	41.25
Average realised $/mscf gas[3]				
Wintershall	1.97	2.15	2.45	
Dea	4.96	4.71	6.00	
Group	—	—	—	2.52

Notes:

(1) For information regarding the calculation of reserves, please see "*Presentation of financial and other information*". This information has been prepared for illustrative and convenience purposes only and does not purport to represent the Group's actual performance or results at any historic date or for any historic period or project its operation or results as at any future date or for any future period.

(2) For an explanation of the components of production costs please see "*Management discussion and analysis of financial condition and results of operations: Production and distribution costs*".

(3) Realised oil and gas prices are presented without the effects of financial hedging.

(4) Information presented for the Group as at and for the six months ended 30 June 2019 aggregates data for each of Wintershall and Dea for the short fiscal years ended 30 April 2019 and for the Group for the two months ended 30 June 2019. This information has been prepared for illustrative and convenience purposes only and does not purport to represent the Group's actual performance or results at any historic date or for any historic period or project its operation or results as at any future date or for any future period.

RISK FACTORS

Any investment in the Notes carries a number of risks. In addition to the other information contained in this Offering Memorandum, you should carefully consider the following risk factors before purchasing the Notes. The risks and uncertainties described below should not be regarded as a complete and comprehensive statement of all potential risks and uncertainties and should be used as guidance only. Additional risks and uncertainties of which the Group is not aware or that the Group currently believes are immaterial may also adversely affect its business, prospects, financial condition and results of operations. If any of the possible events described below were to occur, its business, prospects, financial condition and results of operations could be materially and adversely affected. If that happens, the Group may not be able to pay interest or principal on the Notes when due and you could lose all or part of your investment. The order in which the risks are presented does not necessarily reflect the likelihood of their occurrence or the magnitude of their potential impact on the business, financial condition and results of the operations of the Group.

This Offering Memorandum also contains forward-looking statements that involve risks and uncertainties. The Group's actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including the risks described below and elsewhere in this Offering Memorandum. See "Forward Looking Statements".

Words and expressions used in this "Risk factors" section but defined in the sections "Terms and Conditions for the 2023 Notes", "Terms and Conditions for the 2025 Notes", "Terms and Conditions for the 2028 Notes" and "Terms and Conditions for the 2031 Notes" shall have the same meanings in this section.

1 Risks relating to the Group's industry

1.1 The Group's business depends significantly on hydrocarbon prices, which can be volatile, and are impacted by global economic conditions

The Group's revenues, cash flow, reserves and resources estimates, profitability and growth depend substantially on prevailing international and local prices of the hydrocarbons that the Group produces. Hydrocarbon prices are volatile and depend on factors beyond the Group's control, including, but not limited to:

- changes in global and regional supply and demand, and expectations regarding future supply and demand for oil and gas products;
- the ability and willingness of the members of the Organization of the Petroleum Exporting Countries ("OPEC") and other oil-producing nations to set and maintain specified levels of production and prices;
- access and proximity to, and the capacity and cost of, pipelines, shipping vessels, storage platforms, transportation and refining infrastructure for oil and gas;
- prices and availability of new technologies that increase oil and gas production or that promote fuel efficiency, thereby impacting supply or demand;
- geopolitical uncertainty, including political, economic and military developments in oil and gas producing regions, particularly the Middle East, Russia, and Latin America;
- government regulations and actions, including changes to subsidies, the imposition of export restrictions, taxes, repatriations and nationalizations, regulation and sanctions and unusually long authority procedures;
- increasing government regulations, actions and international treaties and agreements which aim to reduce the environmental impact of oil and gas exploration, development and production activities, including the emission of greenhouse gases and increased expenditure for producers to comply with such regulations, actions, treaties and agreements;
- policy actions, including government subsidies for alternative energy, protests or litigation, against the oil and gas industry and fossil fuel extraction or transportation;
- terrorism or the threat of terrorism, war or threat of war, which may affect supply, transportation or demand for hydrocarbons and refined petroleum products; weather conditions and natural disasters;
- trading and speculative activities by market participants and others seeking to secure access to oil and gas or to hedge against commercial risks, or as part of investment portfolio activity;

- the level and effect of trading in commodity futures markets; and
- fluctuations in exchange rates of the U.S. dollar, the currency in which the world's oil trade is generally denominated, with the Euro, which is the Group's reporting currency, and other currencies in which the Group incurs operating expenses, such as the Russian rouble, the Norwegian kroner and Argentine peso.

The global prices of oil and gas have declined significantly since 2014 and reached a 12 year low in 2016. Oil prices have continued to be volatile, falling to $50/bbl at the end of 2018, recovering to $75/bbl in April 2019 in response to supply-side risks resulting from the geopolitical situations in Venezuela and Iran, as well as OPEC production cuts, before falling back to $60/bbl in August of 2019. Current pricing is driven largely by lower demand growth expectations in line with the more general uncertainty about economic conditions globally.

Gas prices have been similarly volatile, falling from €29/MWh in September 2018 to €10.69/MWh in August 2019. This decline has been driven by global gas market oversupply resulting from significant LNG expansion, especially in Australia, the United States and Russia, which has exceeded global LNG demand growth. The winter 2018/19 was warm both in Europe and Asia, further contributing to gas market oversupply.

The Group's profitability is determined in large part by the difference between the revenues received from the oil and gas that it produces, revenues and dividends from its midstream business and its investments on the one hand, and operational costs, taxation, as well as costs incurred in transporting and selling its oil and gas on the other. Consequently, lower prices for oil and gas may reduce its revenues, cash flow and profitability, and therefore the amount of oil and gas that the Group is able to produce economically, or may reduce the economic viability of the production levels of specific wells or of planned exploration and development projects.

Current global economic conditions, including instability in certain emerging markets, are likely to have significant long-term effects on the Group's operating results. Global economic growth drives demand for energy from all sources, including oil and gas. A lower future economic growth rate could result in decreased demand growth for the Group's oil and gas production as well as lower commodity prices, which could reduce its cash flows and profitability.

A further decline or continued volatility in the prices of oil and gas or a downturn in global economic conditions could have a material adverse effect on its business, financial condition and results of operations.

1.2 The oil and gas reserves and resources data presented in this Offering Memorandum are estimates that may vary significantly from the actual quantities that may be recovered

The reserves and resources set forth in this Offering Memorandum represent estimates only and are based on technical experts' reports or are prepared by management internally. While the majority of the reserves and resources information included in this Offering Memorandum have been audited by technical experts in accordance with PRMS guidelines and definitions, certain information has been produced internally and has not been subject to audit by an independent reserves auditor. PRMS guidelines may differ from guidelines used to prepare reserves and resources data in other jurisdictions, such as in the United States where SEC guidelines apply. In addition, internal reserves estimates of Wintershall are based on SPE PRMS "project maturity" subclassification of reserves. This differs from the reserves status sub-classification as applied by Dea and contracted auditors and included in this Offering Memorandum. For the purposes of this Offering Memorandum, for Wintershall internal estimates, developed reserves are derived from the project maturity sub-classes "Producing Reserves" and "Approved for Development Reserves", undeveloped reserves from "Justified for Development Reserves". As such, the reserves and resources information in this Offering Memorandum may not be directly comparable. Investors, therefore, should not place undue reliance on the forward-looking statements with respect to the Group's estimated reserves and resources and should not assume that the data found in the reserves and resources information is directly comparable to similar information that has been prepared in accordance with the reserves and resources reporting standards of other jurisdictions.

The Group's various reserves auditors may use different assumptions in the production of their reserves reports and, historically, Wintershall and Dea have used different conversion factors in the production of their reserves data. Following the Merger, the Group is in the process of integrating and aligning its

reserves and resources reporting, which will be audited by a single reserves auditor in the future, which may also use assumptions that differ from the assumptions used by the current auditors.

In general, estimates of economically recoverable oil and gas reserves and resources are based on a number of factors and assumptions made as of the date on which the reserves and resources estimates were determined, such as geological and engineering estimates (which have inherent uncertainties), historical production from the properties, the assumed effects of regulation by government agencies and estimates of future production profiles, commodity prices, investments and operating costs, all of which may vary considerably from actual results.

Underground accumulations of hydrocarbons cannot be measured in an exact manner and estimates thereof are a subjective process aimed at understanding the statistical probabilities of recovery. Estimates of the quantity of economically recoverable gas and oil reserves and resources, rates of production and the timing of development expenditures depend upon several variables and assumptions, including the following:

- production history compared with production from other comparable producing areas;
- quality and quantity of available data;
- interpretation of the available geological and geophysical data;
- effectiveness of the applied technologies and equipment;
- effects of regulations adopted by government agencies;
- future operating costs, tax on the extraction of commercial minerals, development costs and workover and abandonment costs; and
- future percentages of international sales;
- future commodity prices;
- capital investments;
- the judgement of the persons preparing the estimate.

As all reserves and resources estimates are subjective, each of the following items may differ materially from those assumed in estimating reserves and resources:

- the quantities and qualities that are ultimately recovered;
- the timing of the recovery of gas and oil reserves and resources;
- the amount and timing of additional exploration and future development expenditures;
- the production and operating costs incurred; and
- future hydrocarbon sales prices.

Many of the factors in respect of which assumptions are made when estimating reserves and resources are beyond the Group's control and therefore these estimates may prove to be incorrect over time. Evaluations of reserves and resources necessarily involve multiple uncertainties. The accuracy of any reserves and resources evaluation depends on the quality of available information and reservoir engineering and geological interpretation. Exploration drilling, interpretation, testing and production after the date of the estimates may require substantial upward or downward revisions in the Group's reserves and resources data. Moreover, different reserves engineers may make different estimates of reserves and resources and cash flows based on the same available data. Due to the inherent uncertainties and the limited nature of reservoir data and the inherently imprecise nature of reserves or resources estimates, the initial reserves or resources estimates are often different, and may be materially different, from the quantities of oil and gas that are ultimately recovered.

If the assumptions upon which the estimates of the Group's gas and oil reserves and resources have been based prove to be incorrect, or if the actual reserves and resources available to it are otherwise less than the current estimates or of lesser quality than expected, the Group may be unable to recover and produce the estimated levels or quality of oil, gas and other hydrocarbons set out in this Offering Memorandum and this could have a material and adverse effect on its business, prospects, financial condition and results of operations.

1.3 The Group faces numerous operational risks inherent in its exploration, production, storage and transportation activities that may affect its ability to produce oil and gas at expected levels, quality and costs

The Group's operations are subject to numerous risks inherent in the exploration, production, storage and transportation of hydrocarbons. These risks include, but are not limited to, encountering unusual or unexpected drilling conditions, rock formations or geological pressures, geological uncertainties, adverse weather conditions, seismic shifts, blowouts, oil spills, uncontrollable flows of oil, gas or well fluids, explosions, fires, improper installation or operation of equipment and equipment damage and shutdowns or failure as well as known, suspected or as yet unknown soil, groundwater or other contamination which could require substantial expenditure to address. Further, the Group may be required to curtail, delay or cancel certain drilling operations because of breaches of security, title problems, government requirements, labour disputes or shortages or delays in the availability of drilling rigs and the delivery of equipment.

In addition, all modes of transportation and storage of hydrocarbons are subject to damage from natural catastrophes, severe storms or other severe weather conditions and involve significant hazards that could result in fires, explosions, spills and other unexpected or dangerous conditions. Underground natural gas storage facilities, in particular, are vulnerable to gas migration and other issues as a result of geological formations or historical well structures. A loss of containment of hydrocarbons and other hazardous materials could occur during transportation by pipeline, rail or road. Given the high volumes of hydrocarbons that the Group produces and transports in the ordinary course of business, the occurrence of any of the above risks could reduce or shut down its production wells, cause the loss of equipment or negatively impact the projected economic performance of its projects. The occurrence of any of the foregoing risks may result in environmental damage, injury to persons and loss of life, damage to its property, delays to or loss of production and third-party liabilities. The Group could also suffer damage to its reputation, loss of licenses and be subject to penalties and/or criminal sanctions, which could have a material adverse effect on its business, financial condition and results of operations.

1.4 The Group faces risks to the equipment, services, storage, transportation facilities and infrastructure used in its exploration and production activities, including those owned, controlled or operated by third-parties

The Group relies on oil and gas field suppliers and contractors to provide materials and services in conducting its exploration and production activities. Oil and gas development and exploration activities are dependent upon, among others, the availability of drilling rigs, vessels and related third-party equipment or services. High demand for such equipment or services or access restrictions may affect the availability and cost of, and the Group's access to, such equipment and services and may delay the Group's development and exploration activities. Failure by it or its contractors to secure necessary equipment or services could materially and adversely affect its business, financial condition and results of operations. In addition, prices for the equipment and services that the Group depends on to conduct its business may not be sustained at levels that enable it to operate profitably. Any competitive pressures on these oil and gas field suppliers and contractors, or substantial increases in the worldwide prices of commodities, such as steel, could result in a material increase of costs of the equipment and services required to conduct the Group's business. Any increases in costs could have a material adverse effect on its operating income, cash flows and borrowing capacity and may require a reduction in the carrying value of its properties, its planned level of spending for exploration and development and the level of its reserves and resources.

In order to monetise its production, the Group also relies on storage and transportation facilities and infrastructure to deliver its hydrocarbons from the production site to loading terminals or further mid- and downstream facilities, which are often owned, controlled or operated by third-parties, some of whom are its competitors. If an operator of these facilities or infrastructure fails to perform its obligations satisfactorily or substantially increases transportation tariffs or there are limits on available capacity due to higher than expected demand, this may lead to delays or the curtailment of transportation or delivery of its hydrocarbons. Even where the Group has some contractual control over the transportation of its production through firm transportation arrangements, third-party systems and facilities may be temporarily unavailable due to market conditions or operational issues or other reasons, including adverse weather conditions, capacity constraints or geopolitical instability, which could have a material adverse effect on its business, financial condition and results of operations. Further, these third-party operators could become subject to increased tariffs imposed by government regulators or the operators or owners of the transportation systems available for the transport of its hydrocarbons, which could result in decreased

offtaker demand and downward pricing pressure. In addition, its transportation arrangements with customers vary such that, in certain circumstances, the Group remains liable for transportation risks in delivering its production to its customers. If the Group is unable to access the requisite transportation and other infrastructure necessary to convey its production to its customers, its operations could be materially and adversely affected.

1.5 The oil and gas industry is highly competitive and the Group may not be able to keep up with technological developments in its industry

The oil and gas industry is highly competitive, including in regions where the Group has assets. The key areas where the Group faces competition include:

- acquisition of exploration and production licenses, or interests in such licenses, at auctions or sales run by government authorities or companies already owning such licenses;
- acquisition of other companies that may already own licenses or existing hydrocarbon producing assets;
- purchase, leasing, hiring, chartering or other procuring of equipment that may be scarce;
- engagement of third-party service providers whose capacity to provide key services may be limited;
- ability to dispose of assets;
- securing additional offtakers of production;
- differentiating technologies;
- employment of qualified, experienced and skilled management and oil and gas professionals; and
- access to financing, including the debt and equity markets.

Competition in the Group's industry is intense and depends, among other things, on the number of competitors in the market, their financial resources, their degree of geological, geophysical, engineering and management expertise, their degree of vertical integration, their ability to select, acquire and develop reserves and properties on time and on budget, their ability to foster and maintain relationships with host governments of the countries in which they have assets and their pricing policies. The Group's competitors include entities with greater technical, physical and financial resources. A recent trend among investors, which also increases competitive pressures, is for financial institutions and investment funds to financially support viable management teams with proven oil and gas experience to acquire resources and establish investments in the oil and gas sector and lock in supply. When looking at acquisition opportunities, the Group also frequently competes with major national and state-owned enterprises, which typically possess significant financial resources and are able to offer attractive and favourable prices to sellers. The effects of operating in a competitive industry may include higher than anticipated prices for the acquisition of licenses or assets, acquisition of licenses or assets with lower than anticipated expected future production volumes, licensing terms providing for increased obligations, the hiring by competitors of key management, restrictions on the availability or increase in cost of equipment or services.

In addition, the oil and gas industry is characterised by rapid and significant technological advancements and introduction of new products and services using new technologies and may involve a certain degree of risk in their implementation. The Group invests resources in technological improvements and advancements in many areas of its business which may not deliver the expected efficiencies or returns on its investments. As others use or develop new technologies, the Group may be placed at a competitive disadvantage or may be forced by competitive pressures to implement those new technologies at substantial costs. Other oil and gas companies may have greater financial, technical and personnel resources that allow them to exploit technological advantages, which may in the future allow them to implement new technologies before the Group can. The Group may not be able to respond to these competitive pressures or implement new technologies on a timely basis or at an acceptable cost. If one or more of the technologies that the Group uses now or in the future were to become obsolete, its business could be adversely impacted.

If the Group is unsuccessful in competing against other companies, its business, financial condition and results of operations could be adversely affected.

1.6 A shift towards alternative energy could have an adverse effect on the Group's industry

Increased environmental awareness and the improved competitiveness of "green" technologies have led to a global trend in recent years towards greater fuel efficiency and a shift to alternative energy sources. There is a risk that improvements in fuel efficiency over the near-term, whether due to technological advancements or more stringent regulation, could lower demand for oil and gas. For example, several jurisdictions have introduced programmes to incentivise the use of more environmentally-friendly vehicles by offering subsidies or tax breaks or by banning the use of vehicles using conventional petroleum-based fuels. The roll-out of these and similar schemes across the Group's markets could reduce demand for vehicles with diesel and gasoline engines, which would, in turn, lower demand for oil and gas. Legislative changes and a shift in consumer preference towards alternative fuels could have a material adverse effect on the Group's strategy, business, financial condition and results of operations.

1.7 Climate change abatement legislation against fossil fuel extraction and transportation may have a material adverse effect on the Group's industry

Global responses to climate and related energy issues are an area of increasing focus in both the public and private sectors around the world. In recent years, international, federal, state and local governments have taken steps to reduce emissions of greenhouse gases. The Group's operations are associated with emissions of greenhouse gases, greenhouse gas emissions-related laws, policies and regulations, including the Paris Agreement on Climate Change and related legislation and regulations implementing its stated goals. Compliance with these obligations may result in substantial capital, compliance, operating and maintenance costs which cannot be reliably estimated. These pieces of legislation or regulatory initiatives could also have a material adverse effect on the Group's business by diminishing the demand for oil and gas, increasing its cost structure or causing unexpected delays and disruptions to its operations. In addition, policy approaches that promote and subsidise the usage of alternative energy sources, including solar, wind power, hydro-electric, biofuels, and other "green" initiatives could have a material adverse impact on levels of demand for oil and gas.

1.8 The Group faces various risks associated with the trend toward increased anti-oil and gas development activity

In recent years, the Group has seen significant growth in opposition to oil and gas development globally. Companies in the oil and gas industry can be the target of opposition to hydrocarbon development from stakeholder groups, including national, state and local governments, regulatory agencies, non-governmental organizations, local communities and public citizens. This opposition is focused on attempting to limit or stop hydrocarbon development or extraction activities in or transportation from certain areas. Examples of such opposition include: efforts to reduce access to public and private lands; delaying or cancelling permits for drilling or pipeline construction; limiting or banning industry techniques such as hydraulic fracturing, and/or adding restrictions on the use of water and associated disposal; imposition of set-backs on oil and gas sites; delaying or denying air-quality permits; advocating for increased regulations, punitive taxation, citizen ballot initiatives or moratoriums on industry activity; and the use of social media channels to cause reputational harm.

In addition, in recent years, there has been a shift in investor sentiment away from extractive industries, including oil and gas production. If this trend continues, it could lead to reduced or less favourable access to capital markets and other sources of funding for companies in these industries, including the Group.

The Group may also incur costs associated with responding to these anti-development efforts, including legal challenges, or complying with any new legal or regulatory requirements resulting from these efforts, which could have a material adverse effect on its business, financial condition and results of operations.

1.9 The Group is exposed to the cyclical nature of the oil and gas industry

The oil and gas industry has historically experienced alternating periods of tight supply, causing prices and margins to increase, followed by periods of substantial additions to capacity, resulting in excess supply and declining prices and margins. Third-party oil field equipment materials and service costs are also subject to these supply and demand dynamics. For example, during periods of decreasing levels of industry exploration and production, the demand for, and cost of, drilling rigs and oil field services decreases. Conversely, during periods of increasing levels of industry activity, the demand for, and cost of, drilling rigs and oil field services increases. As a result, during certain points in the cycle, drilling rigs and oil field services may not be available at rates that allow a satisfactory return on its investment.

In addition, demand for oil and gas products fluctuates in line with expectations of economic growth. There can be no assurance that future growth in demand for oil and gas will be sustained or that the Group will not be affected by industry over-supply, which could have a material adverse effect on its business, financial condition and results of operations.

2 Risks relating to the Group's business

2.1 The Group has recently been formed through a merger and there are risks associated with integrating the constituent businesses

The combination of two separate businesses is a complex, costly and time-consuming process. As a result, the Group will be required to devote significant management attention and resources to combining the business practices and operations of its two legacy companies. The failure to meet the challenges involved in combining the two businesses and to realise the anticipated benefits of the transactions could cause an interruption of, or a loss of momentum in, the activities of the Group and could adversely affect the results of operations of the Group. The overall combination of Wintershall's and Dea's businesses may also result in material unanticipated problems, expenses, liabilities, competitive responses or loss of customer and other business relationships. The difficulties of combining the operations of the companies include, among others:

- difficulties in integrating operations and systems, such as information technology, financial reporting and communications systems, including building adequate systems to replace those currently provided through the transitional services arrangements with BASF;
- difficulties in achieving anticipated synergies, business opportunities and growth prospects from the combination;
- difficulties in managing the expanded operations of a significantly larger and more complex company;
- challenges in conforming standards, controls, procedures and accounting and other policies, business cultures and compensation structures between the two companies;
- integrating the companies' financial reporting and internal control systems;
- challenges in keeping existing customers and obtaining new customers;
- difficulties with employees, including as a result of planned redundancies and ongoing negotiations with works councils;
- attracting and retaining key personnel;
- the diversion of management attention to integration matters;
- the impact of the additional debt financing expected to be incurred in connection with the Merger;
- contingent liabilities that are larger than expected; and
- potential unknown liabilities, adverse consequences and unforeseen increased expenses associated with the Merger.

In addition, the Group currently relies on certain services provided by BASF pursuant to a transitional services arrangement, including in relation to information technology, treasury, human resources, marketing and health and safety functions, which are time limited with some due to expire as early as 2020. When BASF no longer provides these services, if the Group is unable to undertake them internally or to find a suitable external provider in a timely manner, at a reasonable cost or at all, its business could be adversely affected.

Many of the foregoing factors are outside its control and any one of them could result in increased costs, decreased expected revenues and diversion of management time and energy, which could materially impact its business, financial condition and results of operations. In addition, the full benefits of the Merger may not be realised, including the synergies or sales or growth opportunities that are expected. These benefits may not be achieved within the anticipated time frame, or at all. Further, additional unanticipated costs may be incurred during the integration process. All of these factors could decrease or delay the expected accretive effect of the Merger.

2.2 The Group may be unsuccessful in finding, acquiring, developing and producing oil and gas reserves and resources that are economically recoverable

The Group's future success depends on its ability to find and develop or acquire additional oil and gas reserves and resources that are economically recoverable. Oil and gas exploration and production activities are capital intensive and fundamentally uncertain in their outcome. In addition, it is difficult to estimate the costs of implementing any exploration and/or project development programme due to the inherent uncertainties of drilling in unknown formations, the costs associated with encountering various drilling conditions such as over pressured zones and changes in drilling plans and locations.

Even if wells are productive, they may not produce sufficient net revenues to return a profit after drilling, operating and other costs. Completion of a well does not assure a profit on the investment or recovery of drilling. Completion and operating costs and drilling hazards and environmental requirements can lead to cost overruns, project delays and under-performance of assets. In addition, various field operating conditions, including, but not limited to, delays in obtaining government approvals, permits, licenses, authorizations or consents, shut-ins of connected wells, insufficient storage or transportation capacity or other geological and mechanical conditions may also adversely affect production from successful wells.

Under most of its license and concession agreements, the Group partially or fully finances exploration, development and operations and the related facilities and equipment and will only recover its costs (which are often capped) if there is successful production. Additionally, the treatment of the exploration and development of oil and gas under its license and concession agreements is frequently ambiguous leading to uncertain terms as to cost recovery and entitlements to oil and gas discoveries. If the Group is unsuccessful in its exploration, appraisal and development activities, the Group may be unable to meet its production targets and its reserves, resources and production may decline, which could have a material adverse effect its business, financial condition and results of operations.

Additionally, mature producing oil and gas reservoirs are generally characterised by declining production rates that vary depending upon reservoir characteristics and other factors. The rate of decline will change if production from existing wells declines in a different manner than the Group has estimated and can change under other circumstances. Thus, its future oil and gas reserves, resources and production and, therefore, its cash flow and results of operations, are highly dependent upon the Group's success in efficiently developing and exploiting its current properties and economically finding or acquiring additional recoverable reserves and resources. The Group may not be able to develop, find or acquire additional reserves and resources to replace its current and future production at acceptable costs. If the Group is unable to replace its current and future production, its reserves and resources will decrease, and its business, financial condition and results of operations could be materially and adversely affected.

2.3 The Group's exploration and production operations must comply with its obligations under licenses, contracts and development plans

The Group's exploration and development operations must be carried out in accordance with the terms of the applicable production sharing contracts, licenses, operating agreements, annual work programmes and budgets. Pursuant to legislation in the jurisdictions in which the Group does business, the Group or its commercial partners in joint ventures, as applicable, may be subject to fines or a suspension or termination of license if a license holder (which, in certain cases, are third parties) or party to a related agreement fails to comply with its obligations under the relevant license or agreement, to make timely payments of royalties and taxes, provide the required geological information or meet other reporting requirements. In addition, the Group and its commercial partners, as applicable, have obligations to develop the fields in accordance with specific requirements under certain licenses and related agreements, field development plans, laws and regulations and certain licenses may contain terms that place restrictions on the Group, including change of control clauses. If the Group or its partners were to fail to satisfy such obligations with respect to a specific field, the Group or its partners may incur fines and penalties or the production sharing contract, the license or related agreements for that field may be suspended, revoked or terminated. For example, a failure to submit a development plan on time and/or to get an approval from a responsible government authority may result in the delay of a development or the forfeiture of the relevant license, which could have a material adverse effect on the Group's reserves and resources, expected future production, business, financial condition and results of operations.

In addition, a portion of the licenses pursuant to which the Group conducts operations are solely exploration licenses, which have a limited life before the Group is obliged to seek to convert the license to a production license, extend the license or relinquish the license area. If hydrocarbons are discovered during the exploration license term, the Group or its commercial partners, as applicable, may be required to apply for a production license before commencing production. However, no assurance can be given that any necessary production licenses will be granted by the relevant authorities.

The authorities in the jurisdictions in which the Group does business are typically authorised to, and do from time to time, inspect its assets to verify compliance by the Group or its commercial partners, as applicable, with relevant laws, regulations and the licenses or the agreements pursuant to which the Group conducts its business. There can be no assurance that the views of the relevant government agencies regarding the development of the fields that the Group or its commercial partners operate or the compliance with the terms of the licenses pursuant to which the Group conducts such operations will coincide with the Group's views, which could lead to disputes with the relevant authorities.

In addition, sometimes it may be difficult to ascertain whether the Group has complied with obligations under production sharing contracts and licenses as the extent of such obligations may be unclear or ambiguous and regulatory authorities in jurisdictions in which the Group does business may not be forthcoming with confirmatory statements that work obligations have been fulfilled, which can lead to further operational uncertainty.

The occurrence of any of the above risks could have a material adverse effect on its business, financial condition and results of operations.

2.4 The Group is exposed to a significant number of laws and regulations which are subject to change and differing interpretation

The activities of the Group are exposed to extensive laws and regulations governing various matters. These include laws and regulations relating to bribery and corruption, taxation, antitrust, financial markets regulation, economic sanctions, environmental protection, management and use of hazardous substances, management of natural resources, licenses over resources owned by various governments, exploration, development of projects, production and post-closure reclamation, the employment of expatriates, labour and occupational health and safety standards, and historical and cultural preservation. The terms attaching to any permit or license to operate may be onerous. Additionally, in many of the developing countries where the Group operates, the legal systems may not be mature and legal practice may not be developed, such that, in certain cases, there may be significant uncertainty as to the correct legal position, as well as the possibility of laws changing or new laws and regulations being enacted, which has the potential to render the Group unable to enforce its understanding of title, permits or other rights, as well as to increase compliance costs.

These laws and regulations may allow government authorities and private parties to bring lawsuits based upon damages to property and injury to persons resulting from the environmental, health and safety and other impacts of the Group's past and current operations, and could lead to the imposition of substantial fines, penalties, other civil or criminal sanctions, the curtailment or cessation of operations, orders to pay compensation, orders to remedy the effects of violations and/or orders to take preventative steps against possible future violations. Moreover, the costs associated with compliance with these laws and regulations are substantial. Any changes to these laws or regulations or more stringent enforcement or restrictive interpretation of current laws and regulations, particularly with respect to environmental matters and remediation obligations, by government authorities or rulings or clearances obtained from such government authorities could cause additional expenditure to be incurred or impose restrictions on, or suspensions of, the Group's operations and delays in the development of its properties. Failure to obtain, maintain or renew a necessary permit could mean that the Group would be unable to proceed with the development or continued operation of an asset. In addition, certain of the Group's assets are located in countries where title to land and rights in respect of land and resources (including indigenous title) has not been and may not always be clear, creating the potential for disputes over resource development. Disputes relating to an asset could disrupt or delay production or other projects and/or impede the Group's ability to develop new assets.

In addition, the enactment of new laws and regulations and changes to existing laws and regulations (including, but not restricted to, environmental laws, the imposition of higher license fees and hydrocarbon royalties or taxes), compliance with which could be expensive or onerous, could also have a material adverse impact on the ability of the Group to operate its businesses and/or the profitability of its assets. For

example, the recently adopted amendments to the EU Gas Directive (Directive 2009/73/EC of 13 July 2009 concerning common rules for the internal market in gas) extended the scope of European regulation to offshore import pipelines in territorial waters of EU Member States, which have not been subject to this regulation previously.

Furthermore, the Group does business in jurisdictions and with counterparties who have, in the past, and may in the future, become the targets of economic sanctions. These sanctions can be imposed or altered with little or no advance notice. The Group is committed to complying with all applicable sanctions in its business and taking all necessary measures in order to mitigate risks to its business as a result of the imposition of or changes in applicable sanctions regimes. There can be no assurance that compliance with applicable sanctions will not impose additional costs on the Group.

2.5 The Group is exposed to significant political risk

The Group operates and owns interests in assets in a large number of geographic regions and countries, some of which are categorized as developing, complex or have unstable political or social climates and, as a result, is exposed to a wide range of political, economic, regulatory, social and tax environments. These environments are subject to change in a manner that may be materially adverse for the Group, including uncertainty around and changes to government policies and regulations governing industrial production, foreign investment, inflation, capital, exchange and price controls, import and export controls, tariffs, subsidies, income and other forms of taxation (including policies relating to the granting of advance rulings on taxation matters), nationalization or expropriation of property, repatriation of income, royalties, the environment, labour and health and safety.

Volatile oil and gas prices and other factors in recent years have resulted in stricter natural resource policies in some countries, with governments repudiating or renegotiating contracts or licenses with, and expropriating assets from, companies that are producing in such countries. The hydrocarbons that the Group produces and sells are considered strategic resources for particular countries. Governments in these countries may decide not to recognize previous arrangements if they regard them as no longer being in the national interest. Governments may also implement export controls on commodities regarded by them as strategic or place restrictions on foreign ownership of production, exploration or development assets. Renegotiation or nullification of existing agreements, licenses, concessions, permits or tax rulings, changes in fiscal policies (including new or increased taxes or royalty rates) and currency restrictions imposed by the governments of countries in which the Group operates could all have a material adverse effect on the Group.

In recent years, the Group has been subject to significant changes in fiscal policy from certain countries around the world as the global geopolitical climate has evolved, partly affected by fluctuations in oil and gas prices. Continued changes may negatively impact the financial results of existing assets and projects and reduce anticipated future returns and overall level of prospective investment in those countries. In addition, there may be uncertainty around changes in and the enforcement of applicable tax regimes, which can make planning of future investments challenging.

The Group transacts business in locations where it is exposed to a greater-than-average risk of overt or effective expropriation or nationalization, including in countries where the government has previously expropriated assets held within the jurisdiction of other companies or where members of the government have publicly proposed that such action be taken. In addition, title to the Group's hydrocarbon rights may be challenged or impugned, and title insurance may not generally be available. In many cases, the government of the country in which a particular asset is located is the sole authority able to grant such rights and, in some cases, may have limited infrastructure and limited resources which may severely constrain the Group's ability to ensure that it has obtained secure title to individual exploration licenses or extraction rights. A successful challenge to the Group's hydrocarbon extraction rights may result in the Group being unable to proceed with the development or continued operation of a well or project. In some instances, the government's authority to grant extraction rights may be challenged. Although the Group may not be a party to these actions, its ability to develop the relevant assets may be comprised.

The Group's operations may also be affected by political and economic instability in the countries in which it operates. Such instability could be caused by, among other things, terrorism, civil war, guerrilla activities, military repression, civil disorder, crime, workforce instability, change in government policy or the ruling party, economic or other sanctions imposed by other countries, extreme fluctuations in currency exchange rates or high inflation.

The Group operates in emerging markets such as Argentina, Egypt and Russia which are subject to greater risks than other markets, including economic, political, infrastructure and legal risks. For instance, as Russia produces and exports large quantities of crude oil, natural gas and other commodities, the Russian economy is particularly vulnerable to fluctuations in the prices of crude oil, natural gas and other commodities on the world market. Emerging markets such as Argentina, Egypt and Russia are also subject to heightened volatility based on economic, military and political conflicts. For example, the economic sanctions imposed on certain Russian companies and individuals by the U.S., EU and other countries, and the respective counter-sanctions imposed by Russia to foreign trade and companies have had a significant impact on the Russian economy. The resulting geopolitical tensions and sanctions programs have had and could continue to have an adverse effect on the Russian economy, accelerating capital flight from Russia and resulting in volatility on the Russian markets. In addition, the Russian political system remains vulnerable to popular dissatisfaction and social unrest, and such instability could adversely affect the value of investments in Russia. The Group also faces legal risks in doing business in emerging markets such as Argentina, Egypt and Russia since the investment climate, and related legal framework, is still evolving. For example, the government of Argentina recently issued a decree which freezes oil prices for a period of 90 days in response to heightened volatility in the financial markets and has also implemented capital and exchange controls. These ongoing developments could impact the enforceability of laws and contractual provisions, including the payment of dividends, and can result in ambiguities, inconsistencies in legal interpretations and other anomalies, which could have an adverse impact on the Group.

The geopolitical risks associated with operating in a large number of regions and countries, if realised, could affect the Group's ability to manage or retain interests in its production, exploration and development assets and could have a material adverse effect on the profitability, ability to finance or, in extreme cases, viability of one or more of its industrial assets. Although the Group's production, exploration and development assets are geographically diversified across various countries, disruptions in certain of its industrial operations at any given time could have a material adverse effect on the business and results of operations and financial condition of the Group.

2.6 The Group may not be able to achieve its strategic goals and finance its activities

The Group sets a number of operational and project targets in order to achieve its overall strategic goals. There can be no assurance, however, that the Group will be able to meet these strategic goals on time or at all. The Group's business requires significant capital expenditures, including in the areas of exploration and development, production and transportation, as well as to meet its obligations under environmental laws and regulations. If the Group is unable to finance its activities, the Group may delay or abandon its business or technical plans, fall behind in its maintenance requirements or be unable to take advantage of business opportunities.

The Group relies on cash flows from its operating and financing activities to finance its capital expenditures. If its operating cash flows decrease or the Group is unable to otherwise raise financing on acceptable terms, the Group will have to reduce or shift its planned capital expenditures. Any such reduction or shift could materially and adversely affect its ability to expand its business, achieve its strategic targets and, if the reductions are severe enough, could adversely affect its ability to maintain its operations at current levels. If any of these risks were to materialise, they could have a material adverse effect on its business, financial condition and results of operations.

2.7 The Group conducts most of its operations with commercial partners, including through joint ventures, which may increase the risk of disagreements, delays, scope changes, additional costs or the suspension or termination of the licenses or the agreements that govern its assets

The Group has entered into business ventures with commercial partners, including through incorporated or unincorporated joint ventures, in respect of the majority of its assets. The Group holds non-controlling stakes in the majority of these joint ventures and consortia. It is possible that its interests and those of its commercial partners may not always be aligned, resulting in possible project delays, additional costs or disagreements.

To the extent that the Group is not the operator of its gas and oil assets, the Group will be dependent on its commercial partners acting as operators and may have limited ability or be unable to direct or control operations, the timing and performance of such activity or the costs thereof. Where the Group is the operator of an asset, it is also dependent on constructive engagement with its partners. Any mismanagement of a gas or oil property by one of its commercial partners may result in delays or increased

costs. The terms of any relevant operating agreement generally impose standards and requirements in relation to an operator's activities, but there can be no assurance that the operator will observe these standards or requirements in practice. There is also a risk that a commercial partner may elect not to participate in certain activities which require that party's consent and it may not be possible for the Group to undertake such activities alone or in conjunction with the remaining commercial partners at the desired time or at all.

The majority of the Group's partners are other integrated oil and gas companies. The Group has multiple projects with certain of them, including Gazprom, Total and Equinor. While the considerable experience as working partners benefits its operations, the Group is also exposed to concentration risk with respect to these partners. In addition, as the Group has pre-funding arrangements with certain of its commercial partners, the Group may suffer unexpected and significant costs or other losses if its commercial partners become insolvent or otherwise unable to pay debts as they come due or if they default on their obligations to fund capital or other obligations. The Group may, in turn, be subject to claims by its commercial partners regarding alleged non-compliance with its obligations.

Furthermore, failure by its commercial partners to comply with obligations under relevant licenses or the agreements may cause these licenses or agreements to revert back to the relevant government authority who can then reallocate them. Although in many cases the Group would expect the relevant government authority to permit it to continue operations at a field during a reallocation process, there can be no assurance that the Group will be able to continue operations pursuant to these reclaimed licenses or that any transition related to the reallocation of a license would not materially disrupt its operations or development and production schedule.

The Group's exit strategy in relation to any particular oil and gas interest may also be subject to the prior approval of its commercial partners. The terms of operating agreements often require commercial partners to approve an incoming participant to the business venture or provide them with pre-emption rights with respect to the transfer of its interest, either of which could affect its ability to sell or transfer an interest.

In addition, some of the Group's partners in joint venture arrangements are its competitors. A protracted disagreement between the Group and any of its joint venture partners could seriously disrupt the normal operations and management of its projects, and adversely affect the Group's revenues from them. Furthermore, even though the Group does not currently expect material changes to the ownership of its joint ventures, there can be no assurance that there will not be changes in the ownership or management structure of its current joint ventures, or any other joint venture that the Group may enter into in the future, and the effect of any such change or failure to conduct business as planned could have a material adverse effect on its business.

2.8 The Group is exposed to risks related to its midstream business

The Group has economic interests in onshore and offshore gas pipelines in Germany and Northern Europe. The onshore pipelines are operated by regulatory unbundled Group subsidiaries, whereas the offshore systems are operated by a third party in which the Group has a minority share. The midstream business has historically been a stable source of revenue. The European onshore gas transportation business is heavily regulated. The regulatory framework applicable to the Group subsidiaries involved in natural gas onshore transport has historically been stable. However, the risk of further regulatory intervention, both in the general framework and in the operation and expansion of gas pipelines, for example, as part of investment measures ordered under net development plans or in relation to the connection of biogas, cannot be excluded.

The Group also finances Nord Stream 2. The Group's involvement with the Nord Stream 2 project is limited to the provision of loans, as part of a consortium of major European energy companies. Recently, certain members of the U.S. Government have publicly discussed the possibility of sanctions being imposed on the Nord Stream 2 project and further sanctions on related industries and parties. The financing arrangements to which the Group is a party are grandfathered under the "Countering America's Adversaries Through Sanctions Act" as they were signed prior to August 2017 and while the Group does not believe that further sanctions would have a material adverse impact on its business, there can be no assurance that this will be the case.

2.9 The Group may face unanticipated costs in connection with decommissioning obligations

Licensees are typically obliged under the terms of relevant production sharing contracts or production agreements, licenses or local law to dismantle and remove equipment, to cap or seal wells and generally to remediate production sites. In connection with the sale or transfer of its assets, the Group may retain or be liable for decommissioning liabilities, even if the Group has not contractually agreed to accept these liabilities. Decommissioning costs are also uncertain due to possible changes in the relevant legislation and increasingly stringent environmental requirements. The financial statements included elsewhere in this Offering Memorandum make provisions based on the Group's estimate of the aggregate decommissioning costs to be incurred at the end of each of its interests in licenses. These are estimates based on facts and circumstances known as of the date of such financial statements including the then extent of its operations. No guarantee can be given that these provisions will be sufficient to address future liabilities. An increase in these decommissioning costs could materially and adversely affect its business, prospects, financial condition and results of operations.

2.10 The Group depends on its Management Board and other key personnel to effectively manage its business

The Group's future operating results depend in significant part upon the continued contribution of its Management Board, key senior management and technical, financial and operations personnel. The Group's success is dependent on the ability of its board of directors and management to operate its growing business and to manage the ongoing changes from the Merger. In addition, the personal connections and relationships of its board of directors and key management with many of its joint venture partners are important to the conduct of its business. If the Group were to unexpectedly lose a member of its key management or fail to maintain one of the strategic relationships of its key management team, its business and results of operations could be materially adversely affected.

In addition, the Group uses independent advisers and contractors to provide it with certain technical assistance and services. The Group relies upon the owners and operators of rigs and drilling equipment, and upon providers of field services, to drill and develop its prospects to production. The Group also relies upon the services of other third-parties to explore or analyse its prospects to determine a method in which the prospects may be developed in a cost-effective manner. In certain cases, the Group may exercise limited control over the activities and business practices of these providers and any inability on its part to maintain satisfactory commercial relationships with them or their failure to provide quality services could adversely affect its business.

Attracting additional and retaining existing skilled personnel is fundamental to the continued growth of its business. The Group requires skilled personnel in both technical and non-technical business areas. Personnel costs, including salaries, are increasing as the general level of prices and inflation grow, the standard of living rises in the countries in which the Group has assets and as industry-wide demand for suitably qualified personnel increases. No assurance can be given that the Group will successfully attract new personnel or retain the existing personnel required to continue to expand its business and to successfully execute and implement its business strategy.

2.11 Any damage to the Group's business reputation could adversely affect its business

The Group's reputation is extremely important to its business for numerous reasons including, but not limited to, finding commercial partners for business ventures, acquiring new business, farming-in into new licenses, obtaining adequate financing on acceptable terms, securing existing and granting new licenses from governments, procuring offtake contracts, attracting contractors and employees and negotiating favourable terms with suppliers.

Some of the Group's current and potential exploration and development activities are located in or near communities that may regard such operations as having a detrimental effect on their safety or environmental, economic or social circumstances and the Group has been in the past, and may, in the future, be subjected to complaints and legal proceedings from members of such communities. The continued success of the Group's operations and projects are in part dependent upon broad support of and a healthy relationship with the respective local communities in which the Group operates. If it is perceived that the Group is not respecting or advancing the economic and social progress and safety of the local communities, its reputation could be damaged, which could have a negative impact on its "social license to operate", its ability to secure new resources and labour and the safety and security of the Group's workforce and assets. In addition, any negative perception of the oil and gas industry, due to the actions of

other businesses in the industry or external factors, could be imputed to the Group, and negatively impact the way the Group is perceived.

Any damage to the Group's reputation, whether arising from litigation, regulatory, supervisory or enforcement actions, matters affecting its financial reporting or compliance with administrative agencies in the jurisdictions in which the Group does business, negative publicity, including from environmental activists, or the conduct of its business or otherwise, could materially and adversely affect its business, prospects, financial condition or results of operations.

2.12 The Group is exposed to risks in relation to compliance with anti-corruption laws and regulations and economic sanctions programmes, including sanctions against Russia

The Group is exposed to the risk of violating anti-corruption laws and sanctions regulations applicable in those countries where the Group, its commercial partners or agents do business. Some of the international locations in which the Group does business may lack a developed legal system and have high levels of corruption. The global nature of its business and the Group's continued expansion, including in developing countries, exposes it to the increased risk of violations of anti-corruption laws, sanctions regulation or similar laws. Violations of anti-corruption laws and sanctions regulations may be punishable by civil penalties, including fines, denial of export privileges, injunctions, asset seizures, debarment from government contracts (and termination of existing contracts) and revocations or restrictions of licenses, as well as criminal fines and imprisonment. Any major violations could have a significant impact on its reputation and, consequently, on the Group's ability to win future business.

In particular, the Group's international operations and production activities could be subject to anti-corruption laws and regulations such as the U.S. Foreign Corrupt Practices Act of 1977 ("FCPA") and the United Kingdom Bribery Act of 2010 ("United Kingdom Bribery Act") and are also subject to any anti-corruption laws of any jurisdiction applicable to it. The FCPA prohibits providing, offering, promising, or authorising, directly or indirectly, anything of value to government officials, political parties, or political candidates for the purposes of obtaining or retaining business or securing any improper business advantage. As part of its business, the Group deals with state-owned business enterprises, the employees of which may be considered government officials for purposes of the FCPA. The provisions of the United Kingdom Bribery Act extend beyond bribery of government officials and are broader than the FCPA in a number of other respects, including jurisdiction, non-exemption of facilitation payments and penalties. In particular, the United Kingdom Bribery Act (unlike the FCPA) does not require a corrupt or improper intent to be established in relation to the bribery of a public official and also applies to the active payment of bribes as well as the passive receiving of bribes. Furthermore, unlike the vicarious liability regime under the FCPA, whereby corporate entities can be liable for the acts of its employees, the United Kingdom Bribery Act introduced a new corporate offence directly applicable to corporate entities that fail to prevent bribery and did not establish and adopt adequate procedures to prevent bribery from occurring and, in certain circumstances, can render parties liable for the acts of their joint venture or commercial partners.

In addition, since March 2014, heightened tensions between Russia and Ukraine, in particular relating to the accession of Crimea to Russia, have resulted in the imposition of sanctions, asset freezes, travel limitations and certain other measures against specified Russian individuals as well as specified Russian companies by the United States, the European Union and certain other authorities. These sanctions include prohibitions on providing technology in support of exploration or production for deep-water, Arctic offshore or shale projects that have the potential to produce oil in the Russian Federation, encompassing the majority of Russian companies in the oil and gas industry.

While the Group has several joint venture partnerships in Russia, neither the Group nor its joint ventures have active operations in Russia in the particular areas of oil and gas exploration and production that are targeted by current sanctions regimes. However, if the United States or the European Union were to impose further sanctions which included its joint venture partners, this could, among other things, limit its access to certain types of technology in the oil and gas industry, its ability to acquire new assets and its ability to operate its existing assets, any of which could have a material adverse effect on its business, financial condition or results of operations.

The Group has policies and procedures designed to ensure its compliance with applicable laws and regulations and has trained its employees to comply with such laws and regulations and to consider the policies of and the compliance of its commercial partners when choosing entities with whom to enter into business arrangements. However, there can be no assurance that the Group's policies and procedures will be followed at all times or effectively detect and prevent all violations of the applicable laws and every

instance of fraud, bribery and corruption in every jurisdiction in which one or more of its employees, consultants, agents, commercial partners, contractors, sub-contractors or joint venture partners is located. As a result, the Group could be subject to penalties and reputational damage and material and adverse consequences on its business, prospects, financial condition or results of operations if the Group or other parties with whom the Group does business fail to prevent any such violations or are the subject of investigations into potential violations.

2.13 The Group's insurance coverage may not be sufficient

Oil and gas exploration, development, and production operations are subject to all the risks and hazards typically associated with such operations. The Group maintains a number of separate insurance policies to protect its core businesses against loss and liability to third-parties, including general liability, physical damage, operators' extra expense (which includes the cost of regaining control of wells, re-drilling, seepage, pollution, clean-up and contamination) and third-party liability. However, in accordance with industry practice and as a result of the Group's assessment of its insurance programme profile from time to time, the Group is not fully insured against all potential risks. Furthermore, not all risks applicable to the Group's business are insurable, or only insurable at a disproportionately high cost. Although the Group maintains liability insurance in an amount that the Group considers adequate and consistent with industry standard and the Group's assets located in North Africa, Russia and Ogarrio, Mexico also benefit from investment guarantees provided by the Federal Republic of Germany, the nature of these risks is such that liabilities could materially exceed policy limits or not be covered at all, in which event the Group could incur significant costs that could have adverse effect on its business. Any uninsured loss or liabilities, or any loss and liabilities exceeding the insured limits, may adversely affect its business, financial condition and results of operations

2.14 The Group is subject to the risk of litigation

Oil and gas companies like the Group can be involved in various legal proceedings and disputes with landowners, royalty owners, JV partners or other operators over matters such as leases, title transfer, joint interest billing arrangements, revenue distribution, or production or cost sharing arrangements, as well as legal proceedings and disputes with customers and suppliers and in relation to construction and other activities at its assets, in the ordinary course of business. Damages claimed under such proceedings may be material or may be indeterminate, and the outcome of such litigation or arbitration could adversely affect the Group's business. In addition, because the Group maintains a diversified portfolio of assets that includes global projects, the complexity and types of legal procedures with which the Group may become involved may vary, and the Group could incur significant legal and support expenses in different jurisdictions. While the Group assesses the merits of each claim and defends accordingly, the Group may be required to incur significant expenses and there can be no guarantee that a court or tribunal finds in its favour. Further, the adverse publicity surrounding such claims, particularly those relating to environmental matters, could materially and adversely affect the Group's business, financial condition and results of operations. For further detail on material proceedings in which the Group is involved, please see "*Business of the Group*".

2.15 The Group is subject to credit risks

The Group's business is exposed to the risk that the amounts owed by its customers for products sold or services rendered will not be paid when due, and that some of them may not be able to perform timely and fully their obligations, for example, due to insolvency. In such cases, the Group seeks to resolve any disputes and recover amounts owed to it in conformity with the laws of the jurisdictions where the Group operates and with established business practices. As a result of the uncertainty regarding the amount and the date at which the Group will recover overdue debts from its customers, the Group may need substantial financial resources to maintain its financial stability.

The Group is also exposed to credit risk through its arrangements with suppliers and its joint venture and other partners. While the Group conducts thorough financial due diligence on all of its material counterparties, there can be no assurance that its business would not be adversely impacted if one of its customers, suppliers or joint venture partners experienced financial difficulty.

2.16 Changes in foreign exchange rates may affect the Group's results of operations and financial position

The Group is exposed to market fluctuations in foreign exchange rates. Its reporting currency is the Euro. Revenues are based on several currencies including U.S. dollars, while operational costs and investment may be denominated in other currencies, including, for example, the Norwegian kroner and Russian rouble. The Group's net foreign currency exposure (after natural hedges) is hedged actively with linear contracts where feasible to eliminate effects of currency fluctuations. Significant fluctuations in exchange rates between U.S. dollars, the Euro and its other operational currencies could materially and adversely affect its reported results.

2.17 The Group engages in limited trading and hedging activities that could expose it to losses

The nature of its operations results in exposure to fluctuations in commodity prices. The Group may, from time to time, use financial instruments and physical delivery contracts to hedge its exposure to these risks or otherwise optimise its business. If the Group engages in hedging, the Group will be exposed to credit related losses in the event of non-performance by counterparties to the associated financial instruments. Additionally, depending on the type of hedging instruments, it could limit its ability to receive the full benefit of commodity price increases and the Group may not be able to find pricing for hedging on suitable terms. The Group also engages in limited natural gas trading for optimisation of sales in its European markets. Any related trading risks are limited and monitored on a daily basis. If the Group enters into hedging or trading arrangements, the Group may suffer financial loss if the Group are unable to commence operations on schedule or is unable to produce sufficient quantities of hydrocarbons to fulfil its obligations.

2.18 The Group may be unable to sell assets on attractive terms and may be required to retain liabilities for certain matters

The Group regularly reviews its asset base to assess the market value versus holding value of existing assets, with a view to optimising deployed capital. Its ability to consummate any future assets could be affected by various factors, including the availability of purchasers willing to purchase such assets at prices acceptable to it. In specific cases, the Group may retain certain liabilities or agree to indemnify buyers for certain matters and to divest certain assets the Group may provide an indemnity to a buyer. The magnitude of any such retained liability or indemnification obligation may be difficult to quantify at the time of the transaction and ultimately may be material. Also, as is typical in divestiture transactions, third-parties may be unwilling to release the Group from guarantees or other credit support provided prior to the sale of the divested assets. As a result, after a sale, the Group may remain secondarily liable for the obligations guaranteed or supported to the extent that the buyer of the assets fails to perform these obligations.

2.19 The Group may incur material costs to comply with health and safety and environmental regulations

The Group operates in an industry that is inherently hazardous and consequently subject to comprehensive regulation. Failure to adequately mitigate risks relating to compliance with these regulations may result in loss of life, injury, or adverse impacts on health of employees, contractors and third-parties or the environment. Such failure, whether inadvertent or otherwise, by the Group to comply with applicable legal or regulatory requirements may give rise to significant liabilities and/or delays in permissions. A lack of compliance may even lead to denial of permissions that the Group requires for operating its sites. In addition, more stringent environmental laws and regulation may contradict existing license agreements which have been granted and could result in the loss or curtailment of its rights.

The terms of licenses or permissions may include more stringent environmental and/or health and safety requirements. The Group's operations have the potential to impact soil, air and ground-water quality, biodiversity and ecosystems. Obtaining exploration, development or production licenses and permits may become more difficult or may be delayed due to government, regional or local environmental consultation, scientific studies, approvals or other considerations or requirements. Furthermore, third-parties such as environmental organizations may judicially contest licenses and permits already granted by relevant authorities.

The Group has incurred, and expects to continue to incur, substantial capital and operating costs in an effort to comply with increasingly complex health, safety and environmental laws and regulations. New laws and regulations, self-imposed obligations, the imposition of tougher requirements in licenses,

increasingly strict enforcement, or new interpretations of, existing laws, regulations and licenses, or the discovery of previously unknown contamination may require further expenditures to, for example:

- modify operations;
- upgrade treatment plants;
- install pollution control equipment;
- perform site clean ups;
- curtail or cease certain operations; or
- pay fees or fines or make other payments for pollution, discharges or other breaches of environmental requirements.

The costs of the measures taken to comply with environmental regulations have been part of its established business practices and have not had a material adverse effect on the Group's operations to date. However, in the future, the costs of such measures and liabilities related to potential environmental damage caused by the Group may increase, including, for example, due to legacy obligations relating to waste disposal sites, such as sludge pits. In addition, it is not possible to predict what future environmental regulations will be enacted or how current or future environmental regulations will be applied or enforced. The Group may have to incur significant expenditure for the installation and operation of systems and equipment for remedial measures in the event that environmental regulations become more stringent or government authorities elect to enforce them more vigorously, or costly environmental reform is implemented by environmental regulators. Any such expenditure may have a material adverse effect on its business, financial condition and results of operations. No assurance can be given that environmental laws will not result in a curtailment of production or a material increase in the cost of production, development or exploration activities. For further detail, see "*Our Business—Environmental Protection*".

2.20 The Group's IT systems may be subject to intentional and unintentional disruption

The Group is dependent on its IT systems for the normal operation of its business. As part of the post-Merger integration process, the Group is currently reliant on certain IT functions provided by BASF under a transitional services arrangement while the Group builds out its standalone IT infrastructure. Any delay in this process, due to unforeseen difficulties, resource constraint or otherwise, could have an adverse impact on its business.

In addition, the Group could be a target of cyber-attacks designed to penetrate its network security or the security of its internal systems, misappropriate proprietary information, commit financial fraud and/or cause interruptions to its activities, including a reduction or halt in its production. Such attacks could include hackers obtaining access to the Group's systems, the introduction of malicious computer code or denial of service attacks. If an actual or perceived breach of the Group's network security occurs, it could adversely affect its business or reputation, and may expose it to the loss of information, litigation and possible liability. Such a security breach could also divert the efforts of its technical and management personnel. In addition, such a security breach could impair the Group's ability to operate its business and provide products and services to its customers. If this happens, the Group's reputation could be harmed, its revenues could decline and its business could suffer.

In addition, confidential information that the Group maintains may be subject to misappropriation, theft and deliberate or unintentional misuse by current or former employees, third-party contractors or other parties who have had access to such information. Any such misappropriation and/or misuse of its information could result in the Group, among other things, being in breach of certain data protection and related legislation, which could have a material adverse effect on its business, financial condition and results of operations.

2.21 The Group may be subject to work stoppages or other labour disturbances

The Group employs local workers in many of the countries in which it does business. Additionally, the Group hires contractors who, in turn, have their own local employees. Although the Group believes that it has good relations with its employees and its contractor's employees, strikes, work stoppages or other labour disturbances may occur. The majority of the Group's employees, and those employed by its contractors, are represented by labour unions and councils and the Group or its contractors may not be able to negotiate acceptable collective bargaining agreements or future restructuring agreements or may

become subject to material cost increases or additional work rules imposed by such agreements. As part of the post-Merger integration process, the Group is planning significant redundancies, particularly at its operations in Germany and Norway. While the Group is undertaking the redundancy process with the utmost care, there can be no assurance that it will not have an adverse impact on its relationship with employees in the affected business areas. The occurrence of any of the foregoing could adversely affect its business, financial condition and results of operations.

2.22 The Group may be adversely affected by changes to tax legislation or its interpretation

The Group does business in multiple jurisdictions and its profits are taxed according to the tax laws of such jurisdictions. Fluctuations in tax rates can have an impact on projects and make certain projects less economically viable. The Group's tax rate, including its effective tax rate, may be affected by changes in tax laws or their interpretation, and in any given financial year will reflect a variety of factors that may not be present in succeeding financial years. As a result, the Group's tax rate may increase in future periods, which could have a material adverse effect on its financial results.

Tax regimes in certain jurisdictions can be subject to differing interpretations and tax rules in any jurisdiction are subject to legislative change and changes in administrative and regulatory interpretation. For example, the Group's Russian gas projects are joint ventures with Gazprom, which, since 2016, has been subject to an increased mineral extraction tax burden in Russia, which has been applied to certain of the Group's joint ventures.

In certain circumstances, the interpretation by the Group's relevant subsidiaries of applicable tax law as applied to their transactions and activities may not coincide with that of the relevant tax authorities. As a result, transactions may be challenged by tax authorities and any of its profits from activities in those jurisdictions may be subject to additional tax or additional unexpected transactional taxes (e.g. stamp duty or capital gains tax) may arise, which, in each case, could result in significant legal proceedings and additional taxes, penalties and interest, any of which could have a material adverse impact on the Group's business, financial condition, project economics or results of operations.

Through its development projects in Norway, the Group has built up a significant tax balance that can be utilized against future production revenues. While the current petroleum tax regime in Norway has been stable for the last 15 years, despite the significant oil price fluctuations during this period, there is no assurance that future political conditions in Norway will not result in the government adopting different policies for petroleum taxation. In the event there are changes to this tax regime, it could lead to new investments being less attractive and the amount of taxes the Group is required to pay could change. Any future tax reform in Norway may result in changes in the Norwegian tax system that may affect the Group's current and future tax positions, net income after tax and financial condition.

2.23 The Group may fail to fully identify potential problems related to acquired reserves and resources or to properly estimate those reserves and resources

Although the Group performs a review of properties that it acquires that it believes is consistent with industry practices, such reviews are inherently incomplete. It generally is not feasible to review in-depth every individual property involved in each acquisition. However, even a detailed review of records and properties may not necessarily reveal existing or potential problems, nor will the Group's permit it as a buyer to become sufficiently familiar with the properties to assess fully and accurately their deficiencies and potential. Inspections may not always be performed on every well, and environmental problems, such as groundwater contamination, are not necessarily observable even when an inspection is undertaken. Even when problems are identified, the Group often assumes certain environmental and other risks and liabilities in connection with acquired properties. There are numerous uncertainties inherent in estimating quantities of proved oil and gas reserves and resources and future production rate and costs with respect to acquired properties, and actual results may vary substantially from those assumed in the estimates. Accordingly, the oil and gas reserves and resources and production rates information set out in this Offering Memorandum may not reflect actual oil and gas reserves and resources and production rates or be comparable to similar information reported by other companies. In addition, there can be no assurance that acquisitions will not have an adverse effect on its operating results, particularly during the periods in which the operations of acquired businesses are being integrated into its ongoing operations.

2.24 The Group's strategy may expose it to risks

The Group is a leading European independent gas and oil company with full lifecycle capabilities across exploration, development and production activities, as well as a stable, cash-generative European midstream and transportation business with investments in European gas transportation assets. As part of its strategy, the Group may in the future seek additional opportunities to further expand its integrated portfolio and to possibly restructure or cease its existing operations where it is appropriate. The Group assesses each investment that it makes on the basis of extensive financial, operational and market analysis, which may include certain assumptions.

Among the risks associated with this strategy, which could materially and adversely affect the Group's business, results of operations or financial condition, are the following:

- the Group may incur substantial costs, delays or other operational or financial problems in integrating or restructuring acquired businesses, production sites and distribution networks;
- such acquisitions and restructuring processes may divert management's attention from the operation of existing businesses;
- the Group may not be able to identify, acquire, profitably manage or successfully restructure such additional businesses;
- the Group may not be able to fully or effectively enforce its ownership rights in the entities in which the Group invests;
- the Group may not realise the projected profits or anticipated benefits;
- the Group may encounter significant post-acquisition integration or restructuring issues relating to political or government interference and investigation, trade union interference and/or employment issues;
- the Group may not be able to retain key personnel of the newly acquired or recently restructured businesses; and
- the Group may encounter unanticipated events, circumstances or legal liabilities.

The Group's ability to continue to grow and to penetrate new markets will depend on a number of factors. These include, among others, the availability of internal and external financing, the availability of suitable third-party business partners able to share risk and costs as well as existing and future competition. The Group might not be able to implement its growth strategy or successfully manage previous acquisitions and further its growth and this may have a material adverse effect on its business, results of operations or financial condition.

2.25 The Group's production and development projects require substantial capital expenditures and its ability to generate sufficient cash flow to fund its operations depends on many factors beyond its control

The Group makes, and expects to continue to make, substantial capital expenditures in its business for the exploration, development, production and acquisition of oil and natural gas reserves and resources to offset declines in its key production assets. The Group incurs significant costs in conducting its exploration and development activities to establish the extent of oil and gas reserves and resources through seismic and other surveys and drilling, which can differ significantly from estimates, with no guarantee that such expenditure will result in the discovery of commercially deliverable resources and could lead to write-downs of reserves and resources. The Group has in the past and may, in the future, have to write down the value of its assets because production levels have not materialised as expected due to unexpected geological formations, delays in in project developments or other reasons. The Group's assets also require substantial sustaining capital expenditure for continuous inspection, repairs, optimisation and maintenance. Some of its development projects have required and will require significant investments because of the complexity of the well construction technologies, the scale of the projects and/or the harsh environment conditions. However, the Group may be unable to finance its capital expenditures at a reasonable cost, including the capital requirements necessary to maintain its production and operations.

The Group's ability to fund its working capital and capital expenditures and to make payments on, or repay or refinance, its debt, will depend on its future operating performance and ability to generate sufficient cash. This depends on the success of the Group's business strategy and on general economic, financial,

competitive, market, legislative, regulatory, technical and other factors, many of which are beyond the Group's control. The Group cannot assure you that its business will generate sufficient cash flow from operations or that future internal and external financing will be available to it in an amount sufficient to enable it to pay its debt, including the Notes, or to fund its other liquidity needs.

The Group cannot assure you that it will be able to refinance or repay any of its debt at maturity, upon acceleration or early repayment, including the Notes, on commercially reasonable terms or at all. Any refinancing of the Group's debt could be at higher interest rates than its current debt and may require it to comply with more onerous covenants, which could further restrict its business operations. If the Group is unable to make payments or refinance its debt or obtain new financing under these circumstances, the Group would have to consider other options, such as:

- selling assets;
- obtaining additional debt or equity capital;
- restructuring or refinancing all or a portion of its debt on or before maturity;
- foregoing opportunities such as acquisitions of other businesses; or
- reducing or delaying its business activities and capital investments.

The Group cannot assure you that it would be able to accomplish any of these alternatives on a timely basis or on commercially reasonable terms, if at all. Any failure to make payments on its debt, including the Notes, on a timely basis would likely result in a reduction of the Group's credit rating, which could also restrict its ability to incur additional indebtedness. There can be no assurance that any assets that the Group may elect to sell can be sold or that, if sold, the timing of such sale and the amount of proceeds realised from such sale will be acceptable.

2.26 As a result of the Merger, the historical financial information contained in this Offering Memorandum is not comparable

The Merger took effect on 1 May 2019. Consequently, this Offering Memorandum contains the audited consolidated financial statements of Wintershall as at and for the years ended 31 December 2017 and 2018, the audited consolidated financial statements of Dea as at and for the years ended 31 December 2017 and 2018, audited consolidated financial statements for the short fiscal year ended 30 April 2019 for each of Wintershall and Dea and unaudited condensed consolidated interim financial statements of the Group for the two months ended 30 June 2019.

The actual financial condition and results of operations of the Group following the Merger may not be consistent with, or evident from, the financial statements included in this Offering Memorandum. In particular, the short fiscal year and interim financial statements should not be relied upon by investors as providing the same type of information as financial information that represents a full financial year with a similarly comparative period, and investors must exercise caution when using such data to evaluate the Group's business, results of operations and financial condition.

2.27 As a result of the Merger, the unaudited pro forma financial information does not reflect the actual results of operations of the Group had the Merger occurred on 1 January 2018

This Offering Memorandum contains unaudited pro forma financial information comprising a pro forma income statement for the four months ended 30 April 2019 and a pro forma income statement for the year ended 31 December 2018. The unaudited pro forma information is presented for illustrative purposes only, is based on certain assumptions, addresses a hypothetical situation and reflects limited historical financial data and, due to its nature, does not reflect the actual results of operations of the Group if the Merger had occurred on 1 January 2018 nor does it indicate the future development of the net assets, financial position and results of operations of the Group after the Merger. In addition, the assumptions used in preparing the unaudited pro forma financial statements may not prove to be accurate, and other factors may affect Group's financial condition or results of operations following the Merger. Accordingly, the Group's business, assets, results of operations and financial condition may differ significantly from those indicated by the pro forma financial information included in this Offering Memorandum.

2.28 The United Kingdom's withdrawal from the European Union may impact the Group's business

The United Kingdom's initiation of the process to withdraw from the European Union pursuant to Article 50 of the Treaty on European Union following the national referendum in July 2016 ("Brexit"), has created fiscal uncertainty in the United Kingdom, as well as significant uncertainty about the future relationship between the United Kingdom, where the Group has operations, and the EU, where the Group is based. Possible negative outcomes resulting from Brexit include: significantly disrupted trade between the United Kingdom and Europe, including offtake arrangements for the offtake of gas produced at the Group's Norwegian assets; political and economic instability in other countries of the EU and elsewhere in Europe; and instability in the global financial and foreign exchange markets including volatility in the value of the Euro and the pound sterling. It remains unclear what financial, trade and legal implications Brexit will have and whether, and to what extent the Group's business, financial condition and results of operations may be affected.

3 Risks relating to the Notes

3.1 The Notes may not be a suitable investment for all investors

Each potential investor in the Notes must determine the suitability of an investment in light of its own circumstances. In particular, each potential investor should:

- have sufficient knowledge and experience to make a meaningful evaluation of the Notes, the merits and risks of investing in the Notes and the information contained or any applicable supplement;
- have access to, and knowledge of, appropriate analytical tools to evaluate, in the context of its particular financial situation, an investment in the Notes and the impact such investment will have on its overall investment portfolio;
- understand thoroughly the terms of the Notes and be familiar with the behaviour of financial markets in which they participate; and
- be able to evaluate possible scenarios for economic, interest rate and other factors that may affect its investment and its ability to bear the applicable risks.

3.2 The market value of the Notes could decrease if the creditworthiness of the Issuer or the Guarantor worsens or is perceived to worsen

If, for example, because of the materialization of any of the risks regarding the Group, the Issuer or the Guarantor is less likely to be in a position to fully perform all of their obligations under the Notes or the Guarantees, respectively, when they come due, the market value of the Notes may suffer. Even if the Issuer or the Guarantor is not actually less likely to be in a position to fully perform all such obligations when they come due, market participants including rating agencies could nevertheless have a different perception. In addition, the market participants' estimation of the creditworthiness of corporate debtors in general or debtors operating in the same business areas as the Group could adversely change. Also, changes in accounting standards may lead to adjustments in the relevant accounting positions of the Group which could have a material adverse effect on the presentation of the Group financial condition and could impact the market value of the Notes.

If any of these risks occurs, the market value of the Notes could decrease, potentially by a significant amount.

3.3 The Notes and the Guarantees will be effectively subordinated to the debt of the Guarantor or any of its subsidiaries to the extent such debt is secured by assets of the Guarantor or such subsidiaries

The Notes and the Guarantees will be effectively subordinated to the debt of the Guarantor or any of its subsidiaries to the extent such debt is secured by assets of the Guarantor or its subsidiaries that are not also securing the Notes. Although the Terms and Conditions and the Guarantees require the Issuer and the Guarantor to secure the Notes equally if they provide security for the benefit of Relevant Indebtedness (as defined in the Terms and Conditions), the requirement to provide equal security to the Notes is subject to a number of significant exceptions and carve-outs as set out in detail in the Terms and Conditions included in this Offering Memorandum. To the extent the Guarantor or any of its subsidiaries provides security interest over its assets for the benefit of debt without also securing the Notes or the Guarantees, the Notes and/or the Guarantees will be effectively junior to such debt to the extent of such assets. As a result, the holders of (present or future) secured debt of the Issuer or the Guarantor may recover disproportionately

more on their claims than the Noteholders in case of an insolvency, bankruptcy or similar proceeding of the Guarantor or any of its subsidiaries.

3.4 The proceeds from the enforcement of the Guarantees may not be sufficient to satisfy the obligations under the Notes

The Notes will be guaranteed by the Guarantor as specified in the Terms and Conditions. No appraisal of the value of the assets of the Guarantor has been made in connection with the issue of the Notes. In addition, the Terms and Conditions permit the incurrence of financial indebtedness in the future that is secured by the Guarantor's assets, subject to certain restrictions under the negative pledge provision included in the Terms and Conditions. The amount to be received upon an enforcement of each Guarantee would depend on numerous factors affecting the financial situation of the Guarantor at the time of its enforcement. In the event of a foreclosure, liquidation, bankruptcy or similar proceeding of the Guarantor, the payments under the Guarantees may not be sufficient to repay the obligations under the Notes.

3.5 Credit ratings may not reflect all risks and are subject to change

Moody's Investors Service ("Moody's") and Fitch Ratings ("Fitch") have assigned a credit rating to the Guarantor and are expected to assign a credit rating to the Notes. The market value of the Notes is likely to be dependent upon the level of such credit ratings assigned.

However, such credit ratings only reflect the assessment by the aforementioned rating agencies of the credit risks associated with the Group or the Notes. They may not reflect the potential impact of all risks related to the structure, market and additional factors discussed herein, recent developments and other factors that may affect the value of the Notes. A credit rating is not a recommendation to buy, sell or hold the Notes and may be revised, suspended or withdrawn by the respective rating agency at any time. In the event of a change, suspension or withdrawal of a credit rating, the price and the market value of the Notes may be affected. As a result, an investor may incur financial losses as he may only be able to sell the Notes at a lower price.

3.6 There is no active trading market for the Notes

The Notes are new securities for which no active trading market may develop. If a market does develop, it may not be liquid or may become illiquid at a later stage. If the Notes are traded after their initial issuance, they may trade at a discount to their initial offering price, depending upon prevailing interest rates, the market for similar securities, general economic conditions and the financial condition of the Issuer and the Guarantor.

3.7 Risk of early redemption

The Issuer has the right to redeem each Series of Notes if 80 per cent. or more of the aggregate principal amount of the relevant Series of Notes initially issued have been redeemed or repurchased and cancelled. Each Series of Notes can further be redeemed at the option of the Issuer at the relevant Call Redemption Amount (as defined in the Terms and Conditions). Moreover, each Series of Notes can be redeemed at the option of the Issuer at their principal amount during a specified period prior to the relevant maturity date.

Finally, the Issuer will have the right to redeem each Series of Notes for reasons of taxation upon the occurrence of a Gross-up Event, i.e. in the event that the Issuer or the Guarantor is required to pay Additional Amounts on the Notes or the Guarantees as set out in the Terms and Conditions. One of the policy intentions of the Netherlands government is to introduce a withholding tax on interest payments directly or indirectly made to group entities in "low-tax jurisdictions" or countries that are included on the EU list of non-cooperative jurisdictions as of January 1, 2021. If, however, the proposed withholding tax would also apply to interest payments to unrelated recipients, it could potentially be applicable to interest payments made under the Notes. In the event that the proposed measure would apply to payments made under the Notes and the Issuer is required to pay Additional Amounts pursuant to the Terms and Conditions, the Notes may be redeemed at the option of the Issuer.

If the Issuer redeems any Note prior to maturity, a Noteholder of such Note is exposed to the risk that due to early redemption his investment may have a lower than expected yield. Noteholders may be subject to the risk that interest earned from an investment in the Notes may not in the event of early redemption of any Notes be able to be reinvested in such a way that they earn the same rate of return as the redeemed Notes. The Issuer might exercise his optional call right if the yield on comparable Notes in the capital

market falls, which means that the investor may only be able to reinvest the redemption proceeds in Notes with a lower yield.

3.8 Risks relating to fixed rate notes

The Noteholders are exposed to the risk that the prices of the Notes fall as a result of changes in the market interest rate. While the nominal interest rates of the Notes are fixed during the life of the Notes, the current interest rates available in the capital markets ("market interest rates") typically change on a daily basis. Market interest rate movements tend to be inversely correlated to movements in the prices of the Notes. For example, if the market interest rates increase, the prices of Notes will typically fall, until the yield of the Notes is approximately equal to the market interest rates. If the market interest rates fall, the prices of the Notes will typically increase, until the yield of the Notes is approximately equal to the market interest rates. If the Noteholders hold the Notes until their relevant maturity date, changes in the market interest rate are without relevance to such Noteholders as such Notes will be redeemed at a specified redemption amount, i.e. the principal amount of such Notes.

3.9 The Notes are subject to inflation risks

The inflation risk is the risk of future money depreciation. The real yield from an investment is reduced by inflation. The higher the rate of inflation, the lower the real yield on a Note. If the inflation rate is equal to or higher than the nominal yield, the real yield is zero or even negative.

3.10 The Issuer may not be able to repurchase the Notes upon a Put Event

Upon the occurrence of a Put Event (as defined in the Terms and Conditions), the Issuer will be required to offer to redeem all of the Notes in cash in an amount equal to 101 per cent. of the principal amount of such Notes, plus accrued and unpaid interest, if any, to the date of redemption. If a Put Event occurs, the Group may not have sufficient funds at the time of any such event to make the required redemptions. The source of funds for any redemptions required as a result of any such event will be available cash or cash generated from operating activities or third-party financing. In such case, the Issuer's failure to redeem any of the Notes would constitute an event of default under the Terms and Conditions, which would likely cause a default under other debt obligations.

3.11 Clearing System

Each Series of Notes will be represented by one or more Global Notes. Such Global Notes will be deposited with a common safekeeper for Clearstream Banking S.A., Luxembourg and Euroclear Bank SA/NV (together, the "Clearing System"). Investors will not be entitled to receive definitive Notes. The Clearing System will maintain records of the beneficial interests in the Global Notes. While the Notes are represented by one or more Global Notes, investors will be able to trade their beneficial interests only through the Clearing System and the Issuer will discharge its payment obligations under the Notes by making payments to the Clearing System or to its order for distribution to their account holders. A holder of a beneficial interest in a Global Note must rely on the procedures of the Clearing System to receive payments under the Notes. The Issuer has no responsibility or liability for the records relating to, or payments made in respect of beneficial interests in the Global Notes.

3.12 Noteholders may face difficulties in protecting their interests and enforcing their rights under the Guarantees and the Notes

The Guarantor is incorporated in the Federal Republic of Germany, and the Issuer is incorporated in the Netherlands. Consequently, in the event of an insolvency, insolvency proceedings are likely to be initiated in German or Dutch courts and their relevant laws would then govern such proceedings. Insolvency laws in Germany and the Netherlands may differ materially from, and be less favourable than, equivalent procedures in other jurisdictions. This may affect the ability of Noteholders to recover in full if the Issuer or the Guarantor becomes bankrupt, insolvent or reorganises.

3.13 Legal investment considerations may restrict certain investments

The investment activities of certain investors are subject to investment laws and regulations, or to the review by, or regulation of, certain authorities. Each potential investor should consult its legal advisers to determine whether and to what extent (i) the Notes are legal investments to it; (ii) the Notes can be used as collateral for various types of borrowing; and (iii) other restrictions apply to its purchase or pledge of

any Notes. Financial institutions should consult their legal advisers or the appropriate regulators to determine the appropriate treatment of the Notes under any applicable risk-based capital or similar rules.

3.14 The Notes are subject to transaction costs and charges

When Notes are purchased or sold, several types of incidental costs (including transaction fees and commissions) are incurred in addition to the purchase or sale price of the Notes. These incidental costs may significantly reduce or eliminate any profit from holding the Notes. Credit institutions generally charge commissions which are either fixed minimum commissions or pro rata commissions, depending on the value of the order. To the extent that additional parties are involved in the execution of an order, including domestic dealers or brokers in foreign markets, Noteholders may also be charged for the brokerage fees, commissions and other fees and expenses of such parties (third-party costs). In addition to such costs directly related to the purchase of securities (direct costs), potential investors must also take into account any follow-up costs (such as custody fees). Potential investors should inform themselves about any additional costs or fees incurred in connection with the purchase, custody or sale of the Notes before investing in the Notes.

3.15 Noteholders are subject to tax risks

Potential investors of the Notes should be aware that stamp duty and other taxes and/or charges may be levied in accordance with the laws and practices in the countries where the Notes are transferred and other relevant jurisdictions.

3.16 Legality of purchase

Neither the Issuer, the Guarantor nor the Joint Bookrunners nor any of their respective affiliates, has or assumes responsibility for the lawfulness of the acquisition of the Notes by a prospective purchaser of the Notes, whether under the laws of the jurisdiction of its incorporation or the jurisdiction in which it operates (if different) or for compliance by that prospective purchaser with any laws, regulation or regulatory policy applicable to it. A prospective purchaser may not rely on the Issuer, the Joint Bookrunners or any of their respective affiliates in connection with its determination as to the legality of its acquisition of the Notes.

3.17 Change of Law

The terms and conditions of the Notes and the terms of the Guarantees are based on German law in effect as at the date of this Offering Memorandum. No assurance can be given as to the impact of any possible judicial decision or change to German law or administrative practice after the date of this Offering Memorandum. Changes in law after the date hereof may affect the rights of Noteholders as well as the market value of the Notes. Such changes in law may include changes in statutory, tax and regulatory regimes during the life of the Notes, which may have an adverse effect on an investment in the Notes.

3.18 Market conditions

The market for debt securities issued by European companies is influenced by economic and market conditions in Europe and, to varying degrees, by market conditions, interest rates, currency exchange rates and inflation rates in other countries. There can be no assurance that events in Europe or elsewhere will not cause market volatility or that such volatility will not adversely affect the price of the Notes or that economic and market conditions will not have any other adverse effect.

3.19 Currency risk

A Noteholder of a Note denominated in a foreign currency is exposed to the risk of changes in currency exchange rates which may affect the yield of such Notes. A change in the value of any foreign currency against the Euro, for example, will result in a corresponding change in the Euro value of a Note denominated in a currency other than the Euro. If the underlying exchange rate falls and the value of the Euro correspondingly rises, the price of the Note and the value of interest and principal payments made thereunder expressed in Euro falls.

3.20 Liquidity risk

Application may be made to list the Notes to be issued on the Luxembourg Stock Exchange and to admit to trading such Notes on the Euro MTF Market of the Luxembourg Stock Exchange. Regardless of whether the Notes are listed or not, there can be no assurance that a liquid secondary market for the Notes will develop or, if it does develop, that it will continue. The fact that the Notes may be listed does not necessarily lead to greater liquidity than if they were not listed. If the Notes are not listed on any exchange, pricing information for such Notes may, however, be more difficult to obtain which may affect the liquidity of the Notes adversely. In an illiquid market, an investor might not be able to sell his Notes at any time at fair market prices. The possibility to sell the Notes might additionally be restricted in certain jurisdictions due to currency restrictions.

3.21 There is a risk that trading in the Notes will be suspended, interrupted or terminated, which may have an adverse effect on the price of such Notes

The listing of the Notes on the Euro MTF Market of the Luxembourg Stock Exchange may be suspended or interrupted by the respective stock exchange or a competent regulatory authority upon the occurrence of a number of reasons, including violation of price limits, breach of statutory provisions, occurrence of operational problems of the stock exchange or generally if deemed required in order to secure a functioning market or to safeguard the interests of Noteholders. Furthermore, trading in the Notes may be terminated, either upon decision of the stock exchange, a regulatory authority or upon application by the Issuer. Noteholders should note that the Issuer has no influence on trading suspension or interruptions (other than where trading in the Notes is terminated upon the Issuer's decision) and that Noteholders in any event must bear the risks connected therewith. In particular, Noteholders may not be able to sell their Notes where trading is suspended, interrupted or terminated, and the stock exchange quotations of such Notes may not adequately reflect the market value of such Notes. Furthermore, even if trading in Notes is suspended, interrupted or terminated, Noteholders should note that such measures may neither be sufficient nor adequate nor in time to prevent price disruptions or to safeguard the Noteholders' interests; for example, where trading in Notes is suspended after price-sensitive information relating to such Notes has been published, the price of such Notes may already have been adversely affected. All these risks would, if they materialise, have a material adverse effect on the Noteholders.

4 Risks relating to the Issuer and the Guarantor

4.1 The Issuer's ability to fulfil its obligations under the Notes is dependent on the Group

The Issuer is a wholly-owned finance subsidiary of the Guarantor and intends to service and repay the Notes out of the financings it obtains from companies of the Group. The Issuer has insufficient net assets other than amounts due to it from the Group under existing intergroup loans. The Issuer would, therefore, in the absence of other funding sources, have to rely on the Group providing sufficient funds to meet such obligations. Accordingly, in meeting its payment obligations under the Notes, the Issuer is wholly dependent on the profitability and cash flow of the Group. Any delay or failure by the relevant Group companies to make payments of principal and interest to the Issuer under an intercompany loan will affect the Issuer's ability to make payments of interest and principal under the Notes as those payments fall due.

In addition, the other members of the Group are separate and distinct legal entities and have no obligation, other than the Guarantor in relation to the Guarantees, contingent or otherwise, to pay any amounts due pursuant to the Notes or to make any funds available for these purposes, whether by dividends, loans, distributions or other payments, and do not, apart from the Guarantor, guarantee the payment of interest on, or principal of, the Notes.

4.2 The Notes and the Guarantees will be structurally subordinated to the indebtedness of the Guarantor's subsidiaries (other than the Issuer)

Wintershall Dea GmbH, as Guarantor, will provide a guarantee in favour of each Series of Notes. The Notes will not be guaranteed by any subsidiary of the Guarantor. In the event of a liquidation, winding-up, dissolution, bankruptcy, administration, reorganisation, insolvency, receivership or similar proceeding of a subsidiary of the Guarantor (other than the Issuer), such subsidiary will pay the holders of its own debt (including holders of debt which such subsidiaries have guaranteed) before they would be able to distribute any of their assets to the Guarantor. In such case, the Guarantor may not have sufficient assets to make payments on the Guarantees or to service in full any intercompany loans extended to it by the Issuer. As a result, the Issuer may not be able to meet its obligations under the Notes when due.

USE OF PROCEEDS

At closing, the Issuer will on-lend the net proceeds to the Guarantor and Wintershall Norge AS, which will, in turn, use those proceeds to refinance Facility A under the Syndicated Credit Facilities Agreement, to finance transaction costs incurred in connection with the Offering and for general corporate purposes. Each of the Joint Bookrunners acts as a Lender under Facility A under the Syndicated Credit Facilities Agreement and, consequently, will receive a portion of the proceeds of the Offering.

CAPITALISATION

The following table sets forth the unaudited capitalisation and cash and cash equivalents of the Group as at 30 June 2019 on an actual basis as derived from the Interim Financial Statements and on an "as adjusted" basis to give effect to the issuance of the Notes and the use of proceeds therefrom as if those transactions had occurred on 30 June 2019. The as adjusted information below is illustrative only and does not purport to be indicative of our capitalisation following the completion of the Transaction.

This table should be read in conjunction with "*Use of proceeds*", "*Management's discussion and analysis of financial condition and results of operations*" and the financial statements located elsewhere in this Offering Memorandum.

	As at 30 June 2019	
	Actual	As adjusted[1]
	(€ millions) (unaudited)	
Cash and cash equivalents[2]	977	1,285
Interest bearing financial receivables towards related parties	13	13
Liabilities to banks[3]	6,089	2,411
Interest bearing financial liabilities towards related parties	416	416
Leasing liabilities	160	160
Notes offered hereby[4]	—	4,000
Total debt	6,665	6,987
Total equity	9,667	9,667
Total capitalisation[5]	16,332	16,654

Note:

(1) Adjustments reflecting the issuance of the Notes and the application of the proceeds of the offering of the Notes as described in "Use of Proceeds".

(2) The adjustments to cash and cash equivalents reflect the movement in cash and cash equivalents as a result of the application of the proceeds of the Transaction less amounts repaid under Facility A, (€4,000 million less €3,670 million) less already deducted discounts, commissions or fees related to the Transaction and less payment of accrued interest on Facility A (€8 million).

(3) The as adjusted figure reflects payment of principal under Facility A (€3,670 million, calculated on the basis of foreign exchange rates as of 30 June 2019) plus accrued interest (€8 million).

(4) Not including any amortised fees.

(5) Total capitalisation is total debt plus total equity.

SELECTED AND OTHER FINANCIAL INFORMATION

The financial information relating to Wintershall as of and for each of the years ended 31 December 2016, 2017 and 2018, and as of and for the short fiscal year ended 30 April 2019 is derived from the Wintershall Historical Financial Information.

The financial information relating to Dea as of and for the year ended 31 December 2016, 2017 and 2018, and as of and for the short fiscal year ended 30 April 2019 is derived from the Dea Historical Financial Information.

The financial information as of and for the two months ended 30 June 2019 is derived from the Interim Financial Information.

Where financial information in the following tables is labelled "audited", this means that it has been taken or derived from the audited financial statements mentioned above. The label "unaudited" is used in the following tables to indicate financial information that has not been taken or derived from the audited financial statements but was taken or derived either from the Interim Financial Information or the internal reporting systems, or has been calculated based on figures from the aforementioned sources.

Certain financial information (including percentages) in the following tables has been rounded according to established commercial standards. As a result, the aggregate amounts (sum totals or sub totals or differences or if numbers are put in relation) in the following tables may not correspond in all cases to the aggregate amounts of the underlying (unrounded) figures appearing elsewhere in this document. Furthermore, these rounded figures may not add up exactly to the totals contained in the relevant tables. Financial information presented in parentheses denotes the negative of such number presented. In respect of financial information set out in this Offering Memorandum, a dash ("—") signifies that the relevant figure is a true zero or is not available, while a zero ("0") signifies that the relevant figure is available but has been rounded to zero.

The financial statement data and other information set forth in the following tables should be read in conjunction with "Presentation of financial and other information", "Management's discussion and analysis of financial condition and results of operations", "Unaudited Pro Forma Financial Information" and each of Wintershall's, Dea's and the Group's financial statements and related notes. Historical results may not necessarily be indicative of results that may be expected for any future period.

Selected historical and pro forma financial information of the Group

Certain income statement data of the Group

The following table sets out financial information derived from (1) the unaudited pro forma income statement information of the Group for the year ended 31 December 2018, (2) the unaudited pro forma income statement information of the Group for the short fiscal year ended 30 April 2019 and (3) the unaudited condensed consolidated interim financial statements for the two months ended 30 June 2019 and aggregates (2) and (3) for the six months ended 30 June 2019 solely for the convenience of the reader. The pro forma income statements are provided for informational purposes only and do not purport to represent what the Group's results of operations would have been had the Merger actually occurred on 1 January 2018. The pro forma income statements set out below should be read in conjunction with the unaudited pro forma financial information contained in "*Unaudited pro forma financial information*" elsewhere in the Offering Memorandum, which also contains the basis of this presentation. The following aggregated information has been prepared for illustrative and convenience purposes only and does not purport to represent the Group's actual performance or results at any historic date or for any historic period or project its operation or results as at any future date or for any future period.

	Year ended 31 December 2018[1]	Short fiscal year ended 30 April 2019[2]	Two months ended 30 June 2019[3]	Six months ended 30 June 2019[4]
		(millions €) (unaudited)		
Sales revenues gas and oil	5,666	1,732	724	2,456
Sales revenues gas transport/midstream	237	73	39	112
Sales revenues other	365	182	81	263
Net income from equity-accounted investments: gas and oil	25	17	3	20
Net income from equity-accounted investments: gas transport/midstream	104	44	21	65
Other operating income	341	9	44	53
	6,738	2,057	912	2,969
Production and operating expenses	(2,272)	(797)	(325)	(1,122)
Production and similar taxes	(227)	(67)	(33)	(100)
Depreciation and amortisation	(1,397)	(494)	(300)	(794)
Net impairments on assets	(351)	(1,281)	—	(1,281)
Cost of sales gas transport/midstream	(54)	(10)	(6)	(16)
Exploration expenses	(221)	(63)	(35)	(98)
General and administration expenses	(308)	(440)	(44)	(484)
Result from operating activities	1,907	(1,095)	169	(926)
Financial income	6	41	31	72
Financial expenses	(164)	(32)	(38)	(70)
Financial result	(158)	9	(7)	2
Result before taxes	1,749	(1,086)	162	(924)
Income taxes	(936)	97	(29)	68
Net result	813	(989)	133	(856)
Net result attributable to shareholders	800	(1,007)	123	(884)
Net result attributable to non-controlling interests	12	18	10	28

Notes:

(1) Unaudited pro forma income statement of the Group for the year ended 31 December 2018.

(2) Unaudited pro forma income statement of the Group for the short fiscal year ended 30 April 2019.

(3) Unaudited Consolidated Statement of income for the Group for the two months ended 30 June 2019

(4) Income statement data for the six months ended 30 June 2019 has been prepared by aggregating (i) the unaudited *pro forma* income statement of the Group for the short fiscal year ended 30 April 2019 and (ii) the unaudited consolidated statement of income for the Group for the two months ended 30 June 2019. This aggregated information has been prepared for illustrative and convenience purposes only and does not purport to represent the Group's actual performance or results at any historic date or for any historic period or project its operation or results as at any future date or for any future period.

Consolidated balance sheet of the Group

	As at 30 June 2019 (millions €) (unaudited)
Assets	
Goodwill	3,016
Exploration assets	1,808
Other intangible assets	3,290
Property, plant and equipment and investment property	10,595
Investments valued at equity	2,131
Other financial assets	5
Financial receivables	942
Derivative instruments	28
Other receivables	77
Deferred tax assets	433
Non-Current assets	22,325
Inventories	234
Financial receivables	938
Trade and other receivables	1,242
Derivative instruments	73
Income tax assets	13
Cash and cash equivalents	977
Current assets	3,477
	25,802
Subscribed capital	189
Capital reserves	7,411
Retained earnings and other comprehensive income	1,903
Shareholder's equity	9,503
Non-controlling interests	164
Equity	9,667
Pension provisions	598
Decommissioning provisions	2,480
Other provisions	208
Financial debt	2,676
Derivative instruments	2
Income tax liabilities	17
Other liabilities	45
Deferred tax liabilities	3,913
Non-Current liabilities	9,939
Decommissioning provisions	52
Other provisions	403
Financial debt	4,250
Trade and other payables	1,170
Derivative instruments	70
Income tax liabilities	251
Current liabilities	6,196
	25,802

Consolidated statement of cash flows of the Group

	Two months ended 30 June 2019
	(millions €) (unaudited)
Net result	**133**
Amortisation/depreciation/impairment losses/reversal of impairment losses	319
Changes in working capital	(14)
Miscellaneous items	(114)
Cash flow from operating activities	**324**
Payments for intangible assets, property, plant and equipment and investment property	(270)
Payments for financial assets	0
Payments for acquisitions	—
Proceeds from the disposal of non-current assets	7
Proceeds from divestitures	33
Payments for financial receivables	(45)
Cash flow from investing activities	**(275)**
Payments to shareholders	(1,300)
Repayments of shareholder loans	(242)
Proceeds from shareholder loans	—
Change in financial liabilities (related parties)	(35)
Repayments of debt to banks	(1,892)
Proceeds from debt to banks	3,344
Repayment of lease liabilities	(10)
Cash flow from financing activities	**(135)**
Change in cash and cash equivalents	**(86)**
Effects of foreign exchange rates changes, consolidation-related changes and other changes in value	174
Cash and cash equivalents at beginning of reporting period	**889**
Cash and cash equivalents at end of reporting period	**977**

Selected Historical Financial Information for Wintershall

Consolidated income statement—Wintershall

	Years ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
	(millions €)			
Net revenue	3,108	3,662	4,707	1,531
Cost of conversion and purchase costs of the services rendered to generate the revenue	(2,513)	(2,716)	(2,911)	(972)
Gross earnings from revenue	595	946	1,797	560
Distribution costs	(116)	(80)	(94)	(60)
General administrative expenses	(67)	(81)	(68)	(36)
Research costs	(38)	(45)	(26)	(8)
Exploration costs	(94)	(104)	(112)	(75)
Other operating income	249	387	118	48
Other operating expenses	(143)	(337)	(450)	(1,441)
Equity result	104	248	128	61
Result from operating activities	491	934	1,294	(952)
Income from other participating interests	12	4	4	—
Expenses from other participating interests	(5)	(3)	(0)	—
Net investment income	6	1	3	—
Interest income	51	57	72	36
Interest expenses	(141)	(106)	(68)	(25)
Net interest income	(90)	(49)	4	11
Miscellaneous financial income	44	39	251	132
Miscellaneous financial expenses	(54)	(40)	(305)	(151)
Miscellaneous financial result	(10)	(1)	(54)	(18)
Financial result	(93)	(49)	(46)	(7)
Earnings before income taxes	397	885	1,247	(959)
Income taxes	7	(158)	(577)	108
Net income for the year	404	727	671	(851)
Non-controlling interests	(76)	(41)	(55)	(18)
Net income after non-controlling interests	328	686	616	(869)

Consolidated statement of financial position—Wintershall

	As at 31 December			As at 30 April
	2016	2017	2018	2019
		(millions €)		
Intangible assets	2,833	2,308	2,284	1,817
Property, plant and equipment	6,675	6,361	6,508	6,451
Investments accounted for using the equity method	2,581	2,557	2,566	2,191
Other financial investments	71	73	2	2
Deferred tax assets	192	153	129	270
Other assets	318	518	896	955
Non-current assets	12,671	11,969	12,385	11,685
Inventories	76	84	137	143
Trade receivables	494	502	670	551
Miscellaneous receivables and other assets	326	283	254	1,019
Cash and cash equivalents	93	110	219	889
Current assets	989	980	1,280	2,602
Assets	13,660	12,949	13,664	14,288
Share capital	105	105	105	105
Capital reserve	16	416	1,266	1,173
Retained earnings and net retained profit	3,797	3,693	3,134	2,854
Other comprehensive income	(745)	(1,072)	(1,174)	(1,013)
Third-party interests	(43)	72	136	154
Equity	3,130	3,213	3,467	3,273
Pension provisions	323	313	307	344
Other provisions	1,259	1,289	1,605	1,833
Deferred tax liabilities	1,626	1,295	1,321	1,203
Non-current financial liabilities	1,474	501	499	1,252
Miscellaneous non-current liabilities	1,432	1,380	518	294
Non-current liabilities	6,115	4,779	4,250	4,925
Trade payables	243	287	348	328
Provisions	109	132	77	159
Tax liabilities	182	134	222	246
Current financial liabilities	138	100	10	1,495
Miscellaneous current liabilities	3,744	4,304	5,289	3,863
Current liabilities	4,416	4,957	5,947	6,089
Equity and liabilities	13,660	12,949	13,664	14,288

Consolidated cash flow statement—Wintershall

	Years ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
	(millions €)			
Net income for the year after non-controlling interests	328	686	616	(869)
Amortisation of intangible assets, depreciation of property, plant and equipment and impairment of financial investments	1,101	1,024	1,080	1,533
Changes in inventories	9	(13)	(52)	(4)
Changes in receivables	(247)	13	(162)	(15)
Changes in business-related liabilities and other provisions	(220)	(137)	199	(66)
Change in provisions for pensions, in assets from overfunded pension plans and other items	224	131	102	6
Gains (-) from the disposal of non-current assets	(2)	(50)	(20)	(22)
Cash flow from operating activities	1,192	1,654	1,763	563
Payments for property, plant and equipment	(994)	(876)	(588)	(169)
Payments for intangible assets	(14)	(15)	(34)	(1)
Payments for financial investments	(64)	(352)	(330)	(83)
Proceeds from the disposal of non-current assets	224	324	57	1
Payments received for divestitures	(16)	—	—	—
Payments for acquisitions	—	—	(135)	—
Cash flows from investing activities	(864)	(919)	(1,031)	(252)
Payments to company owners	(594)	(825)	(1,299)	(324)
Proceeds from company owners	—	400	850	—
Raising of financing-related liabilities BASF Group	1,659	2,318	2,177	4,546
Repayment of financing-related liabilities BASF Group	(1,658)	(1,568)	(2,237)	(6,128)
Raising of financial liabilities	123	123	45	2,251
Repayment of financial liabilities	(157)	(1,158)	(137)	—
Change in lease liabilities				(13)
Cash flows from financing activities	**(627)**	**(710)**	**(601)**	**333**
Changes in cash and cash equivalents affecting liquidity	(299)	26	131	644
Change in cash and cash equivalents				
due to currency translation effects	25	(7)	(22)	26
due to changes in the scope of consolidation	0	(1)	—	—
Cash and cash equivalents at the beginning of the period	366	93	110	219
Cash and cash equivalents at the end of the period	93	110	219	889
Composition of cash and cash equivalents				
Cash and cash equivalents	93	110	219	889

Selected Historical Financial Information for Dea

Consolidated income statement—Dea

	Years ended 31 December			Short fiscal year ended 30 April
	2016	2017[1]	2018	2019
	(millions €)			
Sales and other operating revenues	1,483	1,427	1,892	458
Cost of sales	(1,101)	(728)	(759)	(304)
Gross profit	382	699	1,133	154
Exploration costs	(119)	(122)	(111)	12
General and administration expenses	(149)	(123)	(125)	(213)
Net impairment of assets	(70)	(100)	(168)	(75)
Net impairment of operating receivables	—	—	1	(4)
Operating result	44	354	730	(126)
Financial income	129	87	109	22
Financial expenses	(224)	(260)	(89)	(33)
Net impairment of financial receivables	—	—	9	8
Result from continuing operations before taxes	(51)	181	759	(129)
Income taxes	18	(174)	(478)	(8)
Result from continuing operations	(33)	7	281	(137)
Result from discontinued operations	(3)	14	53	—
Net result	(36)	21	334	(137)
Thereof attributable to:				
Shareholders of the parent company	(39)	18	330	(137)
Non-controlling interests	3	3	4	—

Note:

(1) Due to the reporting of discontinued operations, the comparative prior figures have been adjusted.

Consolidated balance sheet—Dea

	As at 31 December			As at 30 April
	2016	2017	2018	2019
	(millions €)			
Assets				
Non-current assets				
Intangible assets	567	588	855	1,728
Property, plant and equipment	2,527	2,952	3,320	3,616
Investment property	3	2	2	2
Financial investments	1	4	3	3
Financial receivables	2,209	2,021	1,916	1
Other receivables and other assets	95	81	56	9
Deferred tax assets	85	116	51	121
	5,487	5,764	6,203	5,480
Current assets				
Inventories	90	83	83	84
Financial receivables	0	22	29	1,882
Trade accounts receivable	336	279	264	251
Other receivables and other assets	156	69	110	175
Income tax assets	1	11	0	0
Cash and cash equivalents	101	116	305	171
	684	580	791	2,563
	6,171	6,344	6,994	8,043
Equity and Liabilities				
Equity				
Shareholder's equity	1,900	1,813	1,840	3,122
Non-controlling interests	4	5	—	—
	1,904	1,818	1,840	3,122
Non-current liabilities				
Provisions	616	728	657	706
Debt to banks	1,494	1,334	1,441	—
Financial debt	1,018	1,013	1,041	51
Income tax liabilities	26	26	26	26
Other liabilities	14	15	4	16
Deferred tax liabilities	431	526	739	942
	3,599	3,642	3,908	1,741
Current liabilities				
Provisions	209	208	185	426
Debt to banks	3	0	6	1,893
Financial debt	16	116	396	260
Trade accounts payable	308	304	298	353
Income tax liabilities	32	24	124	120
Other liabilities	100	232	237	128
	668	884	1,246	3,180
	6,171	6,344	6,994	8,043

Consolidated cash flow statement—Dea

	Years ended 31 December			Short fiscal year ended 30 April
	2016	2017[1]	2018	2019
			(millions €)	
Result from continuing operations	(33)	7	281	(137)
Depreciation/impairment losses/reversal of impairment losses	570	389	486	212
Changes in provisions	(10)	23	(2)	145
Changes in deferred taxes	(94)	103	287	(5)
Gain/losses from disposal of assets	5	20	(30)	2
Other non-cash income/expenses	14	(28)	28	7
Changes in working capital	46	110	23	19
Changes in other balance sheet items	128	269	(40)	(55)
Cash flow from operation activities—continuing operations	626	893	1,033	188
Cash flow from operating activities—discontinued operations	—	20	31	—
Cash flow from operating activities	626	913	1,064	188
Cash outflows for additions to intangible assets, property, plant and equipment and investment property	(656)	(829)	(948)	(342)
Cash inflows from disposal of fixed assets	23	15	76	0
Cash outflows for acquisitions	—	(65)	(182)	(740)
Cash inflows from (cash outflows for) divestures	69	—	63	—
Cash inflows from (cash outflows for) financial assets	6	(20)	219	(55)
Cash flow from investment activities—continuing operations	(558)	(899)	(772)	(1,137)
Cash flow from investment activities—discontinued operations	—	(9)	(9)	—
Cash flow from investment activities	(558)	(908)	(781)	(1,137)
Profit transfer to parent company	—	(9)	(130)	(390)
Repayments of debt to banks	(772)	(282)	(325)	(1,598)
Proceeds from debt to banks	203	304	363	2,023
Cash flow from financing activities—continuing operations	(287)	13	(92)	813
Cash flow from financing activities—discontinued operations	—	0	(3)	—
Cash flow from financing activities	(287)	13	(95)	813
Net change in cash and cash equivalents	(219)	18	188	(136)
Effects of foreign exchange rates changes and other changes in value	0	(3)	1	2
Cash and cash equivalents at beginning of reporting period	320	101	116	305
Cash and cash equivalents at end of reporting period	101	116	305	171
Less: Cash and cash equivalents of discontinued operations at end of reporting period	—	0	—	—
Cash and cash equivalents of continuing operations at end of reporting period	101	116	305	171
Supplementary information on cash flows from operating activities—continuing operations				
Income tax paid (less refunds)	1	43	8	11
Interest paid	60	90	98	67
Interest received	6	3	53	2
Dividends received	1	0	0	—

Note:

(1) Due to the reporting of discontinued operations, the comparative prior figures have been adjusted.

Non-IFRS financial information

Non-IFRS financial information—Wintershall

For further explanation and definitions please see "Presentation of financial and other information".

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €) (unaudited)	
EBITDAX[1]	1,670	1,960	2,521	785
Capex (excluding M&A)[2]	1,008	891	622	170
Capex (including M&A)[3]	1,024	891	757	170
Free cash flow[4]	344	735	867	311
Total debt[5]	1,800	1,392	1,013	3,294
Net debt[6]	1,707	1,282	794	2,405
Net debt / EBITDAX	1.02	0.65	0.32	—

Note:

(1) For an explanation of EBITDAX, please see "Presentation of financial and other information." The following table shows the reconciliation of EBITDAX from results before taxes.

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €) (unaudited)	
Earnings before income taxes	397	885	1,247	(959)
Interest and other financing costs	79	46	13	(9)
Exploration costs	94	104	112	75
Depletion, depreciation, amortisation and net impairment losses	1,049	857	1,020	1,502
Acquisition, disposal and restructuring costs and extraordinary items[a]	—	3	7	187
Realised and unrealised gains/losses from foreign currency valuation and financial derivatives	43	131	142	8
Gain (−) / loss attributable to the disposal of fixed assets	(2)	(76)	(30)	(22)
Pension items	11	10	10	3
EBITDAX	1,670	1,960	2,521	785

Notes:

(a)

2017: including €3 million of restructuring cost.

2018: including €7 million of restructuring cost.

Short fiscal year ended 30 April 2019: including €180 million additions to provisions for severance packages and early retirement and €7 million additions to provisions for transaction costs in relation to the Merger.

(2) The following table sets out the calculation of Capex (excluding M&A) for Wintershall for the periods indicated:

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €)	
Payments for property, plant and equipment	994	876	588	169
Payments for intangible assets	14	15	34	1
Capex (excluding M&A) (unaudited)	1,008	891	622	170

(3) The following table sets out the calculation of Capex (including M&A) for Wintershall for the periods indicated:

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
	(millions €)			
Payments for property, plant and equipment	994	876	588	169
Payments for intangible assets	14	15	34	1
Payments for acquisitions	16	—	135	—
Capex (including M&A) (unaudited)	1,024	891	757	170

(4) The following table sets out the calculation of Free cash flow for Wintershall for the periods indicated:

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
	(millions €)			
Cash flow from operating activities	1,192	1,654	1,763	563
Cash flow from investing activities	(864)	(919)	(1,031)	(252)
less Payments for acquisitions	16	—	135	—
Free cash flow (unaudited)	344	735	867	311

(5) The following table sets out the calculation of Total debt for Wintershall for the periods indicated:

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
	(millions €)			
Liabilities to banks	1,612	602	510	2,746
Interest bearing financial liabilities towards related parties	188	790	503	445
Leasing liabilities[a]	—	—	—	103
Total Debt (unaudited)	1,800	1,392	1,013	3,294

(a) Comprises non-current lease liabilities of €74 million and current lease liabilities of €29 million for the short fiscal year ended 30 April 2019.

(6) The following table sets out the calculation of Net debt for Wintershall for the periods indicated:

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
	(millions €)			
Total debt (unaudited)	1,800	1,392	1,013	3,294
less cash and cash equivalents	(93)	(110)	(219)	(889)
Total net debt (unaudited)	1,707	1,282	794	2,405

Non-IFRS financial information—Dea

For further explanation and definitions please see "Presentation of financial and other information".

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €) (unaudited)	
EBITDAX[1]	776	894	1,043	254
Capex (continuing operations) (excluding M&A)[2]	656	829	948	342
Capex (continuing operations) (including M&A)[3]	656	894	1,130	1,082
Free cash flow (continuing operations)[4]	68	59	315	(209)
Total debt[5]	1,896	1,732	1,847	1,962
Net debt[6]	1,795	1,616	1,582	1,791
Net debt / EBITDAX	2.31	1.81	1.52	—

Note:

(1) For an explanation of EBITDAX, please see "*Presentation of financial and other information*." The following table shows the reconciliation of EBITDAX from results before taxes.

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €)	
Results from continuing operations before taxes	(51)	181	759	(129)
Interest and other financing costs	18	16	(10)	16
Exploration expenses	118	120	111	(13)
Depreciation, depletion, amortisations and net impairment losses	570	389	486	212
Acquisition, disposal and restructuring costs and extraordinary items[a]	28	12	(269)	169
Realised and unrealised gains/losses from foreign currency valuation and financial derivatives	75	155	(12)	(3)
Gain (−) / loss attributable to the disposal of fixed assets	(1)	8	(39)	2
Pension items	19	13	17	0
EBITDAX	776	894	1,043	254

Note:

(a) 2016: including €17 million additions to provisions for restructuring cost, €8 million addition to provision for onerous contracts (office building Oslo), €4 million expense from fair valuation of contingent purchase price receivable, €9 million expense related to a dispute in Denmark, €(4) million release of abandonment provision related to a farm-out and €(6) for release of abandonment provision for a field in Norway.

2017: including €28 million additions to provisions for restructuring costs and €(16) million income from the release of decommissioning provisions related to the fair valuation of the storage business.

2018: including €10 million of expenses from the deconsolidation of DEA UK Upstream, €1 million of additions to restructuring provisions and €(280) million payments under an insurance claim.

Short fiscal year ended 30 April 2019: including €126 million additions to provisions for severance packages and early retirement, €40 million additions to provisions for change-of-control fees and €3 million acquisition costs in relation to the Sierra acquisition.

(2) The following table sets out the calculation of Capex (excluding M&A) for Dea for the periods indicated:

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €)	
Cash outflow for additions to intangible assets, property, plant and equipment and investment properties	656	829	948	342
Capex (excluding M&A) (unaudited)	656	829	948	342

(3) The following table sets out the calculation of Capex (including M&A) for Dea for the periods indicated:

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
	(millions €)			
Cash outflow for additions to intangible assets, property, plant and equipment and investment properties	656	829	948	342
Cash outflows for acquisitions	—	65	182	740
Capex (including M&A) (unaudited)	656	894	1,130	1,082

(4) The following table sets out the calculation of Free cash flow for Dea for the periods indicated:

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
	(millions €)			
Cash flow from operating activities—continuing operations	626	893	1,033	188
Cash flow from investment activities—continuing operations	(558)	(899)	(772)	(1,137)
less cash outflows for acquisitions	—	65	182	740
less repayment of financial receivables from related parties dedicated for acquisitions	—	—	(128)	—
Free cash flow (unaudited)	68	59	315	(209)

(5) The following table sets out the calculation of Total debt for Dea for the periods indicated:

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
	(millions €)			
Non-current debt to banks	1,494	1,334	1,441	—
Current debt to banks	3	0	6	1,893
Loan towards DEA Finance SA	399	398	400	—
Leasing liabilities	—	—	—	69
Total debt (unaudited)	1,896	1,732	1,847	1,962

(6) The following table sets out the calculation of Net debt for Dea for the periods indicated:

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
	(millions €)			
Total debt	1,896	1,732	1,847	1,962
less cash and cash equivalents	(101)	(116)	(305)	(171)
plus restricted cash and cash equivalents	—	—	40	—
Net debt (unaudited)	1,795	1,616	1,582	1,791

Non-IFRS financial information—aggregated

The below presents certain non-IFRS financial information on a pro forma and an aggregated basis. For further explanation and definitions please see "Presentation of financial and other information".

	Year ended 31 December 2018[1]	Short fiscal year ended 30 April 2019[2]	Two months ended 30 June 2019[3]	Six months ended 30 June 2019[4]	Last 12 months to 30 June 2019[5]
		(millions €) (unaudited)			
EBITDAX[6]	3,591	1,049	466	1,515	3,474
Northern Europe	2,355	646	241	887	
Russia	419	217	60	277	
Northern Africa/Middle East	235	55	54	109	
Latin America	397	100	69	169	
Midstream	282	105	53	158	
Other	(98)	(73)	(11)	(84)	
Net Debt/EBITDAX	—	—	—	—	1.63

Notes:

(1) Calculated from the unaudited pro forma income statement of the Group for the year ended 31 December 2018.

(2) Unaudited pro forma income statement of the Group for the short fiscal year ended 30 April 2019.

(3) Unaudited Consolidated Statement of income for the Group for the two months ended 30 June 2019.

(4) Calculated from (i) the unaudited pro forma income statement of the Group for the short fiscal year ended 30 April 2019 and (ii) the unaudited Consolidated Statement of income for the Group for the two months ended 30 June 2019.

(5) For an explanation of the calculation of these figures, please see "*Presentation of financial and other information*".

(6) For an explanation of EBITDAX, please see "*Presentation of financial and other information*." The following table shows the reconciliation of EBITDAX from results from continuing operations for the year ended 31 December 2018, the six months ended 30 June 2019 (which is an aggregation of the short fiscal year ended 30 April 2019 and the unaudited condensed consolidated interim financial statements for the two months ended 30 June 2019, shown for solely for the convenience of the reader), and the twelve months to 30 June 2019.

	Year ended 31 December 2018	Short fiscal year ended 30 April 2019	Two months ended 30 June 2019	Six months ended 30 June 2019	Last 12 months to 30 June 2019
			(millions €) (unaudited)		
Result before taxes	1,749	(1,086)	162	(924)	34
Interest and other financing costs	11	(5)	(8)	(13)	(11)
Exploration expenses	220	62	34	96	251
Depreciation, depletion, amortisation and net impairment losses	1,748	1,775	300	2,075	3,156
Acquisition, disposal and restructuring costs and extraordinary items[a]	(246)	316	(30)	286	27
Realised and unrealised gains/losses from foreign currency valuation and financial derivatives	147	5	9	14	20
Gain (−) / loss attributable to the disposal of fixed assets	(70)	(21)	(6)	(27)	(28)
Pension items	31	3	5	8	25
EBITDAX	3,591	1,049	466	1,515	3,474

Note:

(a) 2018: including €9 million additions to restructuring provisions, €15 million expenses for integration, €(280) million payments from an insurance claim, €10 million of expenses from the deconsolidation of DEA UK Upstream.

Short fiscal year ended 30 April 2019 (pro forma): including €306 million additions to provisions for severance packages and early retirement, €7 million expenses for integration and €3 million acquisition costs in relation to the Sierra acquisition.

Two months ended 30 June 2019: including €1 million additions to provisions for severance packages and early retirement, €7 million expenses for integration and €(38) million for the deconsolidation of a subsidiary.

Six months ended 30 June 2019: including €306 million additions to provisions for severance packages and early retirement, €15 million expenses for integration, €3 million acquisition costs in relation to the Sierra acquisition and €(38) million for the deconsolidation of a subsidiary.

Last twelve months ended 30 June 2019: including €313 million additions to provisions for severance packages and early retirement, €29 million expenses for integration, €3 million acquisition costs in relation to the Sierra acquisition, €(280) million payments under an insurance claim and €(38) million for the deconsolidation of a subsidiary.

	As at and for the year ended 31 December 2018	As at and for the six months ended 30 June 2019
	(millions €)	
		(unaudited)
Capex (excluding M&A)[1]	1,570	783
Capex (including M&A)[2]	1,887	1,522
Total debt[3]	—	6,665
Net debt[4]	—	5,675

Notes:

(1) The following table sets out the calculation of Capex (excluding M&A) for the Group for the periods indicated:

	Year ended 31 December 2018	Short fiscal year ended 30 April 2019	Two months ended 30 June 2019	Six months ended 30 June 2019
	(millions €)			
				(unaudited)
Wintershall				
Payments for property, plant and equipment	588	169		
Payments for intangible assets	34	1		
Dea				
Cash outflow for additions to intangible assets, property, plant and equipment and investment properties	948	342		
Group				
Payments for intangible assets, property, plant and equipment and investment property			270	
Capex (excluding M&A) (unaudited)	1,570	512	270	783

(2) The following table sets out the calculation of Capex (including M&A) for the Group for the periods indicated:

	Year ended 31 December 2018	Short fiscal year ended 30 April 2019	Two months ended 30 June 2019	Six months ended 30 June 2019
	(millions €)			
				(unaudited)
Wintershall				
Payments for property, plant and equipment	588	169		
Payments for intangible assets	34	1		
Payments for acquisitions	135	—		
Dea				
Cash outflow for additions to intangible assets, property, plant and equipment and investment properties	948	342		
Cash outflows for acquisitions	182	740		
Group				
Payments for intangible assets, property, plant and equipment and investment property			270	
Payments for acquisitions			—	
Capex (including M&A) (unaudited)	1,887	1,252	270	1,522

(3) The following table sets out the calculation of Total debt for the Group for the periods indicated:

	30 June 2019
	(millions €)
Liabilities to banks	6,089
Interest bearing financial liabilities towards related parties	416
Leasing liabilities	160
Total debt (unaudited)	6,665

(4) The following table sets out the calculation of Net debt for the Group for the periods indicated:

	30 June 2019
	(millions €)
Total debt	6,665
less interest bearing financial receivables from related parties	(13)
less cash and cash equivalents	(977)
Net debt (unaudited)	5,675

Other aggregated operational data

The following table sets out certain operational data for the periods indicated on an aggregated basis for the Group. For further detail on the preparation of the Group's reserves information, please see "*Presentation of financial and other information—Certain reserves, resources and production information*".

	Year ended 31 December			Six months ended 30 June[4]
	2016	2017	2018	2019
	(unaudited)			
1P Reserves[1] (MMboe)	—	—	3,032	—
2P Reserves[1] (MMboe)	—	—	3,707	—
Production (mboe/d)				
Wintershall	461	456	468	—
liquids	141	141	149	—
gas	320	314	319	—
Dea	138	125	121	—
liquids	61	50	49	—
gas	77	75	72	
Group	—	—	—	645
liquids	—	—	—	199
gas	—	—	—	446
Production costs ($/boe)[2]				
Wintershall	4.1	4.8	4.7	—
Dea	7.4	7.7	7.1	—
Group	—	—	—	4.3
Average realised $/boe liquids[3]				
Wintershall	27.60	34.53	44.68	
Dea	39.79	48.23	65.26	
Group	—	—	—	41.25
Average realised $/mscf gas[3]				
Wintershall	1.97	2.15	2.45	
Dea	4.96	4.71	6.00	
Group	—	—	—	2.52

Notes:

(1) For information regarding the calculation of reserves and the aggregation of the Wintershall and Dea reserves, please see "Presentation of financial and other information—Certain reserves, resources and production information". This information has been prepared for illustrative and convenience purposes only and does not purport to represent the Group's actual performance or results at any historic date or for any historic period or project its operation or results as at any future date or for any future period.

(2) For an explanation of the components of production costs please see "*Management discussion and analysis of financial condition and results of operations: Production and distribution costs*".

(3) Realised oil and gas prices are presented without the effects of financial hedging.

(4) Information presented for the Group as at and for the six months ended 30 June 2019 aggregates data for each of Wintershall and Dea for the short fiscal years ended 30 April 2019 and for the Group for the two months ended 30 June 2019. This information has been prepared for illustrative and convenience purposes only and does not purport to represent the Group's actual performance or results at any historic date or for any historic period or project its operation or results as at any future date or for any future period.

Certain historical information relating to the midstream business

The following table sets out certain financial information on the Group's midstream business, which comprised a reporting segment of Wintershall for the three years ended 31 December 2018 and the short fiscal year ended 30 April 2019.

	As at and for the year ended 31 December[1]			As at and for the short fiscal year ended 30 April[1]	As at and for the two months ended 30 June	As at and for the six months ended 30 June[2]
	2016	2017	2018	2019	2019	2019
	(unaudited)					
Net Result *(millions €)*	208	173	198	79	40	119
Capex[3] *(millions €)*	0	4	1	0	0	0
RAB[4] *(millions €)*	2,763	2,716	2,649	3,376	3,376	3,376
Total Assets[5] *(millions €)*	2,222	2,376	2,693	2,779	2,815	2,815
	9.05%	9.05%	6.91%	6.91%	6.91%	6.91%
Return on regulatory equity[6]	7.14%	7.14%	5.12%	5.12%	5.12%	5.12%
Transportation network[7] (km)	3,324	3,339	3,339			3,339
Entry Capacity (bn kWh)[8]	822	906	1,050			

Notes:

(1) In the three years ended 31 December 2018 and the short fiscal year ended 30 April 2019, the midstream business comprised a reporting unit of Wintershall.

(2) Aggregated as the sum of the results of the midstream reporting unit of Wintershall for the short fiscal year ended 30 April 2019 and the midstream reporting unit of the Group for the two months ended 30 June 2019. This information has been prepared for illustrative and convenience purposes only and does not purport to represent the Group's actual performance or results at any historic date or for any historic period or project its operation or results as at any future date or for any future period.

(3) Payments made for property, plant and equipment and payments made for intangible assets for the midstream business.

(4) Regulated asset base for GASCADE, NGT and OGT.

(5) Balance sheet total for the midstream business (Non-Current and current assets).

(6) New investments (start of operation after 31/12/2005) / old investments (start of operation before 1/1/2006) for max. 40% regulatory equity.

(7) Length of transportation network of GASCADE; NGT and OGT.

(8) Entry capacity for GASCADE; NGT and OGT in billion kWh.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The Group encourages you to read the following discussion in conjunction with the section entitled "Selected financial and other information" as well as with the consolidated historical financial statements of Wintershall, Dea and the Group and the related notes thereto included elsewhere in this Offering Memorandum. The following discussion includes forward-looking statements which, although based on assumptions that the Group considers reasonable, are subject to risks and uncertainties which could cause actual events or conditions to differ materially from those expressed or implied by the forward-looking statements. For a discussion of some of those risks and uncertainties please refer to the sections entitled "Forward-looking statements" and "Risk factors".

Overview

The Group is the leading European independent gas and oil company with full lifecycle capabilities across exploration, development and production activities, as well as a stable, cash-generative European midstream and transportation business with investments in European gas transportation assets.

The Group comprises Wintershall Dea GmbH and its subsidiaries, including Wintershall Dea Deutschland AG (formerly DEA Deutsche Erdoel AG, "Dea"). The Group was formed on 1 May 2019 through the combination of:

- the oil and gas business (including the gas transportation business) of BASF which business was held in Wintershall Holding GmbH (as the Company was named until the Merger, hereinafter "Wintershall") and its subsidiaries; and
- the oil and gas business of LetterOne, comprising Dea and its subsidiaries (the "Merger").

The Merger created the largest independent European exploration and production ("E&P") company based on production and 2P reserves. The Group's primary mission is the secure, efficient, environmentally-conscious and sustainable production of natural gas and crude oil. It connects cost-effective energy sources from its balanced, long-life asset portfolio to strategic OECD markets.

The Group's core production, development and exploration assets are located in Northern Europe, Russia, North Africa, the Middle East and Latin America. Its material assets in North Africa and Russia, as well as its investment in Ogarrio, Mexico, benefit from investment guarantees provided by the Federal Republic of Germany. The Group operates predominantly via a partnership model with long-term joint venture arrangements with some of the world's leading oil and gas companies. Its hydrocarbon products are priced on varying bases, including Brent linked and fixed gas prices, with approximately 50 per cent. of its production priced pursuant to contracted and/or regulated prices and the remainder priced pursuant to Brent/liquids or European spot gas prices. Additionally, the Group has economic interests in onshore and offshore natural gas transportation pipelines in Northern Europe, including the transportation network of GASCADE and Nord Stream 1, and its onshore connecting pipelines OPAL and NEL, and finances an additional offshore gas pipeline project, Nord Stream 2. Headquartered in Kassel and Hamburg, Germany, the Group had approximately 2,830 full time equivalent ("FTE") employees as of 30 June 2019.

The Group's average aggregated working interest production during the 12 months ended 31 December 2018 was 589 mboe/d and 645 mboe/d during the six months ended 30 June 2019. The Group targets production of approximately 750 mboe/d by 2023. As of 31 December 2018, the Group had aggregated 1P reserves of 3.0 billion boe and 2P reserves of 3.7 billion boe (a 1P to 2P ratio of 82 per cent.) with a 2P reserve life of 18 years. The Group's 2P reserves consisted of 73 per cent. gas and 27 per cent. liquids, with 63 per cent. located in Russia, 24 per cent. in Europe, 7 per cent. in Latin America and 5 per cent. in North Africa and the Middle East. Its 1P reserves consist of 1.2 billion boe of undeveloped reserves and 1.9 billion boe of developed reserves. In addition to its reserves base, the Group also had 2C resources of 2.6 billion boe. For the 12 months ended 31 December 2018, its *pro forma* sales revenues were €6.3 billion and its aggregated EBITDAX was €3.6 billion, in each case giving *pro forma* effect for the Merger as though it has occurred on 1 January 2018. Following the Merger, the Group targets synergies of at least €200 million per year by year three following the Merger, which are intended to be approximately evenly divided between operating synergies and capital expenditure and production-related synergies.

Basis of presentation

On 1 May 2019, Wintershall and Dea merged to form the Group. As a result of the Merger, each of Wintershall and Dea adopted a short fiscal year, running from 1 January 2019 to 30 April 2019 to allow for the termination of fiscal unity with their former respective parent companies and the creation of a new fiscal unity between Wintershall and Dea as of 1 May 2019. The losses that Wintershall and Dea had in the short fiscal year ended 30 April 2019 were absorbed by their respective shareholders, in accordance with German GAAP. Wintershall Dea GmbH will also have a short fiscal year from 1 May 2019 to 31 December 2019 and has prepared condensed consolidated interim financial statements for the two-month period from 1 May 2019 to 30 June 2019. From 1 January 2020, Wintershall Dea GmbH will have a 12 months fiscal year with a 31 December year end. Since the fiscal year of the Group parallels the fiscal year of the Company, the Group's 2019 financial year began on 1 May and ends on 31 December, prepared on a consolidated basis. For the convenience of investors, the Group has also prepared certain unaudited pro forma financial information reflecting the impact of the Merger, see "*Unaudited Pro Forma Financial Information of the Group*".

As a result of the Merger and in order to be more aligned with its peers, the presentation of the Group's consolidated financial statements has been adjusted, as described below. In particular, reclassifications of prior period amounts have been made to improve comparability and conform to the presentation that has been adopted by the Group post-Merger.

The consolidated income statement of the Group generally provides a more detailed split of presented line items particularly with regard to revenues and net income from equity-accounted investments. The former break-down of the financial result was replaced by the less detailed line items "financial income" and "financial expenses". Income and expenses previously reported as other operating income and expenses as well as distribution and research costs were mainly allocated to the individual functional areas under the new structure. By contrast, depreciation and amortisation, net impairments on assets were allocated from the individual functional areas into separate line items. In addition, the total item cost of sales was allocated to "production and operating expenses", "production and similar taxes", "cost of sales gas transport / midstream" as well as "general and administration expenses".

Foreign currency gains and losses and related income and expenses from derivative financial instruments as well as net impairments on financial receivables are no longer shown in the operating result but are instead recognized as financial result.

The Group reclassified exploration assets from "property, plant and equipment" to "intangible assets". In addition, non-current provisions from income taxes have been reclassified from "other provisions" to "income tax liabilities" and provisions from other taxes have been reclassified from non-current "other provisions" to "other liabilities" and current "tax liabilities" to "trade and other payables". Overlift liabilities have been reclassified from "other provisions" to "trade and other payables".

Based on an evaluation of IFRS 3 "Business Combinations", Wintershall Dea (previously Wintershall Holding GmbH) was determined to be the acquirer in the Merger. As consideration for the contribution of all shares in Dea into Wintershall Dea, equity interests of Wintershall Dea were issued to LetterOne. Transaction costs directly related to the Merger were recognized as administration expenses in the amount of €3 million in the Interim financial statements.

The Group has applied the acquisition method of accounting with respect to the assets and liabilities of Dea and its subsidiaries, which have been measured at fair value as of 1 May 2019. The fair value represents management's best estimate and required a complex series of judgements about future net cash flows, discount rates, competitive trends, market comparables and other factors. Inputs were generally determined by taking into account historical data, supplemented by current and anticipated market conditions, and growth rates.

The valuation process to determine the fair values is not yet complete. The Group estimated the preliminary fair value of acquired assets and liabilities as of the date of the Merger based on information currently available and continues to adjust those estimates. As the Group finalises the fair value of assets acquired and liabilities assumed, additional purchase price adjustments may be recorded during the measurement period, but no later than one year from the date of the Merger. The acquired goodwill is mainly resulting from the recognition of deferred taxes.

Significant factors affecting results of operations of Wintershall, Dea and the Group

A description of the key factors that have affected Wintershall's and Dea's historical results of operations and, following the Merger, have affected or are expected to affect the Group's results of operations and financial condition is set forth below.

The Merger

In connection with the Merger, all shareholder financing of both entities and Dea's external financing was refinanced with a syndicated credit facility agreement comprising a multicurrency bridge term loan, term loans and revolving credit facility from a banking consortium consisting of 16 banks. As of 30 June 2019, all available amounts under the bridge and term loans had been drawn and the revolving credit facility remains undrawn. For more details on these facilities, see "*Financial Liabilities and Contractual Obligations*".

Following the Merger, the Group targets synergies of at least €200 million per year by year three following the Merger, which are intended to be approximately evenly divided between operating synergies and capital expenditure and production-related synergies. The Group expects to realise cost savings through the combination of procurement, exploration and research and development functions. The Group also intends to optimise cash flow and capital expenditure by actively managing its combined operating portfolio, including by focusing on the most profitable assets and most probable discoveries. The Group expects to incur integration costs with an impact on the income statement of approximately €400 million between 2019 and 2021, that comprises costs relating to the consolidation and integration of both legacy companies as well as the reduction of the Group's workforce.

In addition, certain accounting classifications of Group subsidiaries will be impacted following the implementation of the Merger. The onshore gas transportation activities of the Group in Germany are bundled under the holding company WIGA Transport Beteiligungs-GmbH & Co. KG ("WIGA"), which is held by Wintershall Dea and Gazprom Germania GmbH with equity interests of 50.02 per cent. and 49.98 per cent., respectively. Historically, the results of WIGA were fully consolidated into Wintershall's, and later the Group's, financial statements. Based on the articles of association of WIGA's subsidiaries W & G Transport Holding GmbH (WGTH) and OPAL Gastransport GmbH & Co. KG (OGT), these companies were also fully consolidated into Wintershall's, and later the Group's, financial statements. The remaining subsidiaries W & G Infrastruktur Finanzierungs-GmbH, GASCADE Gastransport GmbH and NEL Gastransport GmbH were consolidated according to the equity method. In 2014, Wintershall and Gazprom Germania GmbH entered into a letter agreement to amend the articles of association of WIGA in the event that WIGA is no longer fully consolidated in the BASF Group. The changes to the articles of association would require, among other things, unanimity among the shareholders for any decision making. In practice, historical shareholder decisions have been taken unanimously and the Group does not believe the proposed changes will have an impact on the operations of WIGA. Following the Merger, WIGA is no longer fully consolidated in the BASF Group and the Group expects such changes to the articles of association of WIGA in line with the above-mentioned letter agreement by the end of 2019. Once the changes to the articles have been implemented, WIGA, WGTH and OGT will no longer be fully consolidated in the Group's financial statements but will instead be consolidated according to the equity method. Consequently, only the Group's proportional interest in WIGA's after tax results (including the result of its subsidiaries) will be shown in the Group's income statement. In the Group's balance sheet, the proportional equity value of WIGA will replace the currently fully consolidated value and the Group's share in WIGA will be subject to a fair value adjustment at the time of implementation of the change. This change in the consolidation method will be cash flow neutral. The changes to WIGA's articles of association are expected to be reflected in the Group's accounts for the short fiscal year ended 31 December 2019.

Production volumes

Production volumes of hydrocarbons were a primary driver of Wintershall's and Dea's historical revenues and will be a primary driver of the Group's revenue in future periods. Production volume is driven primarily by the Group's production capacity (including the life stage of its assets, new assets coming online or reaching plateau or assets reaching the end of their life), uptime of the relevant facilities, the availability of transportation capacity, as well as the availability and capacity of specialised service companies. The Group can sell all of its gas and oil production, subject to the customary consent of its commercial partners where relevant so its revenue generally fluctuates as a result of changes in realised

prices and production volumes. Its production levels also affect the level of its reserves and resources and depreciation as depreciation is calculated on the basis of production during the period in relation to proven, developed reserves and resources. Therefore, the Group's production levels are a key factor in determining its overall profitability.

The following tables present information on the average working interest oil and gas production per day by geography for Wintershall and Dea for the years ended 31 December 2016, 2017 and 2018 and the short fiscal year ended 30 April 2019.

Wintershall

	Year ended 31 December			Short fiscal year ended 30 April 2019
	2016	2017	2018	
	(mboepd) (unaudited)			
Norway	89	80	88	99
Germany	27	26	24	22
Russia	245	246	252	300
South America	71	71	71	69
North Africa	20	25	27	29
North Sea	9	7	7	6
Total	461	456	468	526

Dea

	Year ended 31 December			Short fiscal year ended 30 April 2019
	2016	2017	2018	
	(mboepd) (unaudited)			
Norway	63	54	52	44
Germany/Denmark	39	36	32	38
North Africa[1]	36	35	34	38
Mexico	—	—	3	4
Total	138	125	121	116

Note:

(1) Comprising Egypt and Algeria

Oil and gas prices

The prevailing prices of oil and gas had a significant impact on Wintershall and Dea's historical results of operations and will continue to be a primary driver of the Group's results of operations.

Under the cost recovery model in certain of the Group's production sharing contracts, a change in oil and gas prices also has an impact on the levels of reserves, and therefore depreciation, since an increase in oil and gas prices will result in lower reserves being needed to recover costs and a decrease in oil and gas prices will result in higher reserves being needed to recover costs. Furthermore, any reserves that are constrained by an economic threshold will be impacted by changes in oil and gas prices. A decrease in oil or gas prices could lead to reduction in the economic life of a field, which would decrease the associated reserves. Eventually, lower oil and gas prices may result in impairments.

Oil and gas prices have historically been volatile, dependent upon the balance between supply and demand and particularly sensitive to OPEC production levels. In particular, the prices of oil and gas have declined significantly since 2014 and reached a twelve-year low in 2016. Despite slight increases in oil and natural gas prices in 2018, prices have remained significantly lower than pre-2014 levels.

In the year ended 31 December 2018, 36 per cent. of the Group's production was sold based on Russian contracted gas prices, 34 per cent. based on Brent and other liquid benchmarks, 15 per cent. based on European spot gas prices (such as benchmarks like TTF and NBP), 11 per cent. based on Argentinian contracted gas prices and 4 per cent. based on Egyptian contracted gas prices.

The tables below set forth the average realised oil prices for Wintershall and Dea by geography for the periods shown.

Wintershall

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(unaudited)	
Average realised oil price excluding oil hedge result (in $/bbl)	27.60	34.53	44.68	37.45
Germany	35.69	46.44	61.22	57.91
Norway	33.96	44.69	59.10	53.26
Argentina	61.54	55.23	60.51	46.93
Libya	47.70	45.33	73.36	—
Russia	6.31	10.12	10.62	14.1
Average realised gas price (in $/mscf)	1.97	2.15	2.45	2.19
Germany	3.97	4.36	5.51	6.29
Norway	5.11	6.18	7.86	6.54
Argentina	3.34	3.67	4.24	3.1
Russia	0.94	1.03	1.04	0.94

Dea

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(unaudited)	
Average realised oil price excluding oil hedge result (in $/bbl)	39.79	48.23	65.26	58.64
Germany/Denmark	38.60	45.37	64.6	59.65
Norway	41.16	49.58	66.11	57.96
North Africa[1]	34.17	47.68	62.12	58.31
Mexico	—	—	64.12	59.62
Average realised gas price (in $/mscf)	4.96	4.71	6.00	4.97
Germany/Denmark	5.25	4.94	5.84	5.76
Norway	5.89	5.97	7.86	5.47
North Africa[1]	2.67	2.98	3.8	3.64
Mexico	—	—	4.71	5.02

Note:

(1) Comprising Egypt and Algeria

Production and distribution costs

The Group, in common with its competitors, is unable to set market commodity prices directly, and its competitiveness and long-term profitability are, to a significant degree, dependent upon its ability to reduce costs and maintain efficient and safe operations. Its production costs comprise all costs related to its operations including G&A allocation but exclude export and processing tariffs, finance items and expenses for research and development.

Wintershall's historical production costs included all costs to operate, repair and maintain wells and related equipment, as well as the costs to operate, repair and maintain the support equipment used in production. In addition, the costs for materials, fuels and supplies used in production is reflected in production costs, while depreciation is not part of the production cost per unit. During the periods under review, production costs were driven primarily by charges from operators, own personnel, maintenance costs, cost of material and service cost.

Dea's historical production costs included routine and non-routine maintenance costs, certain labour costs, production consumables and power costs. However, tariffs for third-party infrastructure such as pipelines and terminals that reflect mainly cost of capital were not accounted for as part of production costs. During the periods under review, Dea's production costs were driven primarily by operating expenses for the producing fields, comprising charges from operators, own personnel, service costs, cost of materials as well as maintenance.

The table below shows Wintershall's and Dea's production costs for the years ended 31 December 2016, 2017 and 2018 by geography and the short fiscal year ended 30 April 2019.

Wintershall

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			($/boe) (unaudited)	
Russia	0.4	0.5	0.6	0.4
Germany	10.7	12.4	13.8	15.3
Libya	2.1	2.2	2.2	—
Argentina	5.0	5.9	4.4	3.1
Norway	5.3	6.2	7.0	4.8
Production costs Wintershall	4.1	4.8	4.7	3.3

Dea

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			($/boe) (unaudited)	
Norway	7.6	8.0	8.2	10.1
Germany/Denmark	6.7	8.1	6.9	8.5
North Africa[1]	7.9	6.9	5.0	5.1
Mexico	—	—	14.3	15.4
Production costs Dea	7.4	7.7	7.1	8.2

Note:

(1) Comprising Egypt and Algeria

The Group incurs distribution costs in connection with the marketing and distribution of its products. The Group's distribution costs comprise marketing and advertising costs, freight costs, packaging costs, distribution management costs, commission and licensing costs. The Group's results of operations are impacted if there is an increase in any of the inputs in distribution costs. During the historical periods, distribution costs were driven primarily by production volumes and respective tariffs for the transport of the production.

Exploration and appraisal expenditures

The Group is an integrated exploration and production company. The Group deploys comprehensive geo-scientific know-how as well as state-of-the-art exploration, drilling and production techniques and, in the process, the Group benefits from the vast expertise acquired in over 200 years of Wintershall's and Dea's combined corporate history.

Exploration and appraisal expenditures comprise all costs, including geological and geophysical investigations, for the exploration of areas with possible hydrocarbon resources.

Exploration wells are accounted according to the successful efforts method (i.e. expenses incurred on exploration wells are generally capitalised only if the exploration leads to the commercial development of the discovered oil and gas deposits).

The Group's exploration activities are driven by the selection of prolific and commercially attractive basins, active portfolio management and strong relationships with partner companies and authorities in the countries where the Group operates.

The Group's future exploration projects focus on its most attractive regions for growth, including Argentina, Mexico, Brazil, Egypt and Norway. For example, in 2019, the Group acquired six offshore licenses in Mexico to increase its resource base. In Norway, Wintershall was awarded shares in six, and Dea in nine, licenses to extend exploration acreage portfolios. In the 2018 offshore exploration licensing round in Argentina, Wintershall was granted participation in two blocks in the Malvinas Basin.

In 2018, Wintershall drilled 10 exploration wells and one appraisal well, a significant increase compared to the six wells drilled in 2017.

In 2018, Dea drilled four exploration wells and one appraisal well, compared to 2017, when the Group drilled seven exploration wells and one appraisal well.

The following table represents Wintershall's and Dea's exploration and appraisal expenses by geography during the periods indicated.

Wintershall

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €) (unaudited)	
Russia	—	—	2	—
Germany	3	3	3	1
North Africa/Middle East	10	7	2	0
Latin America	3	8	45	40
Norway	71	67	52	27
Other[1]	7	19	9	6
Total	94	104	112	75

Note:

(1) Contains Corporate.

Dea

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €) (unaudited)	
Norway	50	108	65	3
Germany/Denmark	3	1	19	0
North Africa[1]	23	24	16	(2)
Mexico	—	—	5	4
Other[2]	43	(11)	6	(17)
Total	119	122	111	(12)

Note:

(1) Comprising Egypt and Algeria

(2) Comprises all other countries, Central functions and Investment Property

Oil and gas reserves and depreciation

Wintershall, Dea and the Group estimate reserves using standard, recognized evaluation techniques. These estimates are reviewed internally for all assets at least annually and are regularly reviewed by independent consultants. The Group estimates future development costs taking into account the level of development

required to produce the reserves the Group has elected to develop by reference to other similar operators, where applicable, reviews by external engineers and its own experience. Reserves may undergo positive or negative changes in the course of time and impact depreciation and amortisation. The Group uses the unit of production method to depreciate and amortise assets from its oil and gas business. Depreciation is calculated on the basis of production during the period in relation to the proven, developed reserves. If facilities are used for future developments, the reserves basis for these facilities and their intangible assets is extended to total proven reserves. The depreciation rates will be harmonised and based in future on the independently audited reserves reports as of the last year end.

Separately, the depreciation of gas and oil assets charged to the Group's income statement is dependent on the estimate of the Group's gas and oil reserves. An increase in estimated reserves will cause a reduction to the Group's income statement charge because a larger base exists on which to depreciate the asset. Correspondingly, a decrease in estimated reserves will cause an increase to the Group's income statement charge. The estimate of gas and oil reserves also underpins the net present value of a field used for impairment calculations, and in significant cases, a reduction to the reserves estimate can lead to an impairment charge.

Development capital and abandonment expenditures

Development capital and abandonment expenditures impact Wintershall's, Dea's and the Group's operations. Development capital expenditures comprise all costs that are capitalised according to the accounting guidelines for a development project. The Group carefully assesses all development projects and sanctions only those projects that will contribute value, taking into account necessary abandonment costs, based on reasonable estimates and assumptions. Abandonment costs are reviewed periodically and adjusted as necessary.

The following table represents Wintershall's and Dea's development capital and abandonment expenditure by geography for the periods indicated.

Development capital expenditure—Wintershall

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €) (unaudited)	
Russia	65	39	52	—
Europe	—	—	20	6
Latin America	55	71	72	31
Norway	491	481	267	41
	611	591	411	78

Abandonment expenditure—Wintershall

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €) (unaudited)	
Russia	(5)	6	2	0
Germany	57	24	75	73
North Africa/Middle East	(1)	—	5	—
Latin America	49	9	40	—
Norway	4	56	161	20
Midstream	2	1	23	20
	106	96	306	113

Development capital expenditure—Dea

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €) (unaudited)	
Norway	21	297	478	214
Germany/Denmark	10	37	41	19
North Africa[1]	428	398	328	88
Mexico	0	0	0	0
Total	459	732	847	321

Note:

(1) Comprising Egypt and Algeria

Abandonment expenditure—Dea

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €) (unaudited)	
Norway	0	95	0	20
Germany/Denmark	7	35	3	18
North Africa[1]	0	3	0	1
Mexico	0	0	9	1
Total	7	133	12	40

Note:

(1) Comprising Egypt and Algeria

Non-recurring items

During the historical periods discussed in this Offering Memorandum, the financial results of both Wintershall and Dea were impacted by non-recurring items, including impairments and reversals, acquisitions and divestments, discontinued operations and other one-off items, such as insurance claims and items related to the implementation of the Merger. Given the nature of its business, the Group expects these types of exceptional items to continue to impact its financial results.

Wintershall's results in the year ended 31 December 2018 were impacted by amortisation, depreciation and impairments of non-current assets as part of the other operating expenses of €191 million, partially offset by positive effects from gains from disposal of non-current assets of €30 million, whereas the results of the year ended 31 December 2017 were impacted by reversal of impairments on non-current assets of €165 million, amortisation, depreciation and impairments on non-current assets, as part of the other operating expenses of €83 million and positive effects from gains from disposal of non-current assets of €75 million. Results for the four months ended 30 April 2019 were impacted by amortisation, depreciation and impairments of non-current assets as part of the other operating expenses of €1,209 million, caused by an adjustment of underlying price assumptions from the price deck historically provided by BASF to a price deck developed by the Group in the context of the Merger, as well as additions to restructuring provisions of €180 million related to the Merger.

Dea's results in the year ended 31 December 2018 were impacted by impairments of €168 million, offset by positive effects from divestment of infrastructure assets of €38 million and income under an insurance contract of €280 million, whereas the results of the year ended 31 December 2017 were impacted by impairments of €100 million. Results for the year ended 31 December 2016 were impacted by impairments of €70 million. Results for the four months ended 30 April 2019 were impacted by impairments of €75 million, as well as by additions to restructuring provisions of €125 million related to the Merger.

Acquisitions and divestments

The Group may enter into further acquisitions in the future. As part of its corporate strategy, the Group intends to pursue selective acquisition opportunities where it believes that it has strategic and competitive advantages. In connection with any such acquisitions, the Group may direct significant resources to identifying and evaluating potential acquisition opportunities, without any assurance that an acquisition will be completed successfully. Acquisitions may also have a significant impact on the Group's results of operations, including impacting its future revenue, operating costs, capital expenditure and tax.

If the Group elects to divest an asset, it could impact several line items in its income statement depending, in part, on the stage of the asset's life in which disposal occurs. For example, a farm-down during the exploration phase generally will not result in a gain or loss on disposal, but instead any consideration received and/or receivable will be recorded against the carrying value of the asset. A farm-out during the development phase is likely to result in a gain or loss. When the Group enters the development phase of a project with a high equity stake and farms-out a portion of the equity in that license in return for cash consideration and a carry of all, or a portion of, its share of development costs, the cash consideration and/or the fair value of the carry will be assessed against the carrying value of the percentage disposal to calculate the gain or loss on disposal. Further, any acquisition of or sale of interests in producing assets will affect the Group's production volumes and revenues.

Wintershall's material acquisitions and divestitures during the periods under review, in addition to the Merger, included the acquisition of a 10 per cent. participating interest in the Ghasha concession in the UAE in 2018 and the partial sale of its participating interest in the Aguada Pichana license in Argentina in 2017.

Dea's material acquisitions and divestitures during the periods under review, in addition to the Merger, included the acquisition of Engie's participating interests in certain gas and oil fields, including Njord and Hyme, in Norway in 2016, the farm-in into the Ogarrio field in Mexico in 2018, the sale of its interest in Polarled and Gassled pipelines and the Nyhamna gas processing plant in Norway in 2018, the sale of its gas storage business in Germany, which was completed in 2018 and the corporate takeover of Sierra Oil and Gas company in 2019.

The Group has undertaken a farm-down of a 45 per cent. interest in the Aguada Federal and Bandurria Norte blocks in Argentina to ConocoPhillips, which is expected to close before the end of 2019.

Currency exchange rates

The Group's presentational and reporting currency is the Euro. A significant portion of its sales are denominated in U.S. dollars and Euros and the Group incurs expenses related to its exploration, production and development assets in other currencies, including the Russian rouble, Norwegian krone and Argentine peso. Exposures are monitored and managed on a daily basis. Currency risks for the Group's income statement and cash flows are constantly monitored on both group and entity levels and managed accordingly.

Wintershall's presentational currency was the Euro. The majority of its revenues were based on the U.S. dollar, the Euro, the Russian rouble, and the Argentine peso. Operational costs and investment expenditures were mostly incurred in the local currencies of the respective business units and mainly included the Russian rouble, the Norwegian krone, and the Argentine peso.

Dea's presentational currency was the Euro and the majority of its sales were based on the U.S. dollar (oil and Egyptian natural gas), Euro (German natural gas), and pound sterling (Norwegian natural gas). Dea's costs were primarily incurred in U.S. dollar, Euro, Norwegian kroner, pound sterling and other local currencies.

Taxes

The Group does business in multiple jurisdictions and its profits are taxed according to the tax laws of such jurisdictions. This includes corporate income taxes as well as special petroleum taxes in certain jurisdictions such as Norway. In certain jurisdictions, including Germany and Mexico, in addition to the corporate income tax and trade income tax, there is an additional royalty regime in place. These royalties are not shown as income taxes, but as production and similar taxes for the Group, as Cost of sales for Dea and Cost of conversion and purchase costs of the services rendered to generate the revenue for Wintershall, respectively.

Fluctuations in tax rates can have an impact on projects and make certain projects less economically viable. The Group's tax rate, including its effective tax rate, may be affected by changes in tax laws or their interpretation, and in any given financial year will reflect a variety of factors that may not be present in succeeding financial years. As a result, the Group's tax rate may increase in future periods, which could have a material adverse effect on its financial results. For further details, see "*Risk Factors—The Group may be adversely affected by changes to tax legislation or its interpretation*."

Initial Application of IFRS 9

The new accounting standard IFRS 9 "Financial Instruments" took effect as of 1 January 2018. Prior-year figures were not adjusted.

Wintershall

At Wintershall, the introduction of the cash flow condition led to a change in the subsequent measurement of other receivables measured at amortised cost in accordance with IAS 39. These are now measured at fair value in the balance sheet, unless the payments resulting from them relate exclusively to payments of interest and principal. Changes in the fair value of these other receivables are recognized in profit or loss in earnings after taxes.

The recognition of impairment losses based on expected losses had a particular impact on the carrying amount of trade receivables. It also had an impact on the carrying amounts of other receivables that represent financial instruments. The first-time application effects of the new impairment provisions for financial assets were recognized cumulatively in equity. Taking deferred taxes into account, the first-time application of IFRS 9 resulted in a reduction in equity of €1 million, which was attributable, in particular, to the increase in impairments on trade receivables and to a loan granted. Deferred tax effects amounted to €2 million and impairment amount to €2 million (including changes in impairments relating to trade receivables €1 million and changes in impairments relating to other financial instruments €1 million). The reclassification of earnings components recognized in "Other comprehensive income" under IAS 39 to retained earnings had no impact on the amount of equity. For further information, see "Change in Accounting policies" in the notes to Wintershall's consolidated financial statement as of 31 December 2018.

Dea

Financial assets at Dea were reclassified from "available for sale" to the category "at fair value through profit or loss". They do not meet the IFRS 9 criteria for measurement at amortised cost as their cash flows are not exclusively interest and principal payments. There are no valuation differences resulting from the reclassification as part of the transition to IFRS 9 and therefore no changes in book values and no adjustment effects in equity.

In the year ended 31 December 2018, the first-time application of the new impairment provisions for financial assets resulted in an impairment loss of €8 million. After taking into account deferred taxes of €5 million, an adjustment effect of €3 million had to be recognized in retained earnings.

The impairment losses and reversals of impairment losses on operating receivables and the reversals of impairment losses on financial receivables are reported in the income statement as "Impairment losses and reversals of impairment losses on operating receivables" and "Impairment losses and reversals of impairment losses on financial receivables", respectively.

With the first-time application of IFRS 9, the documentation on security relationships and the assessment of effectiveness were adapted. The notes also contain detailed information on risk management strategies, effectiveness and effects of hedge accounting on the balance sheet and income statement.

For further information, see "Change in Accounting policies" in the notes to Dea's consolidated financial statement as of 31 December 2018.

Initial Application of IFRS 16

The new accounting standard IFRS 16 "Leases" took effect as of 1 January 2019. Prior-year figures were not adjusted.

Wintershall

As part of the transition process, right-of-use assets from leases were capitalised as of 1 January 2019 and corresponding lease liabilities were recognized. The relief provisions for short-term leases with a term of less than twelve months and leases in which the asset under-lying the lease agreement is of a low value (value limit of €5,000) have been applied. Such leases are expensed as occurred. As part of the transition to IFRS 16, €114 million were capitalised as rights of use from leases as of 1 January 2019 and corresponding lease liabilities were recognized as liabilities. As a result, this led to a reduction in other expenses with a simultaneous increase in amortisation/depreciation and interest expenses.

Scheduled depreciation increased as a result of the application of IFRS 16 and the corresponding recognition of leasing agreements. The production costs within EBITDAX exclude depreciation, so the changes to IFRS 16, in relative terms, lead to an improvement in EBITDAX. The first-time application of IFRS 16 resulted in an increase in financial liabilities.

For further information, see "Accounting changes" in the notes to Wintershall's consolidated financial statements for the short fiscal year as of 30 April 2019.

Dea

As part of the transition to IFRS 16, €72 million were capitalised as rights of use from leases as of 1 January 2019 and corresponding lease liabilities were recognized as liabilities. The change was made using the modified retrospective approach. The simplification regulations for short-term leases with a maximum term of 12 months and leases with a low value were applied and the payments were recorded as expenses on a straight-line basis.

Scheduled depreciation increased as a result of the application of IFRS 16 and the corresponding recognition of leasing agreements. The production costs within EBITDAX exclude depreciation, so the changes to IFRS 16, in relative terms, lead to an improvement in EBITDAX. The first-time application of IFRS 16 resulted in an increase in financial liabilities.

For further information, see "Change in Accounting policies" in the notes to Dea's consolidated financial statement for the short fiscal year as of 30 April 2019.

Recent Developments

Trading update

Commodity prices decreased slightly in July 2019. During July, Brent traded at an average price of 64.04 USD/bbl, whereas NBP traded at an average price of 3.70 USD/mcf. Production was slightly below the first six months of the year due to lower production in Russia, as expected, given that summer is planned maintenance period in Russia due to weather conditions. In addition, technical limitations occurred in July 2019 due to high outside temperatures, but which has been caught up in the following weeks. This was partially offset by higher production in Norway, due to the ramp-up of production in the fields Aasta Hansteen and Maria, and North Africa, resulting in a slightly lower EBITDAX compared to the average of the first six months of the year.

Results of operations of the Group

The unaudited condensed consolidated interim financial statements of the Group for 30 June 2019 comprise only the months May and June 2019, with a comparison period of January and February 2019 for Wintershall, as required by IAS 34, owing to the short fiscal year for the period from 1 January until 30 April 2019 for Wintershall. Given the different comparison periods, as well as the fact that the two months ended 30 June 2019 includes Dea following the Merger, results are only comparable to a very limited degree.

Sales revenues gas and oil in the two months ended 30 June 2019 increased by €73 million, or 11 per cent., to €724 million, compared to €651 million for the comparison period. The increase was mainly due to the impact of the Merger, partially offset by adverse movements in oil and gas prices as compared to the first two months of 2019. In addition, production in Russia decreased due to the start of the summer maintenance period.

Sales revenues gas transport / midstream in the two months ended 30 June 2019 increased slightly by €2 million, or 5 per cent., to €39 million compared with €37 million for the comparison period due to lower volumes.

Net income from equity-accounted investments gas and oil decreased by €6 million, or 67 per cent., to €3 million in the two months ended 30 June 2019 compared with €9 million for the comparison period. The decrease was mainly driven by lower proportional net income of the associated companies and joint ventures that are valued at equity.

Net income from equity-accounted investments gas transport / midstream increased by €1 million, or 5 per cent., to €21 million in the two months ended 30 June 2019 compared with €20 million for the comparison period. The small increase was driven by the slightly higher proportional net income of the associated companies and joint ventures that are valued at equity.

Production and operating expenses decreased by €5 million, or 2 per cent., to €325 million in the two months ended 30 June 2019 compared with €330 million for the comparison period. The decrease was mainly driven by lower cost for purchased trading quantities and lower production expenses in line with lower production from the legacy Wintershall portfolio mainly in Russia. This was partially offset by the impact of the Merger.

Production and similar taxes increased by €14 million, or 74 per cent., to €33 million in the two months ended 30 June 2019 compared with €19 million for the comparison period. The increase was mainly related to the impacts of the Merger.

Depreciation and amortisation in the two months ended 30 June 2019 increased by €152 million, or 103 per cent., to €300 million compared with €148 million for the comparison period. The increase was mainly driven by the Merger. In addition, depreciation increased, as the Aasta Hansteen field is ramping up production and the Maria field has also increased production.

There were no net impairments on assets in the two months ended 30 June 2019 or in the comparison period.

Cost of sales gas transport / midstream decreased by €1 million, or 14 per cent., to €6 million in the two months ended 30 June 2019 compared with €7 million for the comparison period.

Exploration expenses in the two months ended 30 June 2019 decreased by €9 million, or 20 per cent., to €35 million compared with €44 million for the comparison period. The decrease was related to lower costs for the acquisition of seismic data.

General and administration expenses decreased by €182 million, or 81 per cent., to €44 million in the two months ended 30 June 2019 compared with €226 million for the comparison period. The decrease was mainly driven by the addition to restructuring provisions in February 2019. This was partially compensated by the effect from the Merger.

The result from operating activities of the Group increased by €135 million, or 397 per cent., to €169 million in the two months ended 30 June 2019 compared with €34 million for the comparison period. The increase was mainly driven by the Merger as well as expenses from addition to restructuring provisions in the comparison period.

Financial income increased by €14 million, or 82 per cent., to €31 million in the two months ended 30 June 2019 compared with €17 million for the comparison period. The increase was mainly driven by higher interest income from Nordstream 2. In addition, in the comparison period the Group had net foreign currency exchange gains.

Financial expenses increased by €20 million, or 111 per cent., to €38 million in the two months ended 30 June 2019 compared with €18 million for the comparison period. The increase was driven by the Merger. In addition, the Group had net foreign currency exchange losses in the reporting period.

The result before taxes increased by €129 million, or 391 per cent., to €162 million in the two months ended 30 June 2019 compared with €33 million for the comparison period. The increase was mainly driven by the Merger as well as expenses from addition to restructuring provisions relating to the Merger in the comparison period. Income taxes increased by €17 million, or 142 per cent., to €29 million in the two months ended 30 June 2019 compared with €12 million for the comparison period. The tax rate in the two months ended 30 June 2019 amounted to 18 per cent., and 36 per cent. for the comparison period. The

decrease of the tax rate is mainly driven by lower effective tax rate in Norway and lower tax expenses in relation to the Libyan onshore business.

The net result increased by €112 million, or 533 per cent., to €133 million in the two months ended 30 June 2019 compared with €21 million for the comparison period. The increase was mainly driven by the Merger as well as expenses from addition to restructuring provisions in the comparison period.

Results of operations of Wintershall

The following table sets out certain of Wintershall's historical revenue and expense items for the years ended 31 December 2016, 2017 and 2018 and the short fiscal year ended 30 April 2019.

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €)	
Net revenue	3,108	3,662	4,707	1,531
Cost of conversion and purchase costs of the services rendered to generate the revenue	(2,513)	(2,716)	(2,911)	(972)
Gross earnings from revenue	595	946	1,797	560
Distribution costs	(116)	(80)	(94)	(60)
General administrative expenses	(67)	(81)	(68)	(36)
Research costs	(38)	(45)	(26)	(8)
Exploration costs	(94)	(104)	(112)	(75)
Other operating income	249	387	118	48
Other operating expenses	(143)	(337)	(450)	(1,441)
Equity result	104	248	128	61
Result from operating activities	491	934	1,294	(952)
Income from other participating interests	12	4	4	—
Expenses from other participating interests	(5)	(3)	(0)	—
Net investment income	6	1	3	—
Interest income	51	57	72	36
Interest expenses	(141)	(106)	(68)	(25)
Net interest income	(90)	(49)	4	11
Miscellaneous financial income	44	39	251	132
Miscellaneous financial expenses	(54)	(40)	(305)	(151)
Miscellaneous financial result	(10)	(1)	(54)	(18)
Financial result	(93)	(49)	(46)	(7)
Earnings before income taxes	397	885	1,247	(959)
Income taxes	7	(158)	(577)	108
Net income for the year	404	727	671	(851)
Non-controlling interests	(76)	(41)	(55)	(18)
Net income after non-controlling interests	328	686	616	(869)

Wintershall results of operations for the short fiscal year ended 30 April 2019

Owing to the short fiscal year of only four months, comparability with the previous year's figures for 12 months is only possible to a limited degree. Major standalone drivers and factors are explained, where relevant. In addition, the results of operations are compared with unaudited management accounts for the first four months of 2018, that were derived from Wintershall's internal management reporting as an aggregation of the first quarter 2018 and one third of the second quarter 2018. The comparison with the management accounts is provided for informational purposes only.

Net revenues decreased by €3,176 million, or 67 per cent., to €1,531 million in the short fiscal year ended 30 April 2019 compared to €4,707 million for the year ended 31 December 2018, mainly owing to the short fiscal year which comprises only four months compared with the 12 months in 2018. In addition, there were offsetting effects of increased production in Russia and lower commodity prices. Compared to the first

four months of 2018, net revenues slightly increased due to the increased production in Russia offset by lower commodity prices.

The average price of Brent crude oil, sourced from Reuters, which the majority of Wintershall's oil sales are benchmarked against, declined by 9 per cent. from U.S.$71.31/barrel during the year ended 31 December 2018 to U.S.$65.08/barrel during the short fiscal year ended 30 April 2019. Similarly, the average TTF gas price sourced from Reuters, decreased by 23 per cent., from €22.83 per megawatt hour during the year ended 31 December 2018 to €17.60 per megawatt hour during the short fiscal year ended 30 April 2019. In the first four months of 2019, the U.S. dollar rose against the Euro and the positive exchange rate effect from the U.S. dollar partially offset the fall in the price of Brent crude oil.

The cost of conversion and purchase costs of the services rendered to generate revenue decreased by €1,939 million, or 67 per cent., to €972 million in the short fiscal year ended 30 April 2019 compared with €2,911 million for the year ended 31 December 2018. This is broadly flat as a proportion of net revenue as compared to the year ended 31 December 2018 and compared to the first four months of 2018. The main components of the cost conversion and purchase costs of the services rendered to generate revenue were costs for merchandise and operational expenditures.

Distribution costs decreased by €34 million, or 36 per cent., to €60 million in the short fiscal year ended 30 April 2019, compared to €94 million for the year ended 31 December 2018, owing to the difference in time period. Compared to the first four months of 2018, this was a significant increase, driven by higher tariffs relating to higher production in the Aasta Hansteen field and the Maria field in Norway.

General and administrative expenses decreased by €32 million, or 47 per cent., to €36 million in the short fiscal year ended 30 April 2019 compared with €68 million for the year ended 31 December 2018. On a relative basis, both compared to the year ended 31 December 2018 and to the first four months of 2018, this is slightly higher, mainly driven by central units, the cost of managing business units and cost of general management and the Board of Directors.

Research costs decreased by €18 million, or 69 per cent., to €8 million in the short fiscal year ended 30 April 2019 compared with €26 million for the year ended 31 December 2018 due to the short fiscal year. Compared to the first four months of 2018, research costs increased, which was mainly driven by fewer projects.

Exploration costs decreased by €37 million, or 33 per cent., to €75 million in the short fiscal year ended 30 April 2019 compared with €112 million for the year ended 31 December 2018, owing to the difference in time period. Compared to the first four months of 2018, there was a significant increase driven by the acquisition of seismic data in Brazil and Argentina as well as two dry wells.

Other operating income decreased by €70 million, or 59 per cent., to €48 million in the short fiscal year ended 30 April 2019 compared with €118 million for the year ended 31 December 2018, owing to the difference in time period. Overall, other operating income is mainly driven by gains from the disposal of non-current assets, income from refunds, compensation and settlement payments as well as positive foreign currency valuation effects. Compared to the first four months of 2018, other operating income increased. The reporting period contains gains from the disposal of the Shuwaihat field in Abu Dhabi, whereas the four months of 2018 contained gains from the disposal of Aguada Pichana in Argentina.

Other operating expenses increased by €991 million, or 220 per cent., to €1,441 million in the short fiscal year ended 30 April 2019 compared with €450 million for the year ended 31 December 2018, mainly driven by impairments of assets and additions to provisions. The significant increase compared with the year ended 31 December 2018 relates to amortisation, depreciation and impairments of non-current assets of €1.2 billion for assets in Norway, the Netherlands, Germany and Russia, caused by an adjustment of underlying price assumptions following the transition from a price deck provided by BASF to a price deck produced by the Group in the context of the Merger, as well as additions to restructuring provisions of €180 million relating to the Merger. There was also a significant increase compared with the first four months of 2018, driven by the amortisation, depreciation and impairments of non-current assets and the additions to restructuring provisions related to the Merger.

The equity result decreased by €67 million, or 52 per cent., to €61 million in the short fiscal year ended 30 April 2019 compared with €128 million for the year ended 31 December 2018, owing to the difference in time period. The equity result is mainly driven by the proportional net income of the associated companies and joint ventures that are valued at equity. The increase compared to the first four months of 2018 mainly relates to a higher proportional income of the joint ventures.

The result from operating activities decreased by €2,246 million, or 174 per cent., to €(952) million in the short fiscal year ended 30 April 2019 compared with €1,294 million for the year ended 31 December 2018. This result was negatively influenced by the impairments discussed above and provisions for restructuring measures in connection with the Merger. Compared to the first four months of 2018, result from operating activities decreased significantly as well, driven mainly by the impairments and additions to provisions for restructuring measures.

Net interest income increased by €7 million, or 175 per cent., to €11 million in the short fiscal year ended 30 April 2019 compared with €4 million for the year ended 31 December 2018. Net interest income is mainly driven by interest income from loans, mainly connected to the Nord Stream 2 project, partially offset by interest expenses for financial liabilities. The increase compared to the first four months of 2018 mainly relates to higher interest income from Nord Stream 2 and slightly lower interest expenses in connection with cash pooling with BASF.

Comparison of Wintershall results of operations for the years ended 31 December 2016, 2017 and 2018

Revenue

Wintershall's revenue comprised the sale of own products and merchandise, revenues from trading activities, covering mainly the marketing of gas quantities, gas transportation tariffs and other operating revenues, mainly from services rendered. Merchandise means volumes that are not produced by Wintershall but which are obtained from others and resold by Wintershall. This mainly comprises the volumes that Wintershall bought from Equinor and re-sells in Germany.

Revenues for the year ended 31 December 2018 were €4,707 million a 29 per cent. increase from €3,662 million in 2017. The increase was mainly due to higher oil and gas prices. In addition, revenues from the trading business increased driven by price-related factors.

Revenues for the year ended 31 December 2017 were €3,662 million, an 18 per cent. increase from €3,108 million in 2016. The increase was mainly due to higher oil and gas prices. In addition, revenues from the trading business increased driven by price-related factors.

Cost of conversion and purchase cost of the services rendered to generate the revenue

Wintershall's cost of conversion and purchase cost of the services rendered to generate the revenue comprised all production and purchase costs of the company's own products, as well as merchandise, that were sold in the period, particularly plant, energy and personnel costs.

Cost of conversion and purchase costs of the services rendered to generate the revenue for the year ended 31 December 2018 were €2,911 million, a 7 per cent. increase from €2,716 million in 2017. The increase was due to higher purchase costs for merchandise in Germany, partially offset by lower depreciation/amortisation in Norway.

Cost of conversion and purchase cost of the services rendered to generate the revenue for the year ended 31 December 2017 were €2,716 million, an 8 per cent. increase from €2,513 million in 2016. The increase was due to higher purchase costs for gas trading, partially offset by lower depreciation/amortisation mainly in Norway in 2017 compared to none in 2016.

Distribution costs

Wintershall's distribution costs comprised marketing and advertising costs, freight costs, packaging costs, distribution management costs, commission and licensing costs.

Distribution costs for the year ended 31 December 2018 were €94 million, an 18 per cent. increase from €80 million in 2017. The increase was mainly due to first oil at two Norwegian fields and the recalculation of pipeline tariffs in Norway.

Distribution costs for the year ended 31 December 2017 were €80 million, a 31 per cent. decrease from €116 million in 2016. The decrease was mainly due to lower production volumes in Norway.

General and administration expenses

Wintershall's general and administration expenses primarily comprised the costs of the central units, the costs of managing business units and costs of general management and the board of Directors.

General and administrative expenses for the year ended 31 December 2018 were €68 million, an 16 per cent. decrease from €81 million in 2017. The decrease was due to lower IT-related administration costs in Germany as well as lower administration costs in Russia due to the relocation of the office in 2017.

General and administrative expenses for the year ended 31 December 2017 were €81 million, a 21 per cent. increase from €67 million in 2016. The increase was due to higher IT costs in Germany and administration costs in Russia connected to the relocation of the office.

Research costs

Wintershall's research costs comprised the costs resulting from research projects, as well as the necessary license fees for research activities.

Research costs for the year ended 31 December 2018 were €26 million, a 42 per cent. decrease from €45 million in 2017. The decrease resulted from the termination of a German research project.

Research costs for the year ended 31 December 2017 were €45 million, an 18 per cent. increase from €38 million in 2016. The increase was due to a research project in Germany.

Exploration costs

Wintershall's exploration costs comprised, among other things, expenses related to seismology, geology, geophysics, unsuccessful exploration wells, additions and reversals of provisions and allocable administrative expenses. Impairment losses and reversals are not included in the exploration costs.

Exploration costs for the year ended 31 December 2018 were €112 million, an 8 per cent. increase from €104 million in 2017. The increase was due to higher exploration expenditures in Argentina and Germany.

Exploration costs for the year ended 31 December 2017 were €104 million, an 11 per cent. increase from €94 million in 2016. The increase was mainly due to acquired seismic data in Brazil.

Other operating income

Wintershall's other operating income comprised income from the translation of transactions denominated in foreign currencies, reversals of impairment losses on non-current assets, gains from the disposal of non-current assets, income from refunds, compensations and settlement payments, income from the adjustment and reversal of provisions recognized under other operating expenses, income from other non-typical transactions and miscellaneous income.

Other operating income for the year ended 31 December 2018 was €118 million, a 70 per cent. decrease from €387 million in 2017. The decrease was due to the fact that there were no reversals of impairments on non-current assets in 2018, in contrast to 2017. In addition, income from refunds, compensations and settlements decreased due to compensation payments in Norway and Argentina in 2017. Gains from the disposal of non-current assets also decreased due to the sale of interests in oil and gas concessions in Argentina in 2017.

Other operating income for the year ended 31 December 2017 was €387 million, a 55 per cent. increase from €249 million in 2016. The increase was mainly due to the reversal of impairments on non-current-assets relating to oil and gas fields in Norway. Gains from the disposal of non-current assets also increased due to the sale of interests in oil and gas concessions in Argentina. This was partially offset by lower income from compensation payments in Argentina relating to the New Gas Price Scheme.

Other operating expenses

Wintershall's other operating expenses comprise expenses from foreign currency and hedging transactions, losses from commodity derivatives, amortisation/depreciation and impairments of non-current assets, cost of production for other non-typical transactions, expenses for project costs that were not capitalised, expenses from additions to valuation allowances for trade receivables, expenses for fees, charges and other services and miscellaneous expenses.

Other operating expenses for the year ended 31 December 2018 was €450 million, a 34 per cent. increase from €337 million in 2017. The increase was due to higher impairments of property, plant and equipment in Norway and losses from commodity derivatives in connection with pending gas purchase agreements, partially offset by lower expenses from foreign currency and hedging transactions, mainly in Norway.

Other operating expenses for the year ended 31 December 2017 was €337 million, a 136 per cent. increase from €143 million in 2016. The increase was mainly due to impairment losses in Norway. In addition, expenses from foreign currency and hedging transactions increased, mainly in Norway.

Equity result

Wintershall's equity result comprised the proportionate income from joint ventures and associated companies that are consolidated at equity as well as other adjustments in relation to joint ventures that have to be recognized through profit and loss.

Equity Result for the year ended 31 December 2018 was €128 million, a 48 per cent. decrease from €248 million in 2017. The decrease was due to write-ups on joint ventures in 2017 mainly with Nord Stream AG and Wintershall Nordzee BV. In addition, there was a decrease in earnings in the gas transportation companies that are valued at equity.

Equity Result for the year ended 31 December 2017 was €248 million, a 138 per cent. increase from €104 million in 2016. The increase was due to higher net income of joint ventures, mainly with Nord Stream AG and SNGP and associated companies that are valued at equity as well as write-ups on the equity book value of joint ventures.

Income from other participating interests

Wintershall's income from other participating interests comprised income from profit transfers, income from participating interests and income from the disposal of participating interests.

Income from other participating interests for the year ended 31 December 2018 was €4 million, stable compared to €4 million in 2017.

Income from other participating interests for the year ended 31 December 2017 was €4 million, a 67 per cent. decrease from €12 million in 2016. The decrease was due to lower income from equity investments as well as a decline in income from profit transfers.

Expenses from other participating interests

Wintershall's expenses from other participating interests comprised the expenses of loss absorptions and write-downs on and other losses from participating interests.

Expenses from other participating interests for the year ended 31 December 2018 was €0 million, a 100 per cent. decrease from €3 million in 2017. The decrease was due to lower expenses from loss absorptions.

Expenses from other participating interests for the year ended 31 December 2017 was €3 million a 40 per cent. decrease from €5 million in 2016. The decrease was due to lower write-downs and losses from the sale of shareholdings. This was partially compensated by higher expenses from loss absorption.

Interest income

Wintershall's interest income comprised interest income from cash and cash equivalents, interest income from loans, interest income from securities and miscellaneous interest income.

Interest income for the year ended 31 December 2018 was €72 million, a 26 per cent. increase from €57 million in 2017. The increase was due to significantly higher interest income from loans in connection with the financing of the Nord Stream 2 project.

Interest income for the year ended 31 December 2017 was €57 million, a 12 per cent. increase from €51 million in 2016. The increase was due to higher interest income from loans in connection with the financing of the Nord Stream 2 project. This was partially compensated by lower interest income from cash and cash equivalents.

Interest expenses

Wintershall's interest expenses comprised interest expenses for financial liabilities and miscellaneous interest expenses.

Interest expenses for the year ended 31 December 2018 were €68 million, a 36 per cent. decrease from €106 million in 2017. The decrease was due to the repayment of financial liabilities in Argentina and lower liabilities from cash-pooling with the shareholder.

Interest expenses for the year ended 31 December 2017 were €106 million, a 25 per cent. decrease from €141 million in 2016. The decrease was due to the repayment of financial liabilities in Argentina.

Miscellaneous financial income

Wintershall's miscellaneous financial income comprised gains from the disposal or write-up of securities and loans, the capitalisation of borrowing costs, net interest income from overfunded pension plans and similar obligations and other financial income.

Miscellaneous financial income for the year ended 31 December 2018 was €251 million, a 544 per cent. increase from €39 million in 2017. The increase was due to significantly higher income from hedging transactions for loans.

Miscellaneous financial income for the year ended 31 December 2017 was €39 million, an 11 per cent. decrease from €44 million in 2016. The decrease was due to lower capitalised borrowing costs, partially offset by write-up of securities and loans.

Miscellaneous financial expenses

Wintershall's miscellaneous financial expenses comprised write-downs and losses from securities and loans, accrued interest on other non-current provisions, miscellaneous interest expenses from discounting, net interest expenses from overfunded pension plans and similar obligations and other financial expenses.

Miscellaneous financial expenses for the year ended 31 December 2018 were €305 million, a 663 per cent. increase from €40 million in 2017. The increase was due to significantly higher expenses from hedging transactions for loans.

Miscellaneous financial expenses for the year ended 31 December 2017 were €40 million, a 26 per cent. increase from €54 million in 2016. The decrease was due to lower expenses from hedging of receivables denominated in rubles and lower impairment losses on loans.

Income taxes

Wintershall's income taxes for the year ended 31 December 2018 were €577 million, a 265 per cent. increase from €158 million in 2017, equating to a 46 per cent. effective tax rate in 2018 compared to 18 per cent. in 2017. The higher tax rate in the year ended 31 December 2018 resulted from the increased result before taxes in jurisdictions with high tax rates, namely Norway.

Income taxes for the year ended 31 December 2017 were €158 million, a 2357 per cent. increase from €(7) million (tax income) in 2016, equating to a 18 per cent. effective tax rate in 2017 compared to (two) per cent. in 2016. The higher tax rate in the year ended 31 December 2017 resulted from the increased result before taxes in jurisdictions with high tax rates, namely Norway.

Results of operations of Dea

The following table sets out certain of Dea's historical revenue and expense items for the years ended 31 December 2016, 2017 and 2018 and the short fiscal year ended 30 April 2019.

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017[1]	2018	2019
	(millions €)			
Sales and other operating revenues	1,483	1,427	1,892	458
Cost of sales	(1,101)	(728)	(759)	(304)
Gross profit	382	699	1,133	154
Exploration costs	(119)	(122)	(111)	12
General and administration expenses	(149)	(123)	(125)	(213)
Net impairment of assets	(70)	(100)	(168)	(75)
Net impairment of operating receivables	—	—	1	(4)
Operating result	44	354	730	(126)
Financial income	129	87	109	22
Financial expenses	(224)	(260)	(89)	(33)
Net impairment of financial receivables	—	—	9	8
Result from continuing operations before taxes	(51)	181	759	(129)
Income taxes	18	(174)	(478)	(8)
Result from continuing operations	(33)	7	281	(137)
Result from discontinued operations	(3)	14	53	—
Net result	(36)	21	334	(137)
Thereof attributable to:				
Shareholders of the parent company	(39)	18	330	(137)
Non-controlling interests	3	3	4	—

Note:

(1) The 2017 financial data has been adjusted from the reported 2017 figures due to the reporting of discontinued operations.

Dea's results of operations for the short fiscal year ended 30 April 2019

Owing to the short fiscal year of only four months, comparability with the previous year's figures for 12 months is only possible to a limited degree. Major standalone factors and drivers are explained, where relevant. In addition, the results of operations are compared with unaudited management accounts for the first four months of 2018, that are based on Dea's internal management reporting. The comparison with the management accounts is provided for informational purposes only.

Sales and other operating revenues decreased by €1,434 million or 76 per cent., to €458 million in the short fiscal year 2019 compared with €1,892 million for the year ended 31 December 2018, mainly owing to the short fiscal year which comprises only four months compared with the 12 months in 2018. In addition, production volumes and commodity prices are lower compared with the previous year. Moreover, other operating revenues decreased significantly owing to payments under an insurance claim in the previous year. Compared to the first four months of 2018, sales and other operating revenues also decreased, driven by lower production and lower commodity prices.

The average price of Brent crude oil, sourced from Bloomberg, which the majority of Dea's oil sales are benchmarked against, declined by 8.2 per cent. from U.S.$71.69/barrel during the year ended 31 December 2018 to U.S.$65.78/barrel during the short fiscal year ended 30 April 2019. Similarly, the average UK NBP price, sourced from Bloomberg, decreased by 25.2 per cent., from U.S.$7.91/mscf during the year ended 31 December 2018 to U.S.$5.91/mscf during the short fiscal year ended 31 April 2019, while the average TFF price, sourced from Bloomberg, decreased by 23.9 per cent., from U.S.$7.71/mscf during the year ended 31 December 2018 to U.S.$5.86/mscf during the short fiscal year ended 31 April 2019.

Oil sales decreased by €616 million, or 71 per cent., to €243 million in the short fiscal year 2019 compared with €859 million for the year ended 31 December 2018 due to the timing effect. In addition, oil prices in USD decreased by 6 per cent. including the result from commodity hedges in Germany. Compared to the first four months of 2018, oil sales decreased, mainly driven by lower production and lower oil prices.

Gas sales decreased by €516 million (71 per cent.) to €213 million in the short fiscal year 2019 compared with €729 million for the year ended 31 December 2018, mainly owing to the timing effect in connection with the short fiscal year in 2019. In addition, average realised gas prices (in USD) decreased by 17 per cent. Compared to the first four months of 2018, gas sales decreased, mainly driven by lower production and lower gas prices.

Dea's average daily production volumes fell to 116 mboe/d in the short fiscal year ended 30 April 2019 from 121 mboe/d in the year ended 31 December 2018. In comparison to the first four months of 2018, production declined as well. This was the result of the natural decline in production from its mature fields in Norway and Germany, which was partially offset by higher production at its assets in North Africa and Mexico.

Cost of sales decreased by €455 million, or 60 per cent., to €304 million in the short fiscal year 2019, compared with €759 million for the year ended 31 December 2018. Overall, the decrease is owing to the difference in time period. In contrast, scheduled depletion/depreciation/amortisation increased owing to the production ramp-up in Mexico and Algeria as well as owing to the application of IFRS 16 and the respective treatment of leases. In addition to that, the expenses for maintenance and environmental protection increased. In the previous year, the gain from the sale of Norwegian Polarled infrastructure assets had a positive impact on the cost of sales. In comparison to the first four months of 2018, cost of sales increased as well, driven by the same factors as mentioned above.

Exploration costs decreased by €123 million to an income of €12 million in the short fiscal year 2019 compared with expense of €111 million for the year ended 31 December 2018 owing to lower dry well costs and reversals of provisions. In 2019, exploration costs included no dry well costs, but the expense on the acquisition of seismic data, licence fees and changes in provisions for outstanding work programmes. Compared to the first four months of 2018, exploration costs also decreased, mainly driven by the reversal of provisions in the reporting year.

General and administration expenses increased by €88 million, or 70 per cent., to €213 million in the short fiscal year 2019 compared with €125 million for the year ended 31 December 2018. The major drivers for the increase were the addition to the restructuring provision relating to severance packages and early retirement costs and fees related to change of control provisions triggered by the Merger. In 2018, the deconsolidation of a subsidiary after the strike-off of the company from the companies register led to a negative one-off. Compared to the first four months of 2018, general and administration expenses also increased significantly, driven by the addition to the restructuring provision relating to severance packages and early retirement costs and fees related to the Merger.

Net impairment of assets decreased by €93 million to €75 million in the short fiscal year 2019, compared with €168 million for the year ended 31 December 2018. In 2019, impairments mainly resulted from two producing assets in North Africa. In 2018, impairments resulted mainly from two producing assets in North Africa and one producing asset in Norway. The reversal of an impairment made in previous years relates mainly to a producing field in North Africa. In the first four months of 2018 no impairment of assets were recorded.

Net impairment of operating receivables decreased by €5 million to €(4) million in the short fiscal year 2019, compared with a reversal of impairments of €1 million for the year ended 31 December 2018. Compared to the first four months of 2018, net impairment of operating receivables remained stable.

The operating result of Dea amounted to €(126) million in the short fiscal year ended 30 April 2019. For the year ended 31 December 2018, the result was €730 million. Compared to the first four months of 2018, the operating result also significantly decreased, driven mainly by additions to restructuring provisions and lower revenues.

Financial income decreased by €87 million, or 80 per cent., to €22 million in the short fiscal year 2019 compared with €109 million for the year ended 31 December 2018, owing to the timing effect in the short fiscal year. In addition, interest income from related parties decreased, caused by a reduction of the upstream loan towards L1E Funding GmbH. Compared to the first four months of 2018, financial income decreased, mainly driven by lower interest income from related parties related to the upstream loan towards L1E Funding GmbH. In addition, net foreign currency exchange gains were slightly lower.

Financial expenses decreased by €56 million (63 per cent.) to €33 million in the short fiscal year 2019 compared with €89 million for the year ended 31 December 2018. The absolute decrease is owing to the timing effect in the short fiscal year. Interest expenses were impacted by prepayment fees in connection

with the early repayment of the proceeds loan and subsequently the unsecured notes. Compared to the first four months of 2018, financial expenses remained nearly stable owing to compensating effects of higher interest expenses and higher capitalisation of borrowing costs.

Net impairment of financial receivables mainly comprises a reversal of impairments due to a decrease in both the underlying receivables and the impairment rate. Compared to the first four months of 2018, net impairment of financial receivables increased, mainly driven by a reversal of impairment based on lower financial receivables.

The result from continuing operations before taxes amounted to €(129) million in the short fiscal year 2019 and to €759 million for the year ended 31 December 2018. The decrease was mainly driven by non-recurring effects as additions to restructuring provisions and change of control fees. Compared to the first four months of 2018, result from continuing operations before taxes decreased significantly as well, driven by the effects mentioned above. In the reporting period, Dea had total tax expenses of €8 million. The tax rate in the short fiscal year ended 30 April 2019 amounted to (6) per cent. Owing to the fact that impairments on assets in North Africa and some additions to provisions are not tax-deductible, there are tax expenses despite the negative pre-tax result. Therefore the tax rate for the short fiscal year ended 30 April 2019 is not comparable to the tax rate for the year ended 31 December 2018 or for the first four months of 2018.

The result from continuing operations amounted to €(137) million in the short fiscal year ended 30 April 2019, considerably lower than the value for the year ended 31 December 2018 due to the timing effect of short fiscal year and the non-recurring effects related to the Merger. Compared to the first four months of 2018, result from continuing operations decreased significantly as well, mainly driven by the non-recurring effects related to the Merger as well as lower production and lower commodity prices.

Comparison of Dea's results of operations for the years ended 31 December 2016, 2017 and 2018

Sales revenues and other operating revenues

Dea's sales revenues and other operating revenues comprised revenues from gas and oil sales, gains and losses from commodity derivatives and other operating revenues.

Sales revenues and other operating revenues for the year ended 31 December 2018 were €1,892 million, a 33 per cent. increase from €1,427 million in 2017. The increase was mainly due to higher commodity prices. Additionally, other operating revenues increased significantly owing to payments under an insurance claim under its federal investment guarantee relating to an asset in Libya. This was partially offset by a 5 per cent. decrease in sales volumes.

Oil sales increased by €129 million, or 18 per cent., to €859 million in 2018 compared with €730 million in 2017, as oil prices in U.S. dollars increased by 35 per cent. This was partially offset by a decrease of 4 per cent. in sales volumes and adverse foreign exchange effects due to the weaker U.S. dollar. In addition, there were lower results from oil commodity hedges in Germany, resulting in a decline in revenues of €46 million compared with 2017.

Gas sales increased by €72 million or 11 per cent. to €729 million in 2018 compared with €657 million in 2017, mainly due to an increase in average realised gas prices (in U.S. dollars) of 27 per cent. this was partially offset by sales volumes that were 5 per cent. lower and adverse effects from the weaker U.S. dollar.

Sales revenues and other operating revenues for the year ended 31 December 2017 were €1,427 million, a 4 per cent. decrease from €1,483 million in 2016. The decrease was due to a 5 per cent. decrease in sales volumes. This was partially offset by higher commodity prices. In addition, revenues from gas storage were shown in 2017 as discontinued operations.

Oil sales decreased by €70 million, or 9 per cent., to €730 million for 2017 compared with €800 million for 2016, as 19 per cent. lower sales volumes were partially offset by a 21 per cent. increase in oil prices. In addition, there were lower results from oil commodity hedges in Germany and Norway, resulting in a decline in those revenues of €50 million compared with 2016.

Gas sales increased by €26 million or 4 per cent. to €657 million for 2017 compared with €631 million for 2016, mainly owing to 9 per cent. higher sales volumes with nearly stable prices.

Cost of sales

Dea's cost of sales comprised production costs, royalties, changes in over-/underlift position, tariffs, transport and lease expenses, depletion/depreciation/amortisation and development costs.

Cost of sales for the year ended 31 December 2018 was €759 million, a 4 per cent. increase from €728 million in 2017. The unit of production decreased due to ongoing cost reduction measures and positive non-recurring effects. In addition, transport costs and tariffs declined. The gain from the sale of Norwegian Polarled infrastructure assets had a positive impact on the cost of sales. In contrast, royalties increased in Germany in parallel with higher commodity prices and in Mexico, due to the start of production at Ogarrio. In addition, scheduled depletion/depreciation/amortisation increased due to the start of production in Mexico and Algeria. Moreover, in 2017, Dea reversed impairments on receivables in Egypt owing to lump-sum payments and offsetting of receivables and liabilities.

Cost of sales for the year ended 31 December 2017 was €728 million, a 34 per cent. decrease from €1,101 million in 2016. The decrease was due to lower unit production costs attributable to ongoing cost reduction measures, as well as the depreciation of the Egyptian Pound. In addition, production costs declined in parallel with the production volumes. The same applies to scheduled depletion/depreciation/amortisation, which decreased in line with the lower production. In addition, Dea reversed impairments on receivables in Egypt owing to lump-sum payments and offsetting of receivables and liabilities. In contrast, there were higher costs incurred for tariffs and transport in Norway and price-related production royalties in Germany.

Exploration costs

Dea's exploration costs comprised, among other things, expenses related to seismology, geology, geophysics, unsuccessful exploration wells, additions and reversals of provisions and allocable administrative expenses. Impairment losses and reversals are not included in the exploration costs.

Exploration costs for the year ended 31 December 2018 were €111 million, a 9 per cent. decrease from €122 million in 2017. The decrease was due to lower dry well costs and reimbursements of prior year costs. In 2018, exploration costs included dry well costs for six dry wells in Norway, Germany and Egypt. In addition, exploration costs included expense on the acquisition of seismic data, license fees and changes in provisions for outstanding work programmes.

Exploration costs for the year ended 31 December 2017 were €122 million, a 3 per cent. increase from €119 million in 2016. The increase was due to higher dry well costs. In 2017, exploration costs included dry well costs for five dry wells in Norway. In addition, exploration costs included expenses for the acquisition of seismic data, license fees and changes in provisions for outstanding work programmes.

General and administration expenses

Dea's general and administration expenses comprised costs for central functions, business development and operating services costs as well as costs of general management and the board of Directors.

General and administrative expenses for the year ended 31 December 2018 were €125 million, a 2 per cent. increase from €123 million in 2017. In 2018, the deconsolidation of a subsidiary after the strike-off of the company from the companies register led to a negative one-off effect. In addition, pension expenses in Norway increased after a positive one-off effect in the previous year. Moreover, income from asset disposals decreased year-on-year. This was partially offset by lower additions to restructuring provisions compared with the previous year.

General and administrative expenses for the year ended 31 December 2017 were €123 million, a 17 per cent. decrease from €149 million in 2016. The decrease was mainly due to lower personnel expenses owing to reduced headcount and to higher allocations to operational business areas, partially offset by higher restructuring costs.

Net impairment of assets

Dea's net impairment of assets comprised impairments and reversals of impairments of intangible and tangible assets.

Net impairment of assets for the year ended 31 December 2018 was €168 million, a 68 per cent. increase from €100 million in 2017. In 2018, impairments resulted mainly from two producing assets in North Africa

and one producing asset in Norway. In 2017, impairments resulted mainly from the intended sale of transport assets in Norway as well as two producing assets in North Africa. The reversal of an impairment made in previous years relates mainly to a producing field in North Africa.

Net impairment of assets for the year ended 31 December 2017 was €100 million, a 43 per cent. increase from €70 million in 2016. In 2017, impairments resulted mainly from the intended sale of transportation assets in Norway as well as two producing assets in North Africa. In 2016, impairments mainly affected an underperforming producing field and an exploration license in Norway. The reversal of an impairment made in previous years relates mainly to a producing field in Norway.

Net impairment of operating receivables

Dea's net impairment of operating receivables comprised impairments and reversals of impairment of operating receivables.

Net impairment of operating receivables for the year ended 31 December 2018 was €1 million, compared to nil in 2017. The impairments were nearly completely offset by the reversal of impairments.

There was no net impairment of operating receivables in the years ended 31 December 2016 and 31 December 2017 since this line item in the income statement was introduced in 2018 with the introduction of new IFRS 9.

Financial income

Dea's financial income comprised interest income from third and related parties, net foreign currency exchange gains, income from investments, net gains from financial derivatives and other financial income.

Financial income for the year ended 31 December 2018 was €109 million, a 25 per cent. increase from €87 million in 2017. The increase was due to the fact that in 2018 there were net foreign currency exchange gains instead of losses. In addition, interest income increased.

Financial income for the year ended 31 December 2017 was €87 million, a 33 per cent. decrease from €129 million in 2016. The decrease was due to the fact that in 2017 there were net foreign currency exchange losses instead of gains. In contrast, interest income increased slightly.

Financial expenses

Dea's financial expenses comprised interest expenses to third and related parties less capitalised borrowing costs, net foreign currency exchange losses, net losses from financial derivatives, other financial expenses and interest from additions to long-term provisions.

Financial expenses for the year ended 31 December 2018 were €89 million, a 66 per cent. decrease from €260 million in 2017. This was mainly due to the net foreign currency exchange losses in the previous year, whereas in 2018 there were net foreign exchange gains. In addition, there were lower net losses from financial derivatives year-on-year. Gross interest expenses increased because of higher interest expenses for the reserves-based lending credit facility owing to slightly higher utilization and the higher U.S dollar Libor rate. In parallel, a higher portion of interest was capitalised in line with the ongoing development projects.

Financial expenses for the year ended 31 December 2017 were €260 million, a 16 per cent. increase from €224 million in 2016. The increase was due to higher interest on the proceeds loan in connection with the issuance of senior unsecured notes. Moreover, interest expenses for the reserves-based lending credit facility increased owing to the scheduled increase in the margin and higher U.S. dollar Libor rate. In addition to the interest expenses, financial expenses also include net foreign currency exchange losses in 2017. This was partially offset by lower net losses from financial derivatives.

Net impairment of financial receivables

Dea's reversal of net impairment of financial receivables for the year ended 31 December 2018 was €9 million, compared to nil in 2017. This was mainly due to a reversal of impairments due to a decrease in both the underlying receivables and the discount rate.

There was no net impairment of financial receivables in the years ended 31 December 2016 and 31 December 2017 since this line item in the income statement was introduced in 2018 with the introduction of new IFRS 9.

Income taxes

Dea's income taxes for the year ended 31 December 2018 were €478 million, a 175 per cent. increase from €174 million in 2017, equating to a 63 per cent. effective tax rate in 2018 compared to 96 per cent. in 2017. The decrease in the tax rate in the year ended 31 December 2018 compared to the year ended 31 December 2017 resulted from the fact that certain one-off payments (e.g. insurance payments) were partially tax-exempt.

Income taxes for the year ended 31 December 2017 were €174 million, a 1,067 per cent. increase from €(18) million in 2016, equating to a 96 per cent. effective tax rate in 2017 compared to 35 per cent. in 2016. The higher tax rate in the year ended 31 December 2017 resulted from the fact that various expenses were not or only partially tax-deductible (e.g. impairments in North Africa).

Liquidity and Capital Resources

The Group's first priority in the use of its capital resources is maintenance and sustaining capital expenditure at its assets, followed by the steering of its balance sheet in line with the rating target, payment of dividends to shareholders, growth and development capital expenditure and exploration and appraisal activities and acquisitions.

Liquidity—Wintershall

Wintershall's historic liquidity sources was used to cover working capital, capital expenditures, debt service requirements and other liquidity requirements that may arise from time to time, including, without limitation, (i) repayments of outstanding debt, (ii) acquisitions and other investment opportunities, (iii) funding exploration and development projects and (iv) other payments in the ordinary course of business.

Historical cash flows

The following table sets forth Wintershall's consolidated cash flow information for the years ended 31 December 2016, 2017 and 2018.

	Year ended 31 December		
	2016	2017	2018
		(millions €)	
Net income for the year after non-controlling interests	328	686	616
Amortisation of intangible assets, depreciation of property, plant and equipment and impairment of financial investments	1,101	1,024	1,080
Changes in inventories	9	(13)	(52)
Changes in receivables	(247)	13	(162)
Changes in business-related liabilities and other provisions	(220)	(137)	199
Changes in provisions for pensions, in assets from overfunded pension plans and other items	224	131	102
Gains (−) from the disposal of non-current assets	(2)	(50)	(20)
Cash flow from operating activities	1,192	1,654	1,763
Payments for property, plant and equipment	(994)	(876)	(588)
Payments for intangible assets	(14)	(15)	(34)
Payments for financial investments	(64)	(352)	(330)
Proceeds from the disposal of non-current assets	224	324	57
Payments received for divestitures	(16)	—	—
Payments for acquisitions	—	—	(135)
Cash flows from investing activities	(864)	(919)	(1,031)
Payments to the company owners	(594)	(825)	(1,299)
Proceeds from company owners	—	400	850
Raising of financing-related liabilities BASF Group	1,659	2,318	2,177
Repayment of financing-related liabilities BASF Group	(1,658)	(1,568)	(2,237)
Raising of financial liabilities	123	123	45
Repayment of financial liabilities	(157)	(1,158)	(137)
Cash flows from financing activities	(627)	(710)	(601)
Changes in cash and cash equivalents affecting liquidity	(299)	26	131
Change in cash and cash equivalents			
due to currency translation effects	25	(7)	(22)
due to changes in the scope of consolidation	0	(1)	—
Cash and cash equivalents at the beginning of the period	366	93	110
Cash and cash equivalents at the end of the period	93	110	219

Cash flow from operating activities

Wintershall's cash flow from operating activities amounted to €1,763 million for the year ended 31 December 2018 compared to €1,654 million for the year ended 31 December 2017. The increase of €108 million for the year ended 31 December 2018 was primarily driven by a higher operating result, mainly due to price-related factors.

Wintershall's cash flow from operating activities amounted to €1,654 million for the year ended 31 December 2017 compared to €1,192 million for the year ended 31 December 2016. The increase of €462 million for the year ended 31 December 2017 was primarily driven by the rise in operating income, driven by higher oil and gas prices.

Cash flow from investment activities

Wintershall's cash outflow from investment activities was €1,031 million for the year ended 31 December 2018, compared to a cash outflow of €919 million for the year ended 31 December 2017. The decrease of €112 million for the year ended 31 December 2018 compared to 2017 was primarily driven by the acquisition in Abu Dhabi and lower proceeds from the disposal of non-current assets, partially offset by lower capital expenditures.

Wintershall's cash outflow from investment activities was €919 million for the year ended 31 December 2017, compared to the cash outflow of €864 million for the year ended 31 December 2016. The decrease of €55 million for the year ended 31 December 2017 compared to 2016 was primarily driven by higher investments in financial assets, particularly as a result of financing of gas transportation projects. This was partially offset by lower capital expenditures and higher proceeds from the disposal of non-current assets.

Cash flow from financing activities

Wintershall's cash outflow from financing activities amounted to €601 million in the year ended 31 December 2018, compared to a cash outflow of €710 million for the year ended 31 December 2017. The increase of €109 million for the year ended 31 December 2018 compared to 2017 was primarily driven by lower repayments of financial liabilities, partially compensated by higher repayments of financial liabilities under the cash-pooling agreement with the shareholder.

Wintershall's cash outflow from financing activities amounted to €710 million in the year ended 31 December 2017, compared to a cash outflow of €627 million for the year ended 31 December 2016. The decrease of €83 million for the year ended 31 December 2017 compared to 2016 was primarily driven by repayments of financial indebtedness in connection with the refinancing of the financing structure of the gas transportation business. This was partially compensated by lower net payments to the shareholder and additional drawings under the cash-pooling agreement with the shareholder.

Liquidity—Dea

Dea's principal sources of liquidity during the track record period were operating cash flows from its producing assets, debt financing through drawings on the reserves-based liquidity facility, other external borrowings and shareholder loans.

Historically, Dea's liquidity was used to cover working capital, capital expenditures, debt service requirements and other liquidity requirements that may arise from time to time, including, without limitation, (i) repayments of outstanding debt, (ii) acquisitions and other investment opportunities, (iii) funding exploration and development projects and (iv) other payments in the ordinary course of business.

Historical cash flows

The following table sets forth consolidated cash flow information for Dea for the years ended 31 December 2016, 2017 and 2018.

	Year ended 31 December		
	2016	2017[(1)]	2018
		(millions €)	
Result from continuing operations	(33)	7	281
Depreciation/impairment losses/reversal of impairment losses	570	389	486
Changes in provisions	(10)	23	(2)
Changes in deferred taxes	(94)	103	287
Gains/losses from disposal of assets	5	20	(30)
Other non-cash income/expenses	14	(28)	28
Changes in working capital	46	110	23
Changes in other balance sheet items	128	269	(40)
Cash flow operating activities—continuing operations	626	893	1,033
Cash flow operating activities-discontinued operations	—	20	31
Cash flow from operating activities	626	913	1,064
Cash outflows for additions to intangible assets, property, plant and equipment and investment property	(656)	(829)	(948)
Cash inflows from disposal of fixed assets	23	15	76
Cash outflows for acquisitions	—	(65)	(182)
Cash inflows from (cash outflows for) divestures	69	—	63
Cash inflows from (cash outflows for) financial assets	6	(20)	219
Cash flow from investment activities—continuing operations	(558)	(899)	(772)
Cash flow investment activities—discontinued operations	—	(9)	(9)
Cash flow from investment activities	(558)	(908)	(781)
Profit transfer to parent company	—	(9)	(130)
Distribution to non-controlling interests	(3)	0	—
Repayments of debt to banks	(772)	(282)	(325)
Proceeds from debt to banks	203	304	363
Repayments of financial liabilities	(110)	—	—
Proceeds from financial liabilities	395	—	—
Cash flow from financing activities—continuing operations	(287)	13	(92)
Cash flow from financing activities—discontinued operations	—	0	(3)
Cash flow from financing activities	(287)	13	(95)
Net change in cash and cash equivalents	(219)	18	188
Effects of foreign exchange rates changes and other changes in value	0	(3)	1
Cash and cash equivalents at beginning of reporting period	320	101	116
Cash and cash equivalents at end of reporting period	101	116	305
Less: Cash and cash equivalents of discontinued operations at end of reporting period	—	0	—
Cash and cash equivalents of continuing operations at end of reporting period	—	116	305
Supplementary information on cash flows from operating activities—continuing operations			
Income tax paid (less refunds)	1	43	8
Interest paid	60	90	98
Interest received	6	3	53
Dividends received	1	0	0

Notes:

(1) The 2017 financial data has been adjusted from the reported 2017 figures due to the reporting of discontinued operations.

Cash flow from operating activities

Dea's cash flow from operating activities (continued operations) amounted to €1,033 million for the year ended 31 December 2018 compared to €893 million for the year ended 31 December 2017. The increase of €140 million for the year ended 31 December 2018 compared to 2017 was primarily driven by the higher results from operations before depletion/depreciation/amortisation and deferred taxes, owing to better operational results, as well as non-recurring one-off effects from an insurance contract. In addition, changes in working capital had a positive impact on the cash flow from operating activities, driven mainly by lower accounts receivable, but the changes in net working capital were lower year-on-year.

Dea's cash flow from operating activities (continued operations) amounted to €893 million for the year ended 31 December 2017 compared to €626 million for the year ended 31 December 2016. The increase of €273 million for the year ended 31 December 2017 compared to 2016 was primarily driven by the higher results from operations before depletion/depreciation/amortisation and deferred taxes. In addition, the changes in the working capital had a positive impact on the cash flow from operating activities, driven mainly by lower accounts receivable. Moreover, a prepayment under an insurance contract added to the positive cash flow development.

Cash flow from investment activities

Dea's cash flow from investment activities (continuing operations) was €772 million for the year ended 31 December 2018, compared to a cash outflow of €899 million for the year ended 31 December 2017. The decrease of €127 million for the year ended 31 December 2018 compared to 2017 was primarily driven by higher cash inflow from asset disposals, divestments and repayments of financial receivables, which offset the increase in organic investment and acquisitions.

Dea's cash flow from investment activities (continuing activities) was €899 million for the year ended 31 December 2017, compared to a cash outflow of €558 million for the year ended 31 December 2016. The increase of €341 million for the year ended 31 December 2017 compared to 2016 was primarily driven by higher organic investments and the acquisition of additional shares in the Norwegian Njord area.

Cash flow from financing activities

Dea's cash flow from financing activities (continued operations) amounted to €92 million in the year ended 31 December 2018, compared to a cash inflow of €13 million for the year ended 31 December 2017. The increase of €105 million for the year ended 31 December 2018 compared to 2017 was primarily driven by higher payments under the profit and loss transfer agreement to L1E Acquisitions GmbH ("L1E Acquisitions"), partially offset by additional drawings under the reserves-based lending credit facility.

Dea's cash flow from financing activities amounted to €13 million in the year ended 31 December 2017, compared to cash outflow of €287 million for the year ended 31 December 2016. The decrease of €274 million for the year ended 31 December 2017 compared to 2016 was primarily driven by additional drawings under the RBL compared to repayments in 2016.

Capital expenditure

Capital expenditure for Wintershall historically primarily comprised the costs of exploration wells, maintaining and developing wells and acquiring product rights, licenses and trademarks associated with oil and gas production. The capital expenditure figures below represent Wintershall's cash outflow on construction of gas and oil production facilities and wells.

Capital expenditure for Dea has historically primarily comprised the costs of developing its gas and oil projects and the acquisition of shares in new licenses. The capital expenditure figures below represent Dea's cash outflow on investments in fixed assets.

The following tables set forth Wintershall's and Dea's capital expenditures and proceeds from divestments for the years ended 31 December 2016, 2017 and 2018.

Wintershall

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €)	
Payments for property, plant and equipment	(994)	(876)	(588)	(169)
Payments for intangible assets	(14)	(15)	(34)	(1)
	(1,008)	**(891)**	**(622)**	**(170)**
Payments for financial investments	(64)	(352)	(330)	(83)
Proceeds from disposal of non-current assets	224	324	57	1
Payments for acquisitions	—	—	(135)	—
Payments received for divestitures	(16)	0	—	—
Total	(864)	(919)	(1,030)	(252)

Dea

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €)	
Intangible assets/property, plant & equipment/investment property:				
Capital expenditure (net of financial assets)	(656)	(829)	(948)	(342)
Proceeds from disposal of fixed assets	23	15	76	0
Acquisitions	—	(65)	(182)	(740)
Cash flow from financial assets	6	(20)	219	(55)
Divestments	69	—	63	—
Capex from discontinued operations	—	(9)	(9)	—
Total	(558)	(908)	(781)	(1,137)

Note:

(1) The 2017 financial data has been adjusted from the reported 2017 figures due to the reporting of discontinued operations.

The following tables set forth Wintershall's and Dea's capital expenditures for the years ended 31 December 2016, 2017 and 2018, and for the four months ended 30 April 2019, by geography.

Wintershall

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017	2018	2019
			(millions €) (unaudited)	
Russia	77	65	61	7
Germany	83	62	53	13
Libya	11	19	0	29
Argentina	158	146	138	39
Norway	676	593	367	80
HQ	2	1	2	2
Midstream	0	4	1	0
Total capital expenditures	1,008	891	622	170

Dea

	Year ended 31 December			Short fiscal year ended 30 April
	2016	2017[1]	2018	2019
			(millions €)	
Germany/Denmark	53	48	50	21
Norway	158	370	533	223
North Africa[2]	444	409	345	96
Mexico	—	—	18	1
Other[3]	1	2	2	1
Capital expenditures (continuing operations) (net of financial assets)	656	829	948	342

Notes:

(1) The 2017 financial data has been adjusted from the reported 2017 figures due to the reporting of discontinued operations.

(2) Comprising Egypt and Algeria.

(3) Comprises all other Countries, Central functions and Investment Property.

Future capital expenditure

The Group continually evaluates its capital needs and compare them to its estimated funds available and its actual future capital expenditures may be higher or lower than its budgeted amounts. In particular, its capital expenditures may increase as additional exploration opportunities are presented to us or to fund appraisal and development costs associated with additional successful wells. The final determination with respect to the drilling of any well, including those currently budgeted, will depend on multiple factors, including the results of its development and exploration efforts, the availability of sufficient capital resources for drilling prospects, economic and industry conditions at the time of drilling, including prevailing and anticipated prices that the Group can receive for its oil and gas, the availability of drilling rigs and crews, and its financial condition. The Group expects its capital expenditure to increase to up to €1,700 million for the full year 2019.

Off balance sheet commitments

As at 30 June 2019, the Group had commitments from firm contracts for property, plant and equipment as well as from field development projects in the amount of €408 million. Furthermore, the Group is committed to a certain number of exploration wells and seismic in the context of concession agreements. The estimated expenditures related to these commitments amount to €132 million.

The Group has obligations from purchase agreements that resulted primarily from long-term purchase commitments for natural gas. The firm purchase commitments amounted to €4,453 million as of 30 June 2019 and have the following maturity:

- 2019: €530 million
- 2020: €1,017 million
- 2021: €1,040 million
- 2022: €1,031 million
- 2023: €830 million
- 2024 and beyond: €5 million

Provisions

In addition to the off-balance sheet contractual commitments described above, the Group had provisions in the consolidated balance sheet as of 30 June 2019 relating to pensions of €598 million, decommissioning provisions (non-current €2,480 million and current €52 million) and other provisions (non-current €208 million and current €403 million).

Provisions are set up for all legal or factual obligations to third parties as at the balance sheet date which are based on past events and will probably lead to an outflow of resources in the future and the extent of

which can be reliably estimated. Possible obligations to third parties or existing obligations where an outflow of resources is improbable or the extent thereof cannot be reliably determined, are not recognized as provisions. These are disclosed as contingent liabilities in the notes to the financial statements unless the possibility of an outflow of resources with economic benefits is remote. As at 30 June 2019, there were no contingent liabilities. Provisions are carried at their foreseeable settlement amount and not netted against any recovery claims. The settlement amount comprises cost increases to be taken into account as of the balance sheet date. In the case of non-current provisions, the amounts are discounted to the present value.

Provisions for pensions are recognized for defined benefit plans. This relates to commitments by the company to cover vested entitlements of employees in active service and current benefits to active and former employees or their dependents. These commitments relate in particular to old-age pension payments.

Decommissioning provisions cover the updated commitments for the plugging of wells, the de-installation of onshore and offshore production facilities and the reconditioning of operations and drilling sites. Their extent is based on the anticipated full costs, taking into account the empirical data and the cost benchmarks determined by the Association of German Crude Oil and Natural Gas Producers, with comparable assumptions available for foreign activities.

Other provisions comprise personnel provisions, environmental provisions, provisions for outstanding work programs and sundry provisions.

Financial Liabilities and Contractual Obligations

In connection with the Merger, all shareholder financing of both entities and Dea's external financing was refinanced with a syndicated credit facility agreement comprising a multicurrency bridge term loan, term loans and revolving credit facility from a banking consortium consisting of 16 banks. As of 30 June 2019, all available amounts under the bridge and term loans had been drawn and the revolving credit facility remains undrawn.

Syndicated Credit Facilities Agreement

On 1 March 2019, Wintershall entered into a senior unsecured syndicated credit facility agreement (the "Syndicated Credit Facilities Agreement") with 16 banks. The Syndicated Credit Facilities Agreement consists of four facilities, a €3,700 million bridge loan ("Facility A"), a three-year $1,050 million term loan ("Facility B"), a five-year $1,050 million term loan ("Facility C") and a €900 million revolving credit facility (the "Revolving Credit Facility"). Each facility can be drawn in Euros and U.S. dollars. The Group may use the proceeds from the Syndicated Credit Facilities Agreement for general corporate purposes, including repayment of existing financial indebtedness, financing Merger-related costs and/or potential distributions or returns of capital.

At the closing of the Merger, the Group drew down all available amounts under the Facilities A, B and C. The proceeds were used to fully repay BASF's shareholder financing in Wintershall and to refinance Dea's external finance debt, in particular Dea's reserves-based lending facility and Dea's €400 million high yield bond. Excess proceeds have been used for general corporate purposes of the Group and were partly paid to the shareholders as a return of capital.

The Group expects to use the proceeds of the Offering to pay down certain portions of Facility A.

Facility A

Facility A compromises a one year, €3,700 million bridge loan, with an option to extend Facility A twice for an additional six months. As at the date of this Offering Memorandum, €3,700 million was outstanding under Facility A. Net proceeds from the Offering will be used to repay amounts outstanding under Facility A. See "Use of Proceeds".

Each of the Joint Bookrunners acts as a Lender under Facility A under the Syndicated Credit Facilities Agreement and, consequently, will receive a portion of the proceeds of the Offering.

Facilities B and C

Facility B comprises a three-year term loan of $1,050 million and Facility C comprises a five-year term loan of $1,050 million. As at the date of this Offering Memorandum, $1,050 million was outstanding under Facility B, and $1,050 million was outstanding under Facility C.

Revolving Credit Facility

The Revolving Credit Facility comprises a five-year €900 million loan, with an option to deliver an extension request to the Lenders under the Syndicated Facilities Agreement to extend the original termination date for a period of up to two years. The Revolving Credit Facility back-ups the Group's liquidity needs and is intended to remain undrawn over its tenor. As at the date of this Offering Memorandum, the Revolving Credit Facility remains undrawn.

WIGA group financial liabilities

In May 2014, WIGA group entered into a credit facility agreement, amended in November 2017 (the "Credit Facility Agreement"), with 12 banks. Under the Credit Facility Agreement, WIGA Transport Beteiligungs-GmbH & Co. KG received €500 million, with W & G Transport Holding GmbH as Guarantor, while W & G Infrastruktur Finanzierungs-GmbH received €925 million. W & G Infrastruktur Finanzierungs-GmbH acted as the intermediate holding company for financing two fully regulated subsidiaries, GASCADE Gastransport GmbH and NEL Gastransport GmbH. Amounts under Credit Facility Agreement are due in May 2020 with a bullet repayment.

Cash Pooling Agreements

For optimal liquidity management, the Group has set up cash pooling agreements with most of its consolidated and some of its at-equity consolidated entities. Deposits into group cash pooling of at-equity consolidated entities are considered as payables towards affiliated entities. As at 30 June 2019 the amount pooled into the Group cash pooling amounted to €416 million of interest bearing financial liabilities towards related parties and €13 million interest bearing financial receivables towards related parties.

Exceptions to the standard cash management solutions are mainly in Russia where, due to corporate governance limitations, individual solutions are used. Cash is distributed to Wintershall Dea GmbH from the operating companies (or its shareholders' trading companies) in Russia via repayment of shareholder loans and/or periodic dividend distributions.

Qualitative and quantitative disclosures about market risk

Credit risk management

Credit risk is the risk that a counterparty will not meet its obligation under a financial instrument or customer contract, leading to financial loss. The Group is exposed to credit risk from its operating activities (primarily trade accounts receivable) and from its financing activities, including deposits with banks and financial institutions, favourable derivative financial instruments (positive fair value) and other financial receivables.

Credit risk is managed on a group basis. To manage credit risk, the Group has group-wide procedures in place covering the application for credit approvals, granting and renewal of counterparty limits, proactive monitoring of exposures against these limits and requirements triggering secured payment terms. As part of these processes, the credit exposures with all counterparties are regularly monitored and assessed on a timely basis. For banks and financial institutions, only independently rated parties with an investment grade rating are accepted.

A default event occurs if management has one or more reasons to believe that a customer will not repay his liability towards the Group, mainly due to financial difficulty of the customer. A delay of payments caused by regular business practices does not alone indicate a customer default. An assessment of the overall situation is required on a case-by-case basis. The maximum risk of default corresponds to the carrying amounts (less loss allowance) of the financial assets. For some trade accounts receivable the Group obtains security in the form of guarantees, deeds of undertaking or letters of credit which can be called upon if the counterparty is in default under the terms of agreement. Financial assets are written off when there is no reasonable expectation of recovery of contractual cash flows.

Liquidity risk management

The Group's liquidity risk management ensures that the required liquidity to meet financial obligations is available at all times and that the liquidity position of the Group is optimised. Centralised planning for the Group is the basis of the liquidity risk management. Planning for the respective currencies is effected on a monthly basis and for the short term on a daily basis.

The Group monitors its liquidity risk by reviewing its cash flow requirements on a regular basis taking into consideration its funding sources, existing bank facilities and cash flow generation from its producing asset base. The Group ensures that it has sufficient liquidity to meet its operational funding requirements and debt servicing over the medium-term.

Foreign currency risk management

Changes in exchange rates could lead to losses in the value of financial instruments and adverse changes in future cash flows. A significant portion of the Group's sales are denominated in U.S. dollars and euros and the Group incurs expenses related to exploration, production and development assets in other currencies, including the Russian rouble, Norwegian krone and Argentine peso. Exposures are monitored and managed on a daily basis. Currency risks are monitored on group and entity levels and managed accordingly. The Group's net foreign currency exposure (after natural hedges) is hedged actively with linear contracts where feasible to eliminate income statement effects of currency fluctuations.

Commodity price risk management

The Group is exposed to risks arising from movements in commodity prices. Derivatives and physical forward contracts are used to hedge portions of the Group's commodity price risks. Parameters of hedging contracts are strictly in line with the respective underlying exposure. The Group's hedging policy targets the management of market risks as to ensure appropriate liquidity and debt capacity levels. The Group's risk management committee meets regularly to discuss and to decide on policies to be applied to address such risks.

Critical accounting policies of the Group

Preparation of the consolidated financial statements on the basis of IFRS requires management to make estimates and assumptions that affect the amounts reported for assets, liabilities, income and expenses as well as disclosed contingent liabilities and fair values. The assumptions and estimates mainly concern the following areas:

Gas and oil reserves and resources

Oil and natural gas reserves and resources are applied to determine the recoverable amount in the framework of the impairment test as well as for the production-related depreciation and amortisation using the unit-of-production method. Reserves and resources are estimated by the Group's own qualified engineers and geoscientists applying standardised valuation methods and are classified in line with international industry standards. This process is subject to defined principles. Furthermore, the majority of these estimates is audited by an independent consultant on an annual basis.

Impairment tests

Key assumptions within impairment tests for intangible assets and property, plant and equipment relate to estimated reserves and resources, forecasts for market prices of crude oil and natural gas, production forecasts and discount rates.

Impairment on financial assets (excluding participations valued at equity)

The loss allowances for financial assets measured at amortised cost are based on assumptions about probability of default and expected credit losses. The inputs to the impairment calculation are based on the Group's past history, and existing market conditions, as well as forward looking estimates.

Derivative financial instruments

In accounting for derivative financial instruments, assumptions have to be made as to whether the principles of hedge accounting apply. In addition, for certain contracts a decision is required as to whether they are to be recognized as derivatives or treated as pending transactions according to the own-use exemption.

Provisions

Decommissioning provisions mainly require estimates and assumptions with regard to terms, exchange rates, costs to be considered and discount rates. Future actual cash outflows can differ, owing to changes in relation to these items.

With regard to pension provisions, the discount rate is one of the very important estimators. The discount factor for pension obligations is determined on the basis of yields on high quality, fixed-rate corporate bonds on the financial markets as of the balance sheet date.

Lease agreements

When determining right of use assets and corresponding lease liabilities, heed assumptions regarding the exercise of extension or termination options as well as discount rates have to be made.

All assumptions and estimates are based on conditions and evaluations made as at the date of commencement of the lease agreement. In addition, with regard to expected future business trends, the future development (considered realistic at the current time) of the economic environment in the industries and the regions in which Wintershall Dea operates is taken into account. If the actual trend deviates from the assumed development of conditions, then the assumptions and, if necessary, the carrying amounts of the assets and liabilities concerned will be adjusted accordingly.

For more information on the Group's accounting policies that require the subjective judgement of its management in making assumptions or estimates regarding the effects of matters that are inherently uncertain and for which changes in conditions may significantly affect its results of operations and financial condition, see the notes to the consolidated financial statements of Wintershall and Dea included elsewhere in this Offering Memorandum.

UNAUDITED PRO FORMA FINANCIAL INFORMATION OF THE GROUP

1 Introduction

Effective 1 May 2019, BASF SE ("BASF") and LetterOne Holdings S.A. ("LetterOne") completed the merger of Wintershall Dea GmbH (the "Company", and together with its consolidated subsidiaries, "Wintershall Dea" or the "Group") (formerly: Wintershall Holding GmbH) and Wintershall Dea Deutschland AG ("Dea") (formerly: DEA Deutsche Erdoel AG) contemplated by the Business Combination Agreement, dated as of 27 September 2018, by and among BASF, BASF Handels- und Exportgesellschaft mbH ("BHE"), LetterOne, L1E Acquisitions GmbH ("L1E Acquisitions") and Wintershall Dea GmbH. BASF and BHE jointly held all shares in Wintershall Dea GmbH. L1E Acquisitions, an indirect 100% subsidiary of LetterOne, held all shares in Wintershall Dea Deutschland AG.

LetterOne has contributed its Wintershall Dea Deutschland AG shares in Wintershall Dea GmbH in exchange for the issuance of new shares by the Company. Furthermore, Wintershall Dea GmbH took over a loan liability ("On-demand loan") from L1E Acquisitions towards Wintershall Dea Deutschland AG of EUR 1.7 billion as of 30 April 2019. After the transaction, BASF holds 67% and LetterOne holds 33% of the Ordinary Shares with voting rights in Wintershall Dea GmbH. In addition, BASF holds 5.7% in Preference Shares in the Company. These Preference Shares will be converted into ordinary shares at the earlier of an IPO of the Company or 36 months after closing the transaction. After the conversion of the Preference Shares into Ordinary Shares, BASF will hold 72.7% of the ordinary shares in the company, whereas LetterOne will hold 27.3% of the ordinary shares.

The merger is hereinafter considered as the "Transaction". In accordance with IFRS 3 Business Combinations, Wintershall Dea GmbH was determined to be the acquirer in the Transaction. As consideration for the contribution of all shares in Wintershall Dea Deutschland AG, equity interests of Wintershall Dea GmbH have been issued to LetterOne. The fair value is based on the equity value of Wintershall Dea Deutschland AG and its subsidiaries as of 1 May 2019.

The Transaction had a significant impact on the net assets, financial position and results of operations of the Company and will substantially affect the results of operations going forward. Therefore, the Company prepared the following Pro Forma Financial Information, consisting of a pro forma statement of profit or loss for the fiscal year ended 31 December 2018 and a pro forma statement of profit or loss for the short fiscal year ended 30 April 2019 and the related pro forma notes thereto (together, the "Pro Forma Financial Information").

The purpose of the Pro Forma Financial Information is to show the material effects that the Transaction would have had on the historical consolidated financial statements for the fiscal year ended 31 December 2018 and the short fiscal year ended 30 April 2019 if the Transaction had occurred on 1 January 2018.

As such, the Pro Forma Financial Information is based on various pro forma assumptions described in the accompanying pro forma notes, which Wintershall Dea considers reasonable, and is prepared for illustrative purposes only. The Pro Forma Financial Information assumes in particular, that the Transaction and the Transaction-related Financing occurred on 1 January 2018 and that any associated non-recurring transaction costs were incurred prior to 1 January 2018.

Therefore, the Pro Forma Financial Information describes only a hypothetical situation and, due to its nature, does not reflect the actual results of operations of the Group if the Transaction had occurred on 1 January 2018 nor does it indicate the future development of the net assets, financial position and results of operations of Wintershall Dea after the Transaction. In particular, the Pro Forma Financial Information does not reflect any future effects including, but not limited to, anticipated synergies, operating efficiencies, cost savings, or any restructuring or other implementation or integration measures associated with the Transaction.

The Pro Forma Financial Information has to be read in conjunction with the historical consolidated financial statements of Wintershall Dea GmbH for the year ended 31 December 2018, the historical consolidated financial statements of Wintershall Dea GmbH for the short fiscal year ended 30 April 2019, the historical consolidated financial statements of Wintershall Dea Deutschland AG for the year ended 31 December 2018 and the historical consolidated financial statements of Wintershall Dea Deutschland AG for the short fiscal year ended 30 April 2019.

The Pro Forma Financial Information is presented in euros. Unless otherwise stated, all figures have been rounded to the nearest EUR million ("€m"). There may be rounding differences to the exact mathematical

values in tables and references. These rounded figures may not add up exactly to the totals contained in the tables presented in this Pro Forma Financial Information. The historical financial information for Wintershall Dea GmbH is presented in EUR thousand ("€k") in the audited consolidated financial statements of Wintershall Dea GmbH for the year ended 31 December 2018 as well as the short fiscal year ended 30 April 2019. For the purpose of reclassifying the Wintershall Dea GmbH consolidated income statement to the Wintershall Dea income statement reporting structure the historical financial information is presented in €m. Financial information presented in parentheses denotes the negative of such number presented. A zero ("0") means that the relevant figure is available but has been rounded to or equals zero.

2 Historical financial information included in the Pro Forma Financial Information

2.1 Historical financial information used

The Pro Forma Financial Information was prepared on the basis of the following historical financial information:

- Audited consolidated financial statements of Wintershall Dea GmbH for the fiscal year ended 31 December 2018, prepared in accordance with International Financial Reporting Standards, as adopted by the EU ("IFRS"), as included elsewhere in this prospectus, and
- Audited consolidated financial statements of Wintershall Dea Deutschland AG for the fiscal year ended 31 December 2018, prepared in accordance with IFRS, as adopted by the EU ("IFRS"), as included elsewhere in this prospectus, and
- Audited consolidated financial statements of Wintershall Dea GmbH for the short fiscal year ended 30 April 2019, prepared in accordance with IFRS, as adopted by the EU ("IFRS"), as included elsewhere in this prospectus, and
- Audited consolidated financial statements of Wintershall Dea Deutschland AG for the short fiscal year ended 30 April 2019, prepared in accordance with IFRS, as adopted by the EU ("IFRS"), as included elsewhere in this prospectus.

The underlying figures presented in the Pro Forma Financial Information have been prepared in accordance with IFRS, as adopted by the EU ("IFRS"), and the consistent application of the presentation, recognition and measurement policies of the Group, which are described in the notes to the unaudited condensed consolidated interim financial statements of Wintershall Dea for the two months period ended 30 June 2019.

2.2 Adjustments to Wintershall Dea GmbH's and Wintershall Dea Deutschland AG's historical financial information to align presentation and accounting policies

2.2.1 Alignment methodology

In order to ensure uniform presentation and accounting principles in the Pro Forma Financial Information, Wintershall Dea GmbH's as well as Wintershall Dea Deutschland AG's historical financial information, comprising the audited consolidated financial statements of Wintershall Dea GmbH and Wintershall Dea Deutschland AG for the year ended 31 December 2018 as well as for the short fiscal year ended 30 April 2019, has been adjusted to align with the presentation and accounting policies as applied by Wintershall Dea in its condensed consolidated interim financial statements for the two months period ended 30 June 2019.

Procedures performed by Wintershall Dea GmbH and Wintershall Dea Deutschland AG to align presentation and accounting policies involved an analysis of the accounting guidelines of Wintershall Dea GmbH and Wintershall Dea Deutschland AG. It was determined which positions were treated differently prior to the merger. Afterwards it was defined how those positions should be accounted for after the merger of Wintershall Dea. The analysis showed that the only difference in the accounting policies between Wintershall Dea GmbH and Wintershall Dea Deutschland AG outside of the presentation format relates to the valuation of overlift positions for Wintershall Dea Deutschland AG. This was adjusted in the course of the preliminary purchase price allocation.

For the alignment of the presentation principles, Wintershall Dea GmbH and Wintershall Dea Deutschland AG reclassified line items or amounts assigned to these line items, in Wintershall Dea GmbH's and Wintershall Dea Deutschland AG's historical financial information to appropriate line

items in Wintershall Dea's condensed consolidated interim financial statements for the two months period ended 30 June 2019.

2.2.2 Alignment of Wintershall Dea GmbH's Consolidated Income Statement for the year ended 31 December 2018 to Wintershall Dea accounting

The following table summarizes the presentation adjustments to the consolidated income statement of Wintershall Dea GmbH for the year ended 31 December 2018. The columns of the table illustrate the income statement line item presentation of Wintershall Dea GmbH, the rows show the income statement line item presentation of Wintershall Dea.

Alignment of Wintershall Dea GmbH's Consolidated Income Statement structure for the year ended 31 December 2

	Wintershall Dea GmbH Consolidated Income Statement for the year ended 31 December 2													
	Net revenue	**Cost of conversion and purchase costs of the services rendered to generate the revenue**	**Distribution costs**	**General administrative expenses**	**Research costs**	**Exploration costs**	**Other operating income**	**Other operating expenses**	**Equity result**	**Income from other participating interests**	**Expenses from other participating interests**	**Interest income**	**Interest expenses**	**Miscella financ incon**
										(millions €)				
Wintershall Dea Income Statement Reporting Structure for the year ended 31 December 2018														
Total	**4,707**	**(2,911)**	**(94)**	**(68)**	**(26)**	**(112)**	**118**	**(450)**	**128**	**4**	**(0)**	**72**	**(68)**	**251**
Sales revenues gas and oil	4,120	(15)						(27)						
Sales revenues gas transport/midstream	237													
Sales revenues other	350													
Net income from equity-accounted investments: gas and oil									25					
Net income from equity-accounted investments: gas transport/midstream									104					
Other operating income							62	(10)						
Production and operating expenses		(1,819)	(87)		(20)		39	(27)					(14)	
Production and similar taxes		(128)												
Depreciation and amortisation		(840)	(0)	(1)	(0)	(1)		(8)						
Net impairments on assets								(184)						
Cost of sales gas transport/ midstream		(54)												
Exploration expenses						(111)								
General and administration expenses		(54)	(7)	(67)	(6)		10	(71)						
Result from operating activities	4,707	(2,911)	(94)	(68)	(26)	(112)	111	(327)	128				(14)	
Financial income							(0)	0		4		72		3
Financial expenses							7	(123)			(0)		(54)	248
Financial result							7	(123)		4	(0)	72	(54)	251
Result before taxes	4,707	(2,911)	(94)	(68)	(26)	(112)	118	(450)	128	4	(0)	72	(68)	251
Income taxes														
Net result	4,707	(2,911)	(94)	(68)	(26)	(112)	118	(450)	128	4	(0)	72	(68)	251
Net result attributable to shareholders	4,707	(2,911)	(94)	(68)	(26)	(112)	118	(450)	128	4	(0)	72	(68)	251
Net result attributable to non-controlling interests														

The following table summarizes the reclassification adjustments included in the matrix above to the consolidated income statement of Wintershall Dea GmbH for the fiscal year ended 31 December 2018 in order to align with Wintershall Dea accounting policies.

Alignment of Wintershall Dea GmbH's Consolidated Income Statement for the year ended 31 December 2018 to Wintershall Dea accounting policies

	Year ended 31 December 2018	
	Total aligned Wintershall Dea GmbH	Note
	(millions €)	
Sales revenues gas and oil	4,078	(a), (i), (o)
Sales revenues gas transport/midstream	237	(a)
Sales revenues other	350	(a)
Net income from equity-accounted investments: gas and oil	25	(b)
Net income from equity-accounted investments: gas transport/ midstream	104	(b)
Other operating income	52	(n), (o), (p)
Production and operating expenses	(1,928)	(f), (i), (j), (l), (n), (o)
Production and similar taxes	(128)	(i)
Depreciation and amortisation	(850)	(i), (j), (k), (l), (m), (o)
Net Impairments on assets	(184)	(o)
Cost of sales gas transport/midstream	(54)	(i)
Exploration expenses	(111)	(m)
General and administration expenses	(195)	(i), (j), (k), (l), (n), (o)
Result from operating activities	1,396	
Financial income	78	(c), (e), (g), (p), (q)
Financial expenses	(227)	(d), (f), (g), (h), (n), (o), (q)
Financial result	(149)	
Result before taxes	1,247	
Income taxes	(577)	
Net result	671	
Net result attributable to shareholders	616	
Net result attributable to non-controlling interests	55	

The following reclassification adjustments have been made to Wintershall Dea GmbH's consolidated income statement for the year ended 31 December 2018, in order to align with uniform IFRS presentation principles as applied by Wintershall Dea:

Reclassification I: more detailed split of presented line items

(a) Reclassification from "Net revenue" to "Sales revenues gas and oil" €4,120 million, "Sales revenues gas transport / midstream" €237 million and "Sales revenue other" €350 million.

(b) Reclassification from "Equity-result" to "Net income from equity-accounted investments: gas and oil" €25 million and "Net income from equity-accounted investments: gas transport / midstream" €104 million.

Reclassification II: less detailed split of presented line items

(c) Reclassification from "Income from other participating interests" to "Financial income" €4 million.

(d) Reclassification from "Expenses from other participating interests" to "Financial expenses" €0 million.

(e) Reclassification from "Interest income" to "Financial income" €72 million.

(f) Reclassification from "Interest expenses" to "Production and operating expenses" €14 million and "Financial expenses" €54 million.

(g) Reclassification from "Miscellaneous financial income" to "Financial income" €3 million and "Financial expenses" €(248) million.

(h) Reclassification from "Miscellaneous financial expenses" to "Financial expenses" €305 million.

Reclassification III: allocation of a former line item into individual functional areas

(i) Reclassification from "Cost of conversion and purchase costs of the services rendered to generate the revenue" to "Sales revenues gas and oil" €15 million, "Production and operating expenses" €1,819 million, "Production and similar taxes" €128 million, "Depreciation and amortisation" €840 million, "Cost of sales gas transport / midstream" €54 million and "General and administration expenses" €54 million.

(j) Reclassification from "Distribution costs" to "Production and operating expenses" €87 million, "Depreciation and amortisation" €0 million and "General and administration expenses" €7 million.

(k) Reclassification from "General administrative expenses" to "Depreciation and amortisation" €1 million and "General and administration expenses" €67 million.

(l) Reclassification from "Research costs" to "Production and operating expenses" €20 million, "Depreciation and amortisation" €0 million and "General and administration expenses" €6 million.

(m) Reclassification from "Exploration costs" to "Depreciation and amortisation" €1 million and "Exploration expenses" €111 million.

(n) Reclassification from "Other operating income" to "Other operating income" €62 million, "Production and operating expenses" €39 million, "General and administration expenses" €10 million and "Financial expenses" €7 million.

(o) Reclassification from "Other operating expenses" to "Sales revenues gas and oil" €27 million, "Other operating income" €10 million, "Production and operating expenses" €27 million, "Depreciation and amortisation" €8 million, "Net impairments of assets" €184 million, "General and administration expenses" €71 million and "Financial expenses" €3 million.

Reclassification IV: change in exercise of presentation options

(p) Reclassification from "Other operating income" to "Financial income" €0 million as gains from foreign currency transactions are presented in the Financial result instead of Operating result at Wintershall Dea.

(q) Reclassification from "Other operating expenses" to "Financial expenses" €121 million and "Financial income" €0 million as gains and losses from foreign currency transaction and net impairment of financial receivables are presented in the Financial result instead of Operating result at Wintershall Dea.

2.2.4 Alignment of Wintershall Dea Deutschland AG's Consolidated Income Statement for the year ended 31 December 2018 to Wintershall Dea accounting policies

The following table summarizes the presentation adjustments to the consolidated income statement of Wintershall Dea Deutschland AG for the year ended 31 December 2018. The columns of the table illustrate the income statement line item presentation of Wintershall Dea Deutschland AG, the rows show the income statement line item presentation of Wintershall Dea.

Alignment of Wintershall Dea Deutschland AG's Consolidated Income Statement structure for the year ended 31 structure

	Wintershall Dea Deutschland AG Consolidated Income Statement for the yea								
	Sales and other operating revenues	**Cost of sales**	**Exploration costs**	**General and administration expenses**	**Net impairment of assets**	**Net impairment of operative receivables**	**Financial income**	**Financial expenses**	**Net impairment of financial receivables**
							(millions €)		
Wintershall Dea Income Statement Reporting Structure for the year ended 31 December 2018									
Total	**1,892**	**(759)**	**(111)**	**(125)**	**(168)**	**1**	**109**	**(89)**	**9**
Sales revenues gas and oil	1,589								
Sales revenues gas transport/midstream									
Sales revenues other	15								
Net income from equity-accounted investments: gas and oil									
Net income from equity-accounted investments: gas transport/midstream									
Other operating income	289								
Production and operating expenses		(345)				1			
Production and similar taxes		(99)							
Depreciation and amortisation		(314)	(0)	(4)					
Net impairments on assets					(168)				
Cost of sales gas transport/midstream									
Exploration expenses			(110)						
General and administration expenses				(121)					
Result from operating activities	1,892	(758)	(110)	(125)	(168)	1			
Financial income		(0)	(2)				109		
Financial expenses								(89)	9
Financial result		(0)	(2)				109	(89)	9
Result before taxes	1,892	(759)	(111)	(125)	(168)	1	109	(89)	9
Income taxes									
Net result	1,892	(759)	(111)	(125)	(168)	1	109	(89)	9
Net result attributable to shareholders	1,892	(759)	(111)	(125)	(168)	1	109	(89)	9
Net result attributable to non-controlling interests									

The following table summarizes the reclassification adjustments included in the matrix above to the consolidated income statement of Wintershall Dea Deutschland AG for the year ended 31 December 2018 in order to align with Wintershall Dea accounting policies.

Alignment of Wintershall Dea Deutschland AG's Consolidated Income Statement for the year ended 31 December 2018 to Wintershall Dea accounting policies

	Year ended 31 December 2018	
	Total aligned Wintershall Deutschland AG	Note
	(millions €)	
Sales revenues gas and oil	1,589	(a)
Sales revenues gas transport/midstream		
Sales revenues other	15	(a)
Net income from equity-accounted investments: gas and oil		
Net income from equity-accounted investments: gas transport/midstream		
Other operating income	289	(a)
Production and operating expenses	(344)	(b), (d)
Production and similar taxes	(99)	(d)
Depreciation and amortisation	(318)	(d), (e), (f)
Net Impairments on assets	(168)	
Cost of sales gas transport/midstream		
Exploration expenses	(110)	(f)
General and administration expenses	(121)	(e)
Result from operating activities	732	
Financial income	107	(g)
Financial expenses	(81)	(c)
Financial result	27	
Result before taxes	759	
Income taxes	(478)	
Net result	281	
Net result attributable to Shareholders	278	
Net result attributable to non-controlling interests	4	

The following reclassification adjustments have been made to Wintershall Dea Deutschland AG's consolidated income statement for the year ended 31 December 2018, in order to align with uniform IFRS presentation principles as applied by Wintershall Dea:

Reclassification I: more detailed split of presented line items

(a) Reclassification from "Sales and other operating revenues" to "Sales revenues gas and oil" €1,589 million, "Sales revenues other" €15 million and "Other operating income" €289 million.

Reclassification II: less detailed split of presented line items

(b) Reclassification from "Net impairment of operative receivables" to "Production and operating expenses" €1 million.

(c) Reclassification from "Net impairment of financial receivables" to "Financial expenses" €9 million.

Reclassification III: allocation of a former line item into individual functional areas

(d) Reclassification from "Cost of sales" to "Production and operating expenses" €345 million, "Production and similar taxes" €99 million and "Depreciation and amortisation" €314 million.

(e) Reclassification from "General and administration expenses" to "Depreciation and amortisation" €4 million and "General and administration expenses" €121 million.

(f) Reclassification from "Exploration costs" to "Exploration expenses" €110 million and "depreciation and amortisation" €0 million.

Reclassification IV: change in exercise of presentation options

(g) Reclassification from "Cost of sales" €0 million and "Exploration costs" €2 million to "Financial income" as net foreign currency gains and losses for provisions are presented in the Financial result instead of Operating result at Wintershall Dea.

2.2.5 Alignment of Wintershall Dea GmbH's Consolidated Income Statement for the short fiscal year ended 30 April 2019 to Wintershall Dea accounting policies

The following table summarizes the presentation adjustments to the consolidated income statement of Wintershall Dea GmbH for the short fiscal year ended 30 April 2019. The columns of the table illustrate the income statement line item presentation of Wintershall Dea GmbH, the rows show the income statement line item presentation of Wintershall Dea.

Alignment of Wintershall Dea GmbH's Consolidated Income Statement structure for the short fiscal year ended 30 Apr

	Wintershall Dea GmbH Consolidated Income Statement for the short fiscal year ended 30 Apr													
	Net revenue	Cost of conversion and purchase costs of the services rendered to generate the revenue	Distribution costs	General administrative expenses	Research costs	Exploration costs	Other operating income	Other operating expenses	Equity result	Income from other participating interests	Expenses from other participating interests	Interest income	Interest expenses	Miscella financ incon
								(millions €)						
Wintershall Dea Income Statement Reporting Structure for the short fiscal year ended 30 April 2019														
Total	**1,531**	**(972)**	**(60)**	**(36)**	**(8)**	**(75)**	**48**	**(1,441)**	**61**			**36**	**(25)**	**132**
Sales revenues gas and oil	1,278	(5)					4							
Sales revenues gas transport/midstream	73													
Sales revenues other	180													
Net income from equity-accounted investments: gas and oil									17					
Net income from equity-accounted investments: gas transport/midstream									44					
Other operating income							11	(2)						
Production and operating expenses		(604)	(56)		(5)		25	(11)					(5)	
Production and similar taxes		(36)												
Depreciation and amortisation		(292)	(0)	(1)	(0)	(0)	0	(2)						
Net Impairments on assets								(1,206)						
Cost of sales gas transport/ midstream		(10)												
Exploration expenses						(75)		(1)						
General and administration expenses		(25)	(3)	(36)	(2)		3	(214)						
Result from operating activities	1,531	(972)	(60)	(36)	(8)	(75)	44	(1,436)	61				(5)	
Financial income							(2)	2				36		2
Financial expenses							6	(7)					(21)	130
Financial result							4	(5)				36	(21)	132
Result before taxes	1,531	(972)	(60)	(36)	(8)	(75)	48	(1,441)	61			36	(25)	132
Income taxes														
Net result	1,531	(972)	(60)	(36)	(8)	(75)	48	(1,441)	61			36	(25)	132
Net result attributable to shareholders	1,531	(972)	(60)	(36)	(8)	(75)	48	(1,441)	61			36	(25)	132
Net result attributable to non-controlling interests														

The following table summarizes the reclassification adjustments included in the matrix above to the consolidated income statement of Wintershall Dea GmbH for the short fiscal year ended 30 April 2019 in order to align with Wintershall Dea accounting policies.

Alignment of Wintershall Dea GmbH's Consolidated Income Statement for the short fiscal year ended 30 April 2019 to Wintershall Dea accounting policies

	Short fiscal year ended 30 April 2019	
	Total aligned Wintershall Dea GmbH	Note
	(millions €)	
Sales revenues gas and oil	1,276	(a), (g), (l)
Sales revenues gas transport/midstream	73	(a)
Sales revenues other	180	(a)
Net income from equity-accounted investments: gas and oil	17	(b)
Net income from equity-accounted investments: gas transport/midstream	44	(b)
Other operating income	9	(l), (m), (n)
Production and operating expenses	(655)	(d), (g), (h), (j), (l), (m)
Production and similar taxes	(36)	(g)
Depreciation and amortisation	(295)	(g), (h), (i), (j), (k), (l), (m)
Net Impairments on assets	(1,206)	(m)
Cost of sales gas transport/midstream	(10)	(g)
Exploration expenses	(76)	(k), (m)
General and administration expenses	(277)	(g), (h), (i), (j), (l), (m)
Result from operating activities	(955)	
Financial income	38	(c), (e), (n), (o)
Financial expenses	(42)	(d), (e), (f), (l), (o)
Financial result	(4)	
Result before taxes	(959)	
Income taxes	108	
Net result	(851)	
Net result attributable to Shareholders	(869)	
Net result attributable to non-controlling interests	18	

The following reclassification adjustments have been made to Wintershall Dea GmbH's consolidated income statement for the short fiscal year ended 30 April 2019, in order to align with uniform IFRS presentation principles as applied by Wintershall Dea:

Reclassification I: more detailed split of presented line items

(a) Reclassification from "Net revenue" to "Sales revenues gas and oil" €1,278 million, "Sales revenues gas transport / midstream" €73 million and "Sales revenue other" €180 million.

(b) Reclassification from "Equity-result" to "Net income from equity-accounted investments: gas and oil" €17 million and to "Net income from equity-accounted investments: gas transport / midstream" €44 million.

Reclassification II: less detailed split of presented line items

(c) Reclassification from "Interest income" to "Financial income" €36 million.

(d) Reclassification from "Interest expenses" to "Production and operating expenses" €5 million and "Financial expenses" €21 million.

(e) Reclassification from "Miscellaneous financial income" to "Financial expenses" €130 million and "Financial income" €2 million.

(f) Reclassification from "Miscellaneous financial expenses" to "Financial expenses" €151 million.

Reclassification III: allocation of a former line item into individual functional areas

(g) Reclassification from "Cost of conversion and purchase costs of the services rendered to generate the revenue" to "Sales revenues gas and oil" €5 million, "Production and operating expenses" €604 million, "Production and similar taxes" €36 million, "Depreciation and amortisation" €292 million, "Cost of sales gas transport / midstream" €10 million and "General and administration expenses" €25 million.

(h) Reclassification from "Distribution costs" to "Production and operating expenses" €56 million, "Depreciation and amortisation" €0 million and "General and administration expenses" €3 million.

(i) Reclassification from "General administrative expenses" to "Depreciation and amortisation" €1 million and "General and administration expenses" €36 million.

(j) Reclassification from "Research costs" to "Production and operating expenses" €5 million, "Depreciation and amortisation" €0 million and "General and administration expenses" €2 million.

(k) Reclassification from "Exploration costs" to "Depreciation and amortisation" €0 million and "Exploration expenses" €75 million.

(l) Reclassification from "Other operating income" to "Sales revenues gas and oil" €4 million, "Other operating income" €11 million, "Production and operating expenses" €25 million, "Depreciation and amortisation" €0 million, "General and administration expenses" €3 million and "Financial Expenses" €6 million.

(m) Reclassification from "Other operating expenses" to "Other operating income" €2 million, "Production and operating expenses" €11 million, "Depreciation and amortisation" €2 million, "Net impairments on assets" €1,206 million, "Exploration expenses" €1 million and "General and administration expenses" €214 million.

Reclassification IV: change in exercise of presentation options

(n) Reclassification from "Other operating income" to "Financial income" €2 million as gains from foreign currency transactions are presented in the Financial result instead of Operating result at Wintershall Dea.

(o) Reclassification from "Other operating expenses" to "Financial expenses" €7 million and "Financial income" €2 million as gains and losses from foreign currency transactions and net impairment of financial receivables are presented in the Financial result instead of Operating result at Wintershall Dea.

2.2.6 Alignment of Wintershall Dea Deutschland AG's Consolidated Income Statement for the short fiscal year ended 30 April 2019 to Wintershall Dea accounting policies

The following table summarizes the presentation adjustments to the consolidated income statement of Wintershall Dea Deutschland AG for the short fiscal year ended 30 April 2019. The columns of the table illustrate the income statement line item presentation of Wintershall Dea Deutschland AG, the rows show the income statement line item presentation of Wintershall Dea.

Alignment of Wintershall Dea Deutschland AG's Consolidated Income Statement structure for the short fiscal year end structure

	Wintershall Dea Deutschland AG Consolidated Income Statement for the short								
	Sales and other operating revenues	**Cost of sales**	**Exploration costs**	**General and administration expenses**	**Net impairment of assets**	**Net impairment of operative receivables**	**Financial income**	**Financial expenses**	**Net impairment of financial receivables**
							(millions €)		
Wintershall Dea Income Statement Reporting Structure for the short fiscal year ended 30 April 2019									
Total	**458**	**(304)**	**12**	**(213)**	**(75)**	**(4)**	**22**	**(33)**	**8**
Sales revenues gas and oil	455								
Sales revenues gas transport/midstream									
Sales revenues other	2								
Net income from equity-accounted investments: gas and oil									
Net income from equity-accounted investments: gas transport/midstream									
Other operating income	0								
Production and operating expenses		(138)				(4)			
Production and similar taxes		(31)							
Depreciation and amortisation		(135)	(0)	(2)					
Net impairments on assets					(75)				
Cost of sales gas transport/midstream									
Exploration expenses			13						
General and administration expenses				(211)					
Result from operating activities	458	(304)	13	(213)	(75)	(4)			
Financial income		(0)	(1)				22		
Financial expenses								(33)	8
Financial result		(0)	(1)				22	(33)	8
Result before taxes	458	(304)	12	(213)	(75)	(4)	22	(33)	8
Income taxes									
Net result	458	(304)	12	(123)	(75)	(4)	22	(33)	8
Net result attributable to shareholders	458	(304)	12	(213)	(75)	(4)	22	(33)	8
Net result attributable to non-controlling interests									

The following table summarizes the reclassification adjustments included in the matrix above to the consolidated income statement of Wintershall Dea Deutschland AG for the short fiscal year ended 30 April 2019 in order to align with Wintershall Dea accounting policies.

Alignment of Wintershall Dea Deutschland AG's Consolidated Income Statement for the short fiscal year ended 30 April 2019 to Wintershall Dea accounting policies

	Short fiscal year ended 30 April 2019	
	Total aligned Wintershall Dea Deutschland AG	Note
	(millions €)	
Sales revenues gas and oil	455	(a)
Sales revenues gas transport/midstream		
Sales revenues other	2	(a)
Net income from equity-accounted investments: gas and oil		
Net income from equity-accounted investments: gas transport/midstream		
Other operating income	0	(a)
Production and operating expenses	(142)	(b), (d)
Production and similar taxes	(31)	(d)
Depreciation and amortisation	(136)	(d), (e), (f)
Net impairments on assets	(75)	
Cost of sales gas transport/midstream		
Exploration expenses	13	(f)
General and administration expenses	(211)	(e)
Result from operating activities	(125)	
Financial income	21	(g)
Financial expenses	(25)	(c)
Financial result	(3)	
Result before taxes	(129)	
Income taxes	(8)	
Net result	(137)	
Net result attributable to shareholders	(137)	
Net result attributable to non-controlling interests		

The following reclassification adjustments have been made to Wintershall Dea Deutschland AG's consolidated income statement for the short fiscal year ended 30 April 2019, in order to align with uniform IFRS presentation principles as applied by Wintershall Dea:

Reclassification I: more detailed split of presented line items

(a) Reclassification from "Sales and other operating revenues" to "Sales revenues gas and oil" €455 million, "Sales revenues other" €2 million and "Other operating income" €0 million.

Reclassification II: less detailed split of presented line items

(b) Reclassification from "Net impairment of operative receivables" to "Production and operating expenses" €4 million.

(c) Reclassification from "Net impairment of financial receivables" to "Financial expenses" €8 million.

Reclassification III: allocation of a former line item into individual functional areas

(d) Reclassification from "Cost of sales" to "Production and operating expenses" €138 million, "Production and similar taxes" €31 million and "Depreciation and amortisation" €135 million.

(e) Reclassification from "General and administration expenses" to "Depreciation and amortisation" €2 million and "General and administration expenses" €211 million.

(f) Reclassification from "Exploration costs" to "Exploration expenses" €13 million and "Depreciation and amortisation" of €0 million.

Reclassification IV: change in exercise of presentation options

(g) Reclassification from "Cost of sales" €0 million and "Exploration costs" €1 million to "Financial income" as net foreign currency gains and losses for provisions are presented in the financial result instead of operating result at Wintershall Dea.

3 Basis of Preparation

3.1 Preparation principles

The Pro Forma Financial Information has been prepared consistent in all material aspects with the accounting policies of Wintershall Dea, the pro forma assumptions, pro forma adjustments as described in this section and the presentation and accounting alignments required for the historical financial statements of Wintershall Dea GmbH and Wintershall Dea Deutschland AG as described in section 2.

The Pro Forma Financial Information should be read in conjunction with the audited consolidated financial statements of Wintershall and Dea and the unaudited condensed consolidated interim financial statements of the Group, in each case with the notes thereto.

The pro forma adjustments made for the purposes of the Pro Forma Financial Information are based on the information available at the time of the preparation of the Pro Forma Financial Information and on certain pro forma assumptions, which are directly attributable to the Transaction, factually supportable and described in the accompanying pro forma notes and which Wintershall Dea considers to be reasonable. The Pro Forma Financial Information contains neither potential synergies, cost savings, normalization of any restructuring nor additional future expenses that could result from the Acquisition.

3.2 Pro forma assumptions

Date of acquisition

The Pro Forma Financial Information was prepared based on the assumption that the Transaction occurred as of 1 January 2018 and Wintershall Dea subsequently consolidated Wintershall Dea Deutschland AG Group beginning on 1 January 2018:

Syndicated Credit Facilities Agreement

In the context of the merger with Wintershall Dea Deutschland AG, Wintershall Dea GmbH entered on 1 March 2019 into a senior unsecured syndicated credit facility agreement (the "Syndicated Credit Facilities Agreement", "SFA") with 16 banks. The Syndicated Credit Facilities Agreement consists of four facilities, a €3,700 million bridge loan ("Facility A"), a three-year $1,050 million term loan ("Facility B"), a five-year $1,050 million term loan ("Facility C") and a €900 million revolving credit facility. The first tranche was drawn as of April 30, 2019 with an amount of €2,248 million. The second tranche was drawn as of May 2, 2019 with an amount of €3,337 million. As of June 30, 2019, the utilized amount equivalents to €5,540 million.

The financing takes into account the target rating of Wintershall Dea, at least BBB or equivalent, and is structured with corresponding market conditions. The floating interest rate was 6-month LIBOR plus a margin and a supplement of 0.1% for the USD facilities and 6-month-EURIBOR (0%-floor) plus a margin for the EUR facilities. For the conversion of the USD-facility, the exchange rate from the historical financial statements of the acquirer of the respective periods has been used.

The pro forma adjustments in respect of the SFA are based on the following assumptions:

- For purposes of the pro forma income statements, it is assumed that the SFA was drawn on 1 January 2018.
- The interest expenses due to the SFA are presented in the pro forma income statements for the year ended 31 December 2018, and for the short fiscal year ended 30 April 2019, i.e., for a total period of sixteen months. Based on this duration and certain other assumptions, which Wintershall Dea considers to be reasonable, Wintershall Dea has calculated a weighted average interest rate of approximately 1.1% per 6 months for first half 2018 ended 30 June 2018. For the second half 2018 ended 31 December 2018, Wintershall Dea has calculated a weighted average interest rate of approximately 1.4% per 6 months and a weighted average interest rate of approximately 1.5% per 6 months for the short fiscal year ended 30 April 2019. The respective financial expenses, which are

included in the pro forma income statements, have been calculated retrospectively based on these interest rates.

- One-time fees and arrangement fees relating to the SFA in a total amount of EUR 16 million have been amortised on a monthly basis based on the individual duration of the facilities. With regard to the fees of "Facility A", the amortisation period has been extrapolated for the year ended 31 December 2018, and for the short fiscal year ended 30 April 2019.

Shareholder Loan agreements

In the context of the merger, previous loan agreements with the shareholders were terminated, repaid or converted into equity. This relates to the following shareholder loans:

- Wintershall Dea GmbH: shareholder loans of Wintershall Dea GmbH and Wintershall Norge AS with BASF group ("BASF group financing")
- Wintershall Dea Deutschland AG: shareholder loans of Wintershall Dea Deutschland AG and DEA Norge AS towards LetterOne ("L1E group Financing")
- Wintershall Dea Deutschland AG: On-demand loan between Wintershall Dea Deutschland AG as lender and L1E Acquisitions GmbH as borrower. Previously, this loan was between Wintershall Dea Deutschland AG as lender and L1E Funding GmbH as borrower, the direct parent company of L1E Acquisitions GmbH
- Wintershall Dea Deutschland AG: loan between DEA Norge AS as borrower and DEA Finance SA (related party to Wintershall Dea Deutschland AG) as lender ("Proceeds loan")

The respective pro forma adjustments are based on the following assumption:

The historical results of the entities receiving shareholder loans include expenses for the repaid, terminated or converted shareholder loans. The historical results of the entity issuing an on-demand loan include interest income.

As the pro forma income statement has to be presented as if the merger would have occurred on 1 January 2018, neither financing expenses from the repaid, terminated or converted shareholder loans nor interest income from the issued on-demand loan prior to the transaction should be included in the pro forma income statement. Therefore, respective costs and income were eliminated in the pro forma income statement for the year ended 31 December 2018 as well as for the short fiscal year ended 30 April 2019.

External credit facility

In the context of the merger, previous loan agreements with banks were terminated and repaid. This relates to the following loan:

- Wintershall Dea Deutschland AG: Reserve based lending credit facility ("RBL") with Wintershall Dea Deutschland AG and DEA Norge AS as borrower.

The pro forma adjustments in respect of the repayment of the RBL are based on the following assumptions:

- The historical results of Wintershall Dea Deutschland AG include expenses (interest, commitment fees and foreign currency effects) for the repaid RBL. As the pro forma income statement has to be presented as if the merger would have occurred on 1 January 2018, no financing expenses from the repaid RBL prior to the transaction should be included in the pro forma income statement. Therefore, those financing costs were eliminated in the pro forma income statement for the year ended 31 December 2018 as well as for the short fiscal year ended 30 April 2019.

Unit of Production Method

The historical results of Wintershall Dea Deutschland AG include depreciation rates for tangible assets that are either based on actual production of the period and proved reserves at the beginning of the respective period or calculated according to the straight-line method. These depreciation rates are applied to the respective book values. The preliminary purchase price allocation led to step ups or step downs of the tangible and intangible assets. As the pro forma income statement has to be presented as if the merger would have occurred on 1 January 2018, the step ups and step downs, respectively, incurring from the preliminary purchase price allocation should be considered for the determination of the depreciation rate.

The depreciation rate has to be adjusted based on the book values after the preliminary purchase price allocation and included in the pro forma income statement for the year ended 31 December 2018 as well as for the short fiscal year ended 30 April 2019.

Abandonment Provision

The historical results of Wintershall Dea Deutschland AG include interest expenses for unwinding of discounting the abandonment provision. Post-merger, Wintershall Dea applies a nominal risk-free pre-tax rate based on government bond 'yield rate' for the respective country for discounting purposes, which is applied in the preliminary purchase price allocation. For purposes of the pro forma income statements, it is assumed that the nominal risk-free pre-tax rates have been applied as of 1 January 2018.

Change of Control Payments

The historical results of Wintershall Dea Deutschland AG for the short fiscal year ended 30 April 2019 include provisions for change of control fees stipulated in certain contracts for the acquisition of seismic data. For the purpose of the Pro Forma Financial Information, it is assumed that any non-recurring change of control fees associated with the Transaction were incurred prior to 1 January 2018.

Transaction costs

For purposes of the Pro Forma Financial Information, it is assumed that any non-recurring transaction costs associated with the Transaction were incurred prior to 1 January 2018.

Intercompany transactions

The historical results of Wintershall Dea GmbH and Wintershall Dea Deutschland AG include revenue and expenses recognized due to transactions between Wintershall Dea GmbH and Wintershall Dea Deutschland AG, respectively. For purposes of the Pro Forma Financial Information, those transactions are perceived as intercompany transactions and have to be eliminated.

3.3 Purchase Price Allocation

Based on an evaluation of IFRS 3 "Business Combinations", Wintershall Dea GmbH was determined to be the acquirer in the merger. As consideration for the contribution of all shares in Wintershall Dea Deutschland AG, equity interests of Wintershall Dea GmbH have been issued to LetterOne. The fair value of the consideration is based on the equity value of Wintershall Dea Deutschland AG and its subsidiaries as of 1 May 2019. Transaction costs directly related to the merger were recognized as general and administration expenses in the amount of €16 million.

Wintershall Dea has applied the acquisition method of accounting with respect to the assets and liabilities of Wintershall Dea Deutschland AG and its subsidiaries, which have been measured at fair value as of 1 May 2019. Wintershall Dea has determined fair values of Wintershall Dea Deutschland AG's assets and liabilities and prepared a preliminary purchase price allocation (as of 1 May 2019). The purchase price allocation is subject to further investigation and a final determination of fair values according to IFRS in the course of 12 months after the closing of the Transaction. Inputs were generally determined by taking into account historical data, supplemented by current and anticipated market conditions, and growth rates.

The table below presents the preliminary fair value that was allocated to Wintershall Dea Deutschland AG's assets and liabilities based upon fair values as determined by Wintershall Dea. The valuation process to determine the fair values is not yet complete. The Company estimated the preliminary fair value of acquired assets and liabilities as of the date of acquisition based on information currently available and continues to adjust those estimates. As the Company finalises the fair value of assets acquired and liabilities assumed, additional purchase price adjustments may be recorded during the measurement period, but no later than one year from the date of the acquisition.

	Estimated fair value (millions €)
Assets acquired and liabilities assumed on 1 May 2019	
Fair values of assets acquired	
Exploration assets	1,621
Other intangible assets	2,560
Property, plant and equipment and investment property	4,461
Inventories	84
Financial assets and financial receivables	1,886
Trade and other receivables (incl. derivatives)	477
Income and deferred tax assets	166
Cash	171
Total assets	**11,426**
Fair values of liabilities assumed	
Provisions	1,472
Financial debt	2,204
Trade and other payables (incl. derivatives)	581
Income tax liabilities	133
Deferred tax liabilities	2,766
Total liabilities	**7,156**
Net assets (Consideration for the merger)	**4,270**

4 Pro Forma Financial Information

4.1 Pro forma Income Statement for the year ended 31 December 2018

The following table summarizes the pro forma adjustments to the historical consolidated income statements for the year ended 31 December 2018 of Wintershall Dea GmbH and Wintershall Dea Deutschland AG in accordance with Wintershall Dea's presentation and accounting policies:

	Year ended 31 December 2018					
(millions €)	Total aligned Wintershall Dea GmbH	Total aligned Wintershall Dea Deutschland AG	Total aligned financial information	Pro forma note	Total Pro Forma Adjustments	Pro forma income statement
Sales revenues gas and oil	4,078	1,589	5,666			5,666
Sales revenues gas transport/ midstream	237		237			237
Sales revenues other	350	15	365	(h)	(0)	365
Net income from equity-accounted investments: gas and oil	25		25			25
Net income from equity-accounted investments: gas transport/midstream	104		104			104
Other operating income	52	289	341			341
Production and operating expenses	(1,928)	(344)	(2,273)	(h)	0	(2,272)
Production and similar taxes	(128)	(99)	(227)			(227)
Depreciation and amortisation	(850)	(318)	(1,168)	(g)	(229)	(1,397)
Net impairments on assets	(184)	(168)	(351)			(351)
Cost of sales gas transport/ midstream	(54)		(54)			(54)
Exploration expenses	(111)	(110)	(221)			(221)
General and administration expenses	(195)	(121)	(316)	(a)	8	(308)
Result from operating activities	1,396	732	2,129		(222)	1,907
Financial income	78	107	186	(d)	(180)	6
Financial expenses	(227)	(81)	(308)	(b), (c), (d), (e), (f)	144	(164)
Financial result	(149)	27	(122)		(36)	(158)
Result before taxes	1,247	759	2,007		(258)	1,749
Income taxes	(577)	(478)	(1,055)	(a), (b), (i)	118	(936)
Net result	671	281	952		(139)	813
Net result attributable to shareholders	616	278	894		(93)	800
Net result attributable to non-controlling interests	55	4	58		(46)	12

The following pro forma adjustments (column "Total Pro Forma Adjustments") with a non-recurring effect have been made to the aggregated income statement of Wintershall Dea GmbH and Wintershall Dea Deutschland AG (column "Total aligned financial information") for the year ended 31 December 2018 with regard to the purchase price allocation procedures and transaction related items:

(a) Represents the elimination of the previously recorded non-recurring merger related costs of Wintershall Dea GmbH of €7 million and Wintershall Dea Deutschland AG of €1 million. The merger related costs are assumed to be tax deductible. Applying a tax rate of 30% for Wintershall Dea GmbH, 40.4% of Wintershall Norge AS and 30.56% for Wintershall Dea Deutschland AG, the respective tax adjustment amounts to an expense of €3 million.

(b) Represents the elimination of previously recorded non-recurring commitment interest expenses and other previously recorded one-time expenses of Wintershall Dea Deutschland AG of €9 million for the RBL. The financing costs are assumed to be tax deductible. Applying a tax rate of 30.56%, the respective tax adjustment amounts to an expense of €3 million.

The following pro forma adjustments (column "Total Pro Forma Adjustments") with a continuing effect have been made to the aggregated income statement of Wintershall Dea GmbH and Wintershall Dea Deutschland AG (column "Total aligned financial information") for the year ended 31 December 2018 with regard to the preliminary purchase price allocation and transaction related items:

(c) Represents the elimination of the previously recorded expenses of Wintershall Dea GmbH and Wintershall Dea Deutschland AG related to the repaid BASF group financing, L1E Group financing as well as the RBL. The adjustments reflect the elimination of interest expenses of Wintershall Dea GmbH of €26 million and Wintershall Dea Deutschland AG of €114 million as well as €71 million foreign exchange losses for Wintershall Dea Deutschland AG.

(d) Represents the elimination of previously recorded income of Wintershall Dea Deutschland AG from the On-demand loan of €94 million, the elimination of gains owing to the reversal of valuation adjustment of €9 million as well as €85 million foreign exchange gains for Wintershall Dea Deutschland AG.

(e) Recognition of arrangement fees of €7 million (thereof €6 million for Facility A) and interest expenses of €71 million (thereof €42 million for Facility A) related to the SFA with an allocation to the facilities and their individual duration. For Facility A it is assumed that the tranche will be replaced with the realisation of the bond. Therefore, an amortisation period of 22 month is assumed. For Facility B and Facility C, an amortisation period of 36 respectively 60 months is assumed.

(f) Elimination of interest expenses related to the abandonment provision for Wintershall Dea Deutschland AG, amounting to €24 million. Recognition of interest expenses related to the abandonment provision for Wintershall Dea Deutschland AG using a nominal risk-free pre-tax rate based on government bond "yield rate" for the respective country amounting to €14 million.

(g) Recognition of recurring effects from the preliminary purchase price allocation. Adjustments relate to the depreciation on step ups/step downs on tangible assets. Additional depreciation of €229 million associated with the fair value step ups/step downs of tangible assets have been recorded.

(h) Represents the elimination of intercompany transactions between Wintershall Dea GmbH and Wintershall Dea Deutschland AG, amounting to €0 million income and €0 million expenses.

(i) Recognition of tax effects on the adjustments with a continuing effect described above, amounting to a reduction of income taxes of €124 million, using a tax rate of 30.56% for Wintershall Dea Deutschland AG, 30% for Wintershall Dea GmbH, 40.4% for Wintershall Norge AS and 45% as well as 78% for DEA Norge AS.

4.2 Pro forma Income Statement for the short fiscal year ended 30 April 2019

The following table summarizes the pro forma adjustments to the historical consolidated income statements for the short fiscal year ended 30 April 2019 of Wintershall Dea GmbH and Wintershall Dea Deutschland AG in accordance with Wintershall Dea's presentation and accounting policies:

	Short fiscal year ended 30 April 2019					
(millions €)	Total aligned Wintershall Dea GmbH	Total aligned Wintershall Dea Deutschland AG	Total aligned financial information	Pro forma note	Total Pro Forma Adjustments	Pro forma income statement
Sales revenues gas and oil	1,276	455	1,732			1,732
Sales revenues gas transport/midstream	73		73			73
Sales revenues other	180	2	182	(k)	(0)	182
Net income from equity-accounted investments: gas and oil	17		17			17
Net income from equity-accounted investments: gas transport/midstream	44		44			44
Other operating income	9	0	9			9
Production and operating expenses	(655)	(142)	(797)	(k)	0	(797)
Production and similar taxes	(36)	(31)	(67)			(67)
Depreciation and amortisation	(295)	(136)	(432)	(j)	(62)	(494)
Net impairments on assets	(1,206)	(75)	(1,281)			(1,281)
Cost of sales gas transport/ midstream	(10)		(10)			(10)
Exploration expenses	(76)	13	(63)			(63)
General and administration expenses	(277)	(211)	(488)	(d), (e)	48	(440)
Result from operating activities	(955)	(125)	(1,081)		(14)	(1,095)
Financial income	38	21	60	(g)	(19)	41
Financial expenses	(42)	(25)	(67)	(a), (b), (c), (f), (g), (h), (i)	35	(32)
Financial result	(4)	(3)	(7)		16	9
Result before taxes	(959)	(129)	(1,088)		2	(1,086)
Income taxes	108	(8)	100	(a), (b), (c), (d), (e), (l)	(3)	97
Net result	(851)	(137)	(988)		(1)	(989)
Net result attributable to shareholders	(869)	(137)	(1,006)		(1)	(1,007)
Net result attributable to non-controlling interests	18		18		(0)	18

The following pro forma adjustments (column "Total Pro Forma Adjustments") with a non-recurring effect have been made to the aggregated income statement of Wintershall Dea GmbH and Wintershall Dea Deutschland AG (column "Total aligned financial information") for the short fiscal year ended 30 April 2019 with regard to the purchase price allocation procedures and transaction related items:

(a) Represents the elimination of previously recorded non-recurring commitment expenses of Wintershall Dea Deutschland AG of €1 million of the RBL. The financing costs are assumed to be tax deductible. Applying a tax rate of 30.56%, the respective tax adjustment amounts to an expense of €0 million.

(b) Represents the elimination of the previously recorded non-recurring financing costs for early repayments of the Proceeds loan of Wintershall Dea Deutschland AG of €15 million. The early

repayment fees are assumed to be tax deductible. Applying a tax rate of 49.4%, the respective tax adjustment amounts to an expense of €7 million.

(c) Represents the elimination of one-time repayment fees for replacing the BASF Group financing of €7 million from Wintershall Dea GmbH. Furthermore, the adjustment comprises the elimination of realised €5 million foreign exchange gains related to the repayment of the BASF Group financing. These financing costs are assumed to be tax deductible. Applying a tax rate of 30%, the respective tax adjustment amounts to an expense of €1 million.

(d) Represents the elimination of one-time change of control fees relating to Wintershall Dea Deutschland AG of €40 million, which are recognized in Wintershall Dea Deutschland AG's historical financial information. Applying an average tax rate of 30.56% for Germany, 30% for Mexico and 78% for Norway, the respective tax adjustment amounts to an income of €30 million.

(e) Represents the elimination of the previously recorded non-recurring merger related costs of Wintershall Dea GmbH of €5 million and Wintershall Dea Deutschland AG of €4 million. The merger related costs are assumed to be tax deductible. Applying a tax rate of 30% for Wintershall Dea GmbH and 30.56% for Wintershall Dea Deutschland AG, the respective tax adjustment amounts to an expense of €3 million.

The following pro forma adjustments (column "Total Pro Forma Adjustments") with a continuing effect have been made to the aggregated income statement of Wintershall Dea GmbH and Wintershall Dea Deutschland AG for the short fiscal year ended 30 April 2019 with regard to the preliminary purchase price allocation and transaction related items:

(f) Represents the elimination of the previously recorded interest income and interest expenses related to the BASF Group financing, the L1E group financing, the RBL and the Proceeds loan of Wintershall Dea GmbH and Wintershall Dea Deutschland AG. The adjustments consist of the elimination of interest expenses of Wintershall Dea GmbH of €0 million and Wintershall Dea Deutschland AG of €47 million as well as €7 million foreign exchange losses for Wintershall Dea Deutschland AG.

(g) Represents the elimination of the previously recorded interest income related to the On-demand loan of Wintershall Dea Deutschland AG of €17 million, the elimination of interest income of Wintershall Dea GmbH of €1 million as well as the elimination of gains owing to the reversal of valuation adjustment of €8 million.

(h) Recognition of arrangement fees of €2 million (thereof €2 million for Facility A) and interest expenses of €29 million (thereof €18 million for Facility A) related to the SFA with an allocation to the facilities and their individual duration. For Facility A it was assumed that the tranche will be replaced with the realisation of the bond. Therefore, an amortisation period of 22 month is assumed.

(i) Elimination of interest expenses related to the abandonment provision for Wintershall Dea Deutschland AG amounting to €8 million. Recognition of interest expenses related to the abandonment provision for Wintershall Dea Deutschland AG using a nominal risk-free pre-tax rate based on government bond "yield rate" for the respective country amounting to €5 million.

(j) Recognition of recurring effects from the preliminary purchase price allocation. Adjustments relate to the depreciation on step ups/step downs on tangible assets. Additional depreciation of €63 million associated with the fair value step ups/step downs of tangible assets have been considered for the short fiscal year ended 30 April 2019.

(k) Represents the elimination of intercompany transactions between Wintershall Dea GmbH and Wintershall Dea Deutschland AG amounting to €0 million income and €0 million expenses.

(l) Recognition of tax effects on the adjustments with a continuing effect described above, amounting to a reduction of income taxes of €37 million, using the tax rate of 30.56% for Wintershall Dea Deutschland AG, 30% for Wintershall Dea GmbH, 40.4% for Wintershall Norge AS and 49.4% as well as 78% for DEA Norge AS.

DESCRIPTION OF THE ISSUER

General Information

Incorporation, Registered Office, Duration, Name

The Issuer's legal and commercial name is Wintershall Dea Finance B.V.

The Issuer was incorporated on 31 July 2019 and operates as a private limited liability company (*besloten vennootschap met beperkte aansprakelijkheid (B.V.)*) under the laws of the Netherlands. The Issuer has been incorporated for an indefinite period of time. The Issuer is registered with the trade register of the Dutch Chamber of Commerce (*Handelsregister van de Kamer van Koophandel*) under number 75491486. The Issuer's Legal Entity Identifier (LEI) is 529900SUC9JUI6M74U66.

The Issuer's corporate seat is The Hague, the Netherlands. The Issuer's registered office and place of business is Bogaardplein 47, 2284 DP Rijswijk, the Netherlands. Its telephone number is: +31 703583100.

Since its incorporation there have been no relevant recent events particular to the Issuer which are to a material extent relevant to the evaluation of the Issuer's solvency.

Corporate Purpose

Pursuant to Article 3 of the Issuer's articles of association dated 31 July 2019, the objects of the Issuer are (a) to incorporate, to participate, in any way whatsoever in, to manage and supervise and to finance subsidiaries, group companies and third parties, (b) to borrow, to lend and to raise funds, including the issue of bonds, debt instruments or other securities or evidence of indebtedness and to enter into agreements in connection with the aforementioned activities, (c) to render advise and services, (d) to grant guarantee, to bind the company and to pledge or to otherwise encumber its assets for its own obligations and for obligations of subsidiaries, group companies and third parties, (e) to acquire, alienate, encumber, manage and exploit registered property and items of property in general, (f) to trade currencies, securities and items of property in general, (g) to perform any and all activities of an industrial, financial or commercial nature and to do all that is connected with (a) to (g) or may be conductive thereto, all to be interpreted in the broadest sense.

Fiscal Year

The Issuer's fiscal year corresponds to the calendar year. In 2019, the Issuer will have a short fiscal year from 31 July to 31 December 2019.

Auditors

It is intended to mandate KPMG Netherlands as auditor of the Issuer.

Share Capital

The issued share capital of the Issuer amounts to €1.00, divided into 1 share with a nominal value of €1.00 which is fully issued and paid-up. The Issuer does not have authorised but unissued capital.

Major Shareholder

The Guarantor is the sole shareholder of the Issuer.

Organisational structure

The Issuer is a wholly-owned subsidiary of the Guarantor and belongs to the Group.

The Issuer does not have any subsidiaries of its own and is dependent upon administrative and management services provided by the Guarantor and certain subsidiaries of the Guarantor.

Business Overview

Principal Activities

The main purpose of the Issuer is to act as finance company within the Group including the issuance of bonds. The principal activity of the Issuer is the raising of capital in order to lend funds to companies of the Group. Beside these operations, the Issuer has no further material activities.

Material Contracts

The Issuer has not entered into any material contracts in the ordinary course of its business that are material to its ability to meet its obligations to the Noteholders.

Legal and Arbitration Proceedings

From 31 July 2019, the date of its incorporation, to the date of this Offering Memorandum, the Issuer has not been involved in any government, legal or arbitration proceedings against or affecting the Issuer, nor is the Issuer aware of any pending or threatened proceedings, which (in either case) may have or have had in the recent past significant effects on the financial position or profitability or results of operations of the Issuer.

Administrative, Management and Supervisory Bodies of the Issuer

Managing Board

Gijsbertus Wilhelmus van den Brink is the sole managing director.

Conflicts of Interest

The Issuer is not aware of any conflicts of interest between the duties of Mr. van den Brink to Wintershall Dea Finance B.V. and his private interests or other commitments

Financial Information for the Issuer

The Issuer has not issued any financial statements since its incorporation. However, the Issuer has prepared an opening balance sheet as of 31 July 2019. The opening balance sheet has been prepared in accordance with Part 9 of Book 2 of the Dutch Civil Code.

Opening Balance Sheet

	As of 31 July 2019
	(unaudited)
	(in €)
Cash	1
Total assets	1
Subscribed capital	1
Total shareholders' equity and liabilities	1

Trend Information

There has been no material adverse change in the prospects of the Issuer since the date of its incorporation.

DESCRIPTION OF THE GUARANTOR

General Information

Incorporation, Registered Office, Duration, Name, Website

The Guarantor was incorporated on November 15, 2006 under the laws of Germany as a limited liability company (*Gesellschaft mit beschränkter Haftung*). It is registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Lüneburg, Germany, under registration number HRB 200519 and has its registered seat at Celle and its business address at Friedrich-Ebert-Straße 160, 34119 Kassel, Germany (telephone number: +49 561 301-0). The duration of the Guarantor is indefinite. The Guarantor's Legal Entity Identifier (LEI) is 529900PP4O3OCBMO9C52.

The Guarantor's legal and commercial name is "Wintershall Dea GmbH".

The Guarantor's website is available at www.wintershalldea.com. The information on the Guarantor's website does not form part of this Offering Memorandum unless it is explicitly incorporated by reference into this Offering Memorandum.

History and Development

See "*Business of the Group—History*".

Corporate Purpose

Pursuant to Article 2(1) of the Guarantor's articles of association (*Satzung*) dated 2 May 2019 (the "Articles of Association"), the objects of the Guarantor are:

- the extraction, processing and sale of potash and rock salts, crude oil, natural gas and other mineral resources and the resulting main products and by-products;
- the production and sale of fuels and lubricants and other mineral oil products, mixed fertilisers, construction materials and agricultural commodities as well as chemical products of all kinds; and
- the trade in all the aforementioned mineral resources and goods.

The Guarantor is further entitled to establish branch offices in Germany and abroad, invest in other companies, lease, acquire and undertake formations of such companies and enter into all business transactions that are suitable for promoting its business purpose. The Guarantor is also entitled to act as an organ within the framework of a fiscal inter-company relationship (*steuerliches Organschaftsverhältnis*). The shareholders' meeting (*Gesellschafterversammlung*) of the Guarantor (the "Shareholders' Meeting") may authorise the Guarantor's management to conclude a control and profit and loss transfer agreement (*Beherrschungs- und Ergebnisabführungsvertrag*).

Fiscal Year

As a result of the Merger, the Guarantor declared the period 1 January 2019 to 30 April 2019 a short fiscal year. The Guarantor also intends that the period from 1 May 2019 to 31 December 2019 be declared a short fiscal year. From 1 January 2020, the Guarantor's fiscal year will correspond to the calendar year.

Auditors

For more information, see "*Independent Auditors*".

Share Capital

As of 30 June 2019, the Guarantor had a registered share capital (*Stammkapital*) of €189,437,527.00, divided into (i) 156,716,500 ordinary shares (*Stammgeschäftsanteile*), each with a nominal value (*Nennbetrag*) of €1.00 (together, the "Ordinary Shares" and each an "Ordinary Share") and (ii) 32,721,027 non-voting preference shares (*Vorzugsgeschäftsanteile*), each with a nominal value (*Nennbetrag*) of €1.00 (together, the "Preference Shares" and each a "Preference Share"). All shares have been fully paid up.

Major Shareholders

For more information, see "*Management—Overview of the Shareholders of the Guarantor*".

Business Overview

See "*Business of the Group*".

Administrative, Management and Supervisory Bodies of the Guarantor

Management Board and Supervisory Board of the Guarantor

For more information, see "*Management*".

Conflicts of Interest

The Guarantor is not aware of any conflicts of interest on the part of the members of the Management Board and the Supervisory Board between their respective duties to Wintershall Dea GmbH and their respective private interests or other commitments.

Financial information relating to the Guarantor

With regard to certain selected consolidated information, see "*Selected and Other Financial Information*".

Significant Changes in Financial Performance

There has been no significant change in the financial performance of the Group since 30 June 2019.

Trend Information

There has been no material adverse change in the prospects of the Guarantor since 31 December 2018.

Unless stated otherwise, the statements on markets provided below are based on our beliefs and estimates, some of which were, in turn, derived from various sources we believe to be reliable, including industry publications and surveys or studies conducted by third party sources including BP Statistical Review of World Energy; International Energy Agency Oil Market Report; IMF World Economic Outlook Update; OPEC World Oil Outlook; International Energy Agency Medium-term Oil Market Report; OPEC Monthly Oil Market Report; U.S. Energy Information Administration; World Bank, among others. Industry publications, surveys and forecasts generally state that the information contained therein has been obtained from sources believed to be reliable, but that the accuracy and completeness of such information is not guaranteed. We believe that these industry publications, surveys and forecasts are reliable but we have not independently verified them and cannot guarantee their accuracy or completeness. In addition, in many cases there is no readily available external information (whether from trade associations, government bodies or other organizations) to validate market-related analyses and estimates, requiring us to rely on the review of industry publications, including information made available to the public by our competitors. The projections and forward-looking statements in this section are not guarantees of future performance and actual events and circumstances could differ materially from current expectations. Numerous factors could cause or contribute to such differences.

Oil and Gas Industry and Outlook

The Global Economic Cycle at Present

The availability of affordable energy is vital to all sectors of the global economy, particularly transport, industrial production, electricity generation and heating. Global demand for energy is linked to movements in GDP and accordingly fluctuates with the economic cycle. The outlook for energy markets is shaped by several factors including, population growth, the size of the working-age population, urbanization levels and immigration. By 2040, the global population is set to increase by 1.7 billion to 9.2 billion with the economic activity expected to double that of 2017. There will be major regional shifts economically during this period.

Geopolitical events particularly impact oil and gas producing countries and regions. In recent years, there has been increasing focus on climate change from OECD countries with the ratification of the Paris Agreement on Climate Change placing new rules on nations to meet specific de-carbonization targets. This will necessarily impact the energy sector as one of the leading contributors to global carbon emissions. Global energy companies are now beginning to adapt to and change as a result of this increasing focus on emissions. At the same time, they remain highly exposed to the traditional drivers of the sector.

Source: BP Statistical Review of World Energy, U.S. Energy Information Administration, International Energy Agency.

Natural Gas Price Dynamics, Drivers and Outlook

Natural gas markets operate on a regional basis with local and regional factors having a greater impact on pricing. Significant variation in temperature between seasons tend to affect demand for gas in use for both heating and cooling. Moreover, the availability of supply through piped gas infrastructure is a key driver of pricing.

Natural gas has distinct regional markets across the globe, and the correlation in prices among these regional markets has eroded since 2009. The more pronounced divergence of market prices in recent years is a result of the presence of two different pricing systems. Under gas-on-gas pricing, the price of natural gas is indexed to competitively determined gas market spot prices which change in response to natural gas supply and demand. Under oil-indexation, the price of natural gas is determined from oil market spot prices which change in response to oil supply and demand. The European gas market is still split with oil indexation still dominating the continent while competitive gas-on-gas pricing made inroads into Northwestern Europe. As such, UK prices are also gas-on-gas based, although they are more readily influenced by oil-indexed prices in continental Europe when arbitrage opportunities exist. Asian prices are based primarily on an oil-indexed pricing system whilst U.S. prices are based on the North American natural gas market where prices are determined in a competitive process between multiple natural gas suppliers (i.e., gas-on-gas based prices).

The natural gas market structure varies among countries. Traditionally, national natural gas markets have regulated monopolistic structures with no competition and with state-entity involvement. However, this is gradually changing as regions such as the US, the EU, Canada, the UK, and Australia have substantially

deregulated their natural gas markets, opening the door for gas-on-gas, competitive pricing. The deregulation of the downstream gas market had a liberalising impact on the upstream markets. Competitive pricing structures encouraged the development of trading hubs, such as the UK's National Balancing Point (NBP) and the U.S.'s Henry Hub. Given gas pricing is mainly impacted by regional factors and dynamics, an overview of recent history and outlook for the relevant natural gas markets is discussed more in detail in the section "*Competition and Regional Market Dynamics*".

Key drivers of natural gas supply include unconventional development, new pipelines, floating technologies, national-level policies that affect supply, and new LNG capacity. LNG has typically been used to balance regional supply and demand (i.e., Europe), or to meet a relatively small demand for gas (e.g., Taiwan), except in Japan and Korea, two of the largest LNG importers globally, where natural gas demand is met entirely with LNG. In fact, Asian economic growth combined with national-level policies are one of the primary drivers of global demand for gas. Policies that affect natural gas supply and demand generally have roots in environmental, safety, and energy security objectives.

The key sector that is driving continued growth in natural gas demand is electric power generation, in which natural gas has largely displaced oil and is successfully competing with coal. While gas pipelines have and will likely continue to increase international gas trade on connectable landmasses, the primary means for natural gas trade that connects continents, utilizes stranded resources (e.g., Australia), and supplies island markets (e.g., Japan) is through LNG shipments.

A warm winter in Asia and declining price differentials between European and Asian spot natural gas prices led to increased volumes of LNG exports delivered to Europe. Europe's total LNG imports in the winter of 2018-2019 averaged 10.2 bcf/d, 60 per cent. higher than in the previous two winters and the highest winter average since at least 2013, according to CEDIGAZ LNG data. LNG imports to Europe have been relatively low in recent years, but they are expected to grow as new LNG supply comes online and European countries continue to increase natural gas consumption as part of their decarbonisation initiatives.

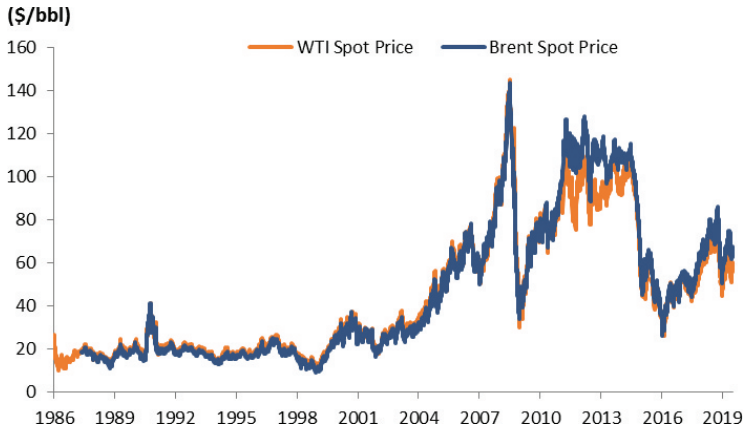
Due to the global climate change agenda the world is experiencing a significant increase in the contribution of renewable generation as part of the supply mix in developed energy markets. However, the intermittent nature of this source of energy requires the existence of conventional generation infrastructure to balance the supply of power. Natural gas-fired plants are generally considered a cleaner source of baseload generation when compared to other baseload fuels and, as such, a number of countries are looking to shift their non-renewable generation to this cleaner fuel source. This shift will likely be emphasised in more developed markets, where other fuel sources, specifically coal and nuclear, are either being phased out or retired from the generation mix and not being replaced on a like-for-like basis. In particular in Europe, this will impact both Germany and the UK.

Source: BP Statistical Review of World Energy 2019. OPEC World Oil Outlook Sept 2018. International Energy Agency Oil market Report. EIA, An Introduction to Global Natural Gas Markets 2014.

Oil Price Dynamics, Drivers and Outlook

Global oil prices are highly cyclical and have over the past 5 years experienced a period of volatility. Since January 2016 when the Brent Global Spot ICE reached a low of $27.9/bbl, crude oil prices have steadily recovered to reach a 3 year high of $86.1/bbl in October 2018. Prices have since stabilized to reach an average spot price of $64.6/bbl as of year-to-date 31 August 2019. The recovery from the lows experienced

in 2016 has been the result of a combination of strong growth in global demand coupled with increasing constraints on supply as well as geopolitical events.

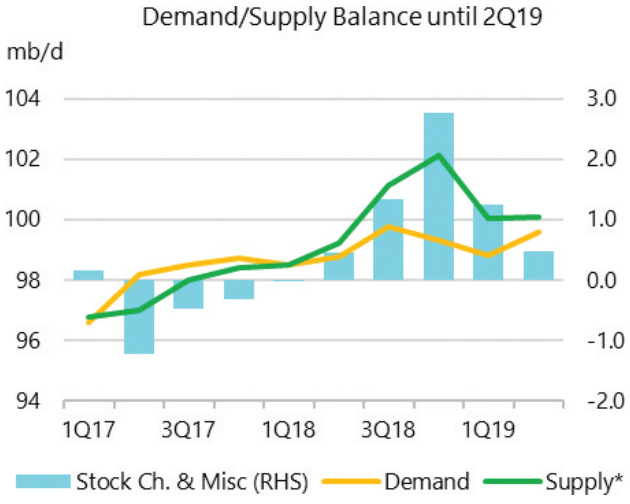


Source: U.S. Energy Information Administration, Daily Spot Prices, January 1986 – 2019.

In 2018, liquids (including crude oil, natural gas condensate and natural gas liquids) demand provided a relatively stable backdrop, continuing to grow robustly by an above-average 1.4 mmbbls/d, or 1.5% to 99.8 mmbbls/d. In an absolute sense, the growth in demand was dominated by the developing world, with China (0.7 mmbbls/d) and India (0.3 mmbbls/d) accounting for almost two thirds of the global increase. The U.S. (0.5 mmbbls/d) also accounted for a significant portion of growth with demand being the highest in the past 10 years. In 2019, world liquids (including crude oil, natural gas condensate and natural gas liquids) demand is anticipated to rise by 1.14 mmbbls/d. The majority of demand growth is projected to originate from India, China and OECD Americas. OECD countries are projected to rise by 0.14 mmbbls/d, while non-OECD countries will drive oil demand growth by adding an estimated 1.00 mmbbls/d in 2019.

In 2018 global supply rose by 2.2 mmbbls/d to 94.7 mmbbls/d with almost all of the net increase accounted for by the U.S., with their growth in production (2.2 mmbbls/d) a record for any country in any year. Elsewhere, production growth in Canada (0.4 mmbbls/d) and Saudi Arabia (0.4 mmbbls/d) was outweighed by declines in Venezuela (−0.6 mmbbls/d) and Iran (−0.3 mmbbls/d). Global oil supply as of June 2019, topped the 100 mmbbls/d mark for the first time since January, rising 300 kb/d month-on-month. The bulk of the increase stemmed from Kazakhstan where output surged to a new high after the completion of maintenance work. Higher flows from the US, Brazil, Nigeria and Russia also contributed.

OPEC and non-OPEC allies led by Russia agreed on 2 July 2019 to extend their existing supply cuts for nine months through March 2020 in a bid to lower oil stocks amid surging US supply. Of the 1.2 mmbbls/d total cut, OPEC is expected to shoulder 0.8 mmbbls/d and non-OPEC, the remainder. Very high compliance with the OPEC+ pact is helping to rebalance the oil market and extending the deal will continue that effort.



Source: International Energy Agency, Oil Market Report July 2019.

Outlook for global demand growth is set to accelerate from an estimated 0.3 mmbbls/d in Q1 2019 (q-o-q) and 0.8 mmbbls/d in 2Q19 (q-o-q) to reach 1.8 mmbbls/d in the second half of 2019 as economic activity improves and petrochemical plants ramp up, for a total y-o-y growth in 2019 of 1.2 mmbbls/d in 2019. For 2020, the pace of growth is expected to average 1.4 mmbbls/d, y-o-y, compared to 1.2 mmbbls/d this year according to the International Energy Agency.

Non-OPEC oil supply in 2019 is expected to grow at a pace of 2.1 mmbbls/d, y-o-y, following a robust increase of 2.9 mmbbls/d in 2018. The U.S. is projected to remain the main driver for non-OPEC supply growth in 2019 adding 1.8 mmbbls/d y-o-y, followed by Brazil, Russia, China, Australia and the UK. At the same time Mexico, Norway, Kazakhstan, Indonesia and Vietnam are projected to see the largest declines.

The combination of demand and supply has seen financial markets maintain a fairly stable outlook for crude oil prices in the medium-term. Although recent geopolitical tensions remain high in the Middle East, oil prices have been less volatile year-to-date July 2019. The Brent Global Spot ICE forward curve at 31 August 2019 is $62.8/bbl for 2019, $56.7/bbl for 2020 and $55.7/bbl for 2021. Credit Rating Agencies, specifically S&P, forecasts oil prices to remain at an average of $60.0/bbl for 2019 and 2020 and $55.0/bbl for 2021 while Moody's price forecast remains at an average of $71.0/bbl for 2019, $65.0/bbl for 2020 and 62.0/bbl for 2021.

Source: U.S. Energy Information Administration. BP Statistical Review of World Energy 2019. OPEC World Oil Outlook Sept 2018. S&P March 2019. Moody's *August 2018. FactSet.*

Competition and Regional Market Dynamics

The oil and gas business is highly competitive in the search for and acquisition of reserves, in the procurement of rigs and other production equipment, in the production and marketing of oil and gas and in the recruitment and employment of qualified personnel. Major global players include national oil and gas companies, major international oil and gas companies and independent oil and gas companies.

The Group operates in four main regions: Northern Europe, Russia, Middle East & North Africa and Latin America.

Northern Europe

Northern Europe represents a significant portion of oil and gas production and exploration in Europe as well as globally. Norway is Europe's largest oil and gas producer, producing 1.8 mmbbls/d of liquids and 11.7 bcf/d of gas in 2018, with Equinor being the largest international oil and gas company ("IOC") in the country. The UK is one of the world's most mature oil and gas basins, producing hydrocarbons offshore since 1967 with more than 45 billion boe produced to date. The prolific West of Shetland basin is a major new development hub for the region. Other countries such as the Netherlands, Germany and Denmark are also key hydrocarbon regions with a long hydrocarbon production history.

Despite increasing gas production from Norway over the past decades, the balance of domestic production and imports is expected to change in the near term, due to declining production in the EU and with Russian gas gaining increasing importance. More details on the historical trends and outlook for European gas exports can be found in the "*Midstream Sector*" section.

As a result of the prolific nature of the region, many oil and gas companies including IOCs, independents and more recently private-equity backed players have established operations and continue to develop several megaprojects. Overall, the region illustrates a wide spectrum of activity, development concepts, companies and strategies that can be deployed to maximise the economic value of the natural resources.

Source: BP Statistical Review of World Energy, Oil & Gas UK's 2018 Economic Report.

Norway

Natural gas is a key resource for Norway as the vast majority of its gas production is exported to continental Europe and the UK, as the domestic market accounts for less than 5% of the total gas volumes produced. The country is the largest oil and gas producer in Europe ex-Russia and around 30% of its gas production comes from the Troll field. Gas production in Norway has risen steadily since the Troll gas development came onstream in 2006, and peaked in 2017. Troll is expected to continue to account for the bulk of Norway's gas production, but Åsgard, Ormen Lange and Snøhvit also make significant contributions. Gas accounts for around half of total Norwegian production, plateauing at around 11.7 bcf/d

in 2018. Meanwhile, oil production is expected to rebound over the next five years, reaching an output of 2.0 mmbbls/d in 2023, as Johan Sverdrup comes onstream in Q4 2019.

Norway is also the largest holder of natural gas and crude oil reserves in Europe, and it provides much of the natural gas and petroleum liquids consumed on the continent. All of Norway's reserves are located offshore on the Norwegian continental shelf, which is divided into three sections: the North Sea, the Norwegian Sea, and the Barents Sea. The bulk of Norway's oil production occurs in the North Sea, which has a well-developed infrastructure and continues to attract interest, especially with the development of the Johan Sverdrup field. However, the Barents Sea is growing in prominence with upgrades to undiscovered resource estimates concluded in 2017, and is considered a key development area.

Several IOCs have a sizable presence in Norway, although the industry is still dominated by Equinor and the Norwegian government, through the State's Direct Financial Interest.

Source: BP Statistical Review of World Energy. U.S. Energy Information Administration, Norwegian Petroleum Directorate.

Germany

Germany is primarily a gas producing country, with almost all production onshore. The A/6-B/4 field is the only offshore development in Germany. Onshore gas production has taken place since the 1930s. The states of Lower Saxony and Schleswig-Holstein account for the vast majority of German gas production, with the remainder being accounted for mainly by Bavaria. Lower Saxony's predominance in gas production is not expected to change.

Germany had the highest oil and gas consumption in Europe in 2018 with 2.3 mmbbls/d and 8.5 bcf/d respectively, and given low levels of production, c. 43 kbbls/d and 0.7 bcf/d respectively, the country is heavily reliant on imports to meet demand. Gas is currently imported to Germany exclusively by pipeline, and the country currently has no infrastructure for the direct import of LNG. There are plans for building up to three LNG terminals. Mineral oil covered 34.9% of Germany's primary energy use in 2018. Transport accounts for most of Germany's oil consumption, and only a small fraction is used for power production.

Germany exploration and production activities has historically been divided up between five key players, although in recent years, several small players have started to emerge with specialty interests in specific locations or technologies to re-develop ceased fields.

Source: BP Statistical Review of World Energy. U.S. Energy Information Administration. International Energy Agency Oil market report, Central Intelligence Agency.

United Kingdom

The UK is the third-largest producer of natural gas and the second-largest producer of oil in OECD Europe. High oil and natural gas prices through late 2014 encouraged high levels of investment in the industry and have led to recent production increases. However, since then prices and investment have declined, and production is likely to return to its long-term declining trend. According to the Oil & Gas Authority, net gas production is expected 4.0at 3.5 bcf/d in 2019 following a small decline in 2018, whereas oil production should still resume its downward trend in 2019.

The UK is a mature basin by international standards. While earlier production came from large fields, much of the remaining resources and new discoveries are small in size. Although major oil and gas companies—defined as BP, Chevron, Equinor, Exxon Mobil, Royal Dutch Shell, and Total (together, the "Majors") have demonstrated their ongoing commitment to the UK Continental Shelf, albeit in a more focused portfolio, North Sea-focused independents along with private equity-backed companies are filling the gap left by Majors and large caps, as this group rationalises its UK presence.

Source: BP Statistical Review of World Energy. U.S. Energy Information Administration, Oil & Gas UK's 2018 Economic Report.

Russia

Russia is a major producer and exporter of natural gas and oil. Russia was the second-largest producer of dry natural gas in 2018, producing a total of 66.2 bcf/d. Russia was the third-largest producer of petroleum and other liquids in 2018, with average liquids production of 11.4 mmbbls/d.

Russia's reserves account for c.20% of the world's total proved natural gas reserves. Most of these reserves are located in large natural gas fields in West Siberia. The state-run Gazprom dominates Russia's upstream natural gas sector, producing about two-thirds of Russia's total natural gas output in 2016. While independent producers have gained importance, upstream opportunities remain fairly limited for them and Russian oil majors. Furthermore, Gazprom's dominant upstream position is reinforced by its legal monopoly on pipeline gas exports.

In 2018, almost 90% of Russia's natural gas exports were delivered to customers in Europe via pipeline, with Germany, Turkey, Italy, Belarus, and the UK receiving the bulk of these volumes, with the remainder delivered to Asia as LNG. Gazprom holds exclusive rights to natural gas exports via pipelines, and a material exporter of LNG to overseas buyers. Russia exports to Europe have, typically, been underpinned by long-term contracts with oil-indexed prices and take-or-pay clauses. Over the past few years though, it has been forced to adapt to changing market rules in Europe and an increasingly competitive global gas market by introducing elements of hub-linked pricing to its contracts. Imports of LNG in Europe played a key role in this dynamic, with many large terminals developed in the region, over the past decade, such as the Gate terminal in the Netherlands, built to address the rising demand for gas in Northern Europe driven by Germany.

The EU's domestic gas production is in rapid decline. To plug the shortfall and secure supplies, Europe and Russia are building the Nord Stream 2 Pipeline, which will travel 1,200 km through the Baltic Sea, starting from the Leningrad coast of Russia and reaching landfall near Greifswald in Germany. The pipeline will have an annual capacity of 55 bcm and is expected to be operational in late 2019.

Russia's proved oil reserves were 106 billion barrels as of December 2018, according to the BP Statistical Review of World Energy. Most of Russia's reserves are located in West Siberia, between the Ural Mountains and the Central Siberian Plateau, and in the Urals-Volga region, extending into the Caspian Sea. In the longer term, Russia's eastern oil fields, along with the largely untapped oil reserves in the Russian Arctic, may play a larger role.

Domestic companies dominate most of Russia's oil production and in recent years the market has seen consolidation trends, with assets concentrated under fewer firms with more state control. However, large international players continue to be active in the country.

In 2018, Russia exported more than 5 mmbbls/d of crude oil. Most Russian exports (70%) went to European countries, particularly the Netherlands, Germany, Poland, and Belarus. Europe is dependent on Russian oil supply, with more than one-third of crude oil imports into OECD Europe in 2016 coming from Russia. Asia and Oceania accounted for 26% of Russian crude oil exports in 2016, with China accounting for a growing share of total Russian exports.

In recent years, the Russian government has offered special tax rates or tax holidays to encourage investment in difficult-to-develop resources, such as Arctic offshore and low-permeability reservoirs, including shale reservoirs. Attracted by the tax incentives and the potentially vast resources, many international companies entered into partnerships with Russian firms to explore Arctic and shale resources.

Source: BP Statistical Review of World Energy. U.S. Energy Information Administration, country Analysis Brief Russia.

Middle East & North Africa

The Middle East & North Africa ("MENA") region, through its dominance of world oil reserve ownership (over 50% of proved oil reserves in 2018 according to BP Statistical Overview of World Energy), occupies a central position in the global energy balance.

Natural gas importance in MENA has been growing significantly over the past couple of decades. As of 2018, the region held c. 3,000 tcf of proved reserves, which represents over 40% of total global reserves. Meanwhile, production is lagging with over 20% of total world production, or over 80 bcf/d in 2018. In North Africa, gas features more prominently, with the ongoing development of large-scale Egyptian offshore discoveries. Meanwhile, gas becomes more relevant in the Middle East to supply growing domestic markets, and boost LNG exports.

Source: BP Statistical Review of World Energy

Egypt (non-OPEC)

Egypt is the second-largest natural gas producer and the largest non-OPEC oil producer in Africa. Egypt became a net importer of natural gas in 2015 as a result of growing domestic demand and declining production levels. However, the Egyptian Natural Gas Holding Company ("EGAS") aims to increase gas production by 4.8 bcf/d by 2022. The Zohr field, which accounts for a third of domestic production underpins the resurgence in the country's gas production in combination with the government's pragmatism in providing improved terms and pricing for offshore gas projects such as Atoll and West Nile Delta. Substantial natural gas discoveries have generated significant interest among business investors and may potentially further boost production. Increasing future supplies from all the newly discovered field, coupled with the continued expected growth in Egypt's natural gas demand, will allow Egypt to become a net exporter again in the short term.

International upstream players in Egypt operate within joint ventures in partnership with the three local NOCs, EGPC, Ganope El Wadi Petroleum Holding Company ("GANOPE") and the Egyptian Natural Gas Holding Company ("EGAS"). Under the current arrangements, private upstream operators sell their portion of profit and cost gas to EGPC, GANOPE and EGAS under a long-term contract with a gas pricing structure mainly linked to Brent and including a price floor and ceiling. However, the new gas market law allows international upstream operators with contracts signed post 2013 to market their own share of profit gas.

Egypt's oil consumption currently outpaces oil production, and one of the country's major challenges is to satisfy increasing oil demand amid falling production. The country also serves as a major transit route for oil shipped from the Persian Gulf to Europe and to the US. The Suez Canal is an important transit route for oil and LNG shipments traveling northbound from the Persian Gulf to Europe and to North America, and for shipments traveling southbound from North Africa and from countries along the Mediterranean Sea, to Asia. Fees collected from these two transit points are significant sources of revenue for the Egyptian government.

Source: Oxford Energy.

Algeria (OPEC)

Algeria is the leading natural gas producer in Africa, member of OPEC and is one of the top three oil producers in Africa. Algeria is estimated to hold the third-largest amount of shale gas resources in the world, however these currently remain undeveloped pending more favourable fiscal terms.

A substantial amount of Algeria's gross natural gas production is either re-injected to enhance oil recovery or is vented and/or flared. The remainder is used for domestic consumption or exported to other countries. Algeria is a major gas exporter to Europe, with approximately 70% of the total volumes exported via pipeline to Europe (with Italy and Spain being the largest export destinations) and the remaining 30% is exported via LNG. In 1964, Algeria was the first country in the world to export LNG, when it made its first shipment from the liquefaction plant in Arzew to the UK.

However, the country's gas supply balance is tightening—domestic demand is increasing by around 5% annually while gross natural gas production has remained relatively stable over the past decade. New production and infrastructure projects have repeatedly been delayed. In the past few licensing rounds, there was limited interest from investors to undertake new oil and natural gas projects under the government's terms. Furthermore, the giant Hassi R'Mel field, the cornerstone of gas production, is in decline. The field accounts for 50% of supply but, despite ongoing compression and enhanced recovery efforts, depletion will accelerate next decade. By 2020, some of this loss will be offset by the Reggane Nord, Timimoun and Touat fields. Algeria's national oil and natural gas company, Sonatrach, dominates the country's hydrocarbon sector, owning roughly 80.0% of all hydrocarbon production. By law, Sonatrach is given majority ownership of oil and natural gas projects in Algeria.

Source: U.S. Energy Information Administration, Oxford Energy, BP Statistical Review of World Energy.

United Arab Emirates (OPEC)

Natural gas use in the UAE is rising. Although the country is a member of the Gas Exporting Countries Forum ("GECF"), domestic demand is likely to draw heavily on the UAE's natural gas resources. Most of the UAE's oil and gas production (>95%) is in Abu Dhabi. Despite Abu Dhabi's large gas reserves and

processing capacity, the UAE is a net importer of natural gas. The UAE has the capacity to import LNG via Floating Storage & Regasification Units ("FSRUs"), and receives piped gas from Qatar through the Dolphin pipeline. There is a material level of investment being made to increase domestic gas production, and capacity is expected to increase over the next decade. However, the volumes of sales gas available for the domestic market will be significantly lower, because of the continued reliance on gas re-injection for oil recovery. The Abu Dhabi National Oil Company ("ADNOC") is targeting self-sufficiency in gas by 2030. It intends to do this by bringing on sour gas projects and unconventional gas with reasonable economics, and by running a successful exploration round. One of the key developments to achieve such a goal is the Ghasha concession, which is a collection of discovered, undeveloped oil and gas reservoirs offshore Abu Dhabi. It also includes the sour gas reservoirs around existing oil fields, such as Nasr, Mubarraz and SARB. The Ghasha concession is being developed as three projects in parallel, namely Ghasha and Hail, and the Dalma project, containing several fields in the Dalma area.

UAE is among the world's 10 largest oil producers and is a member of OPEC. The likelihood of further major oil discoveries is low, but the UAE uses enhanced oil recovery techniques to increase the extraction rates of the country's mature oil fields. Traditionally ADNOC and the Majors have dominated the Abu Dhabi upstream space. However, the latest bid rounds and ADNOC awards have seen a number of recent IOC entrants and increasing prominence of Asian players.

Source: BP Statistical Review *of World Energy, U.S. Energy Information Administration, International Energy Agency.*

Libya (OPEC)

Libya is a member of the OPEC, the holder of Africa's largest proved crude oil reserves, and the fourth-largest holder of Africa's proved natural gas reserves. Libya exports gas to Italy via the Greenstream pipeline. Exports have declined since 2015 to less than half Greenstream's c.1 bcf/d capacity.

The Libyan oil and gas industry is dominated by the state-owned NOC and its wholly owned subsidiaries, Arabian Gulf Oil Company ("Agoco") and Sirte Oil Company. The Sirte Basin accounts for over 70% of the remaining gas reserves. The offshore Pelagian Shelf has approximately 25% of remaining gas reserves, with the Ghadames and Murzuk Basins accounting for the remainder. The most significant undeveloped gas reserves are located in the Sirte Basin and Pelagian Shelf. The Western Libya Gas Project more than doubled gas production when it was commissioned in 2005. Pre-2011, several Majors had ambitions to launch new gas export projects, having signed framework agreements with the NOC to do so. However, plans have been downgraded. Libya's priority is now producing sufficient gas for domestic power requirements.

Libya is an important contributor to the global supply of light, sweet (low sulfur) crude oil, which Libya mostly exports to European markets. Libya's economy is heavily dependent on hydrocarbon production and bulk of country's government and export revenue comes for oil and gas.

Political instability has been one of the main recent challenges in the country and has impacted the overall growth in expected crude supply production, which remained steady in 2018.

Source: BP Statistical Review of World *Energy, U.S. Energy Information Administration, International Energy Agency.*

Latin America

In Latin America, the energy industry remains key for the development of the region despite recent infrastructure challenges, economic headwinds and political issues, particularly in Venezuela. Reduced macro uncertainty on the regulatory front is expected across most of the region as new administrations embrace the market-friendly E&P policies, especially in Brazil and Colombia, and should continue to attract increased investments from international players. The region as a whole (including Mexico) is producing over 8.0 mmbbls/d of crude oil.

Project sanctions are expected to return, smaller in scale and more varied in operatorship. In a region where NOCs dominate the landscape, IOCs should lead final investment decision making in 2019.

Source: BP Statistical Review of World Energy.

Argentina

Argentina is one of the largest economies in South America and the largest dry gas producer in the region. Hydrocarbon reforms in 2014 have made it easier for IOCs to bid for upstream opportunities and have led to more frequent offshore licensing rounds. Domestic oil and natural gas production remains dominated by Yacimientos Petrolíferos Fiscales ("YPF"), the former state energy company.

Argentina has a relatively mature gas market boasting one of the largest integrated gas transmission systems in South America. As the domestic market developed during the 1990s, export markets became increasingly relevant. Exports to Chile, Uruguay, and Brazil coincided with the construction of several export pipelines. Exports expanded until 2001 when an economic crisis caused a decline in production. Several regulatory interventions led to a recovery in production and tight gas production began to ramp up in 2014, reversing the country's decline. The country resumed exports to Chile in 2018. Domestic oil prices were historically set by the Government at a large discount to international benchmarks. In 2017, the Macri government has deregulated and liberalised the market, largely aligning domestic prices with international benchmarks. Gas prices remain partly regulated, with a floor price on wellhead gas production above a set base level. This incentive programme is however, being gradually phased out until gas price reaches LNG import parity.

There are several significant basins in the country such as Vaca Muerta and Noroeste. The Vaca Muerta shale is similar in age to the Eagle Ford in the U.S. Vaca Muerta's resources include dry gas, wet gas, volatile oil and black oil and it has emerged as one of the most attractive unconventional plays outside of North America, with all major international players holding positions. The Vaca Muerta shale formation has recoverable resources of over 300 tcf of natural gas and over 15 billion barrels of oil and condensate within c.9 million acres. Production from Vaca Merta surpassed 1.0 bcf/d in December 2018, allowing Argentina to resume gas exports. Natural gas from Vaca Muerta is transported by an existing pipeline network to the port of Bahia Blanca, where it is liquefied at Tango FLNG. The Noroeste basin is characterised by deep reserves of gas in large structures, with high drilling costs being largely offset by high productivity. The Austral basin is an additional source of significant quantities of gas but developments have been restricted by distance to markets.

Source: Argentina Energy Ministry, U.S. Energy Information *Administration, World Oil, BP Statistical Review of World Energy 2019.*

Mexico

The 2013 Energy Reform opened Mexico's doors to private investment in the upstream sector after 75 years. Between 2014 and 2018, Mexico launched three highly-successful licensing rounds. Entry opportunities ranged from deepwater, shallow-water and onshore mature fields. Deepwater exploration will be primarily IOC-led as Pemex shifts its focus to near-field shallow-water and onshore development. A number of companies are active in the country through participation in service contracts and in assets awarded as part of the ongoing licensing rounds.

In 2017, the discovery of the Zama offshore field was announced, and it represented the first find by a private company in Mexico in over 79 years. Zama is one of Mexico's largest discoveries in the last 20 years. This discovery in itself will not be sufficient to revert the downward trend in production witnessed over the past several years. Gas production in 2018 fell to 3.6 bcf/d, well below the peak witnessed in 2010 of 5.0 bcf/d. Oil output for 2018 declined by 0.2 mmbbls/d to 2.1 mmbbls/d. However, there is a considerable amount of yet-to-find reserves that could contribute to production post 2025. This resource base potential is expected to be developed by Pemex in JV partnerships with international partners or via open acreage licensing.

Source: International Energy Agency Oil Market Report, BP Statistical Review of World Energy 2019.

Brazil

Brazil held the third largest proven natural gas reserves in South America with over 13 tcf of reserves in 2018. Proven oil reserves are estimated at 13.4 billion barrels, second only in South America to Venezuela. Approx. 94% of Brazil's reserves are offshore with 80% of all reserves offshore of the state of Rio de Janeiro. The pre-salt discoveries in the Santos basin have substantial quantities of associated gas, and this will significantly increase the supply in the years ahead. However, there is much uncertainty about how much gas will be re-injected to optimise liquids recovery.

Domestic gas demand in Brazil has traditionally been low. As a result, large volumes of associated gas produced with oil have either been re-injected or flared. Prior to 2000, only three non-associated gas fields of note were developed in Brazil; Merluza, Pescada and Arabaiana. However, in the late 1990s, the demand for gas in Brazil grew rapidly and imports have flowed from Bolivia since 1999. Electrical power producers have pushed demand growth in the last few years. This demand growth has slowed in recent years. Following three years of drought, in 2016, hydro power production has recovered to normal patterns and therefore the demand for gas to power in Brazil has reduced significantly.

Petrobras holds dominant positions in upstream, midstream and downstream operations across Brazil. However, governmental reform, such as allowing non-Petrobras operators within the pre-salt polygon, the reduction of royalties for mature fields, and the extensive Petrobras's divestment plan and recent bid rounds have seen global industry interest in Brazil increase exponentially. The contractual review of the Transfer of Rights ("ToR") regime further opens up the possibility for international players to gain access to a material low-breakeven volume base of approximately 9 billion boe via the next bid rounds. The surplus volumes beyond the originally 5 billion boe granted to Petrobras will be offered under production Sharing Agreement contracts.

Source: U.S. Energy Information Administration, BP Statistical Review of World Energy 2019.

Midstream Sector

Position and Importance within Value Chain

The midstream sector is a key element in gas supply dynamics linking production (upstream) to market outlets (downstream). Together with gas storage facilities and the distribution networks, the gas infrastructure contributes to a resilient, stable and flexible energy system. Due to the structure of the gas supply chain, where the means of transportation of natural gas is limited to inflexible pipes requiring large investments, natural gas transportation has traditionally been a monopolistic industry. Underground gas storage facilities are used to balance demand and supply. In Europe, natural gas transportation is regulated by specific EU legislation on third party access, unbundling, tariffing and transparency rules. A number of other specific rules ensuring competition in natural gas apply to the sector and its pipeline systems.

About one quarter of all the energy used in the EU is natural gas, and many EU countries import nearly all their supplies. Some of the Member States are also more reliant on a single source or a single transport route for the majority of their gas than others. Disruptions along the import routes can endanger supplies. Diversification of supply sources and routes as well as interconnections are paramount both for energy security as well as for competitiveness, based on EU legislation with common regulation, standards and indicators.

Source: European Parliament, Policy Department: An Assessment of the Gas and Oil Pipelines in Europe. European Commission website

Major Networks in Europe and Russia

In Europe, the internal transportation grid is especially dense in areas with many import points, e.g. in the Emden and Zeebrügge area and at the Eastern boundaries. Most EU Member States' natural gas transportation systems are well integrated in the overall system and Transmission System Operators ("TSOs") are managing cross-country transportation.

In the EU in 2017, the dependency rate was equal to 55%, which means that more than half of the EU's energy needs were met by net imports. This rate ranges from over 95% in Malta, Luxembourg and Cyprus to below 15% in Estonia and Denmark. Due to decreasing domestic production in Europe, the dependency rate on energy imports has increased since 2000, when it was just 47%. The EU mainly depends on Russia for imports of crude oil, natural gas and solid fuels, followed by Norway for crude oil and natural gas. In fact, more than three quarters of the EU's imports of natural gas came from Russia (40%), Norway (26%) and Algeria (11%). Up to the mid-2020s, European companies have contractually secured to import at least 11.1 bcf/d of Russian gas. Many of the largest European gas markets (Germany, France, Italy, Netherlands, and Belgium) have relatively low concentrations of other non-European supplies.

Italy and Germany are the largest importers of Russian gas in the European Union, and the two countries together represent almost half of the total EU gas imports from Russia. Germany can count on direct supplies from Russia due to Nord Stream 1, an offshore natural gas pipeline commissioned in 2011 and

2012 respectively that, through the Baltic Sea, brings Russian gas to Germany and all over Europe. The Nord Stream 1 is the longest sub-sea pipeline in the world and it is extremely strategic for Europe given it provides a direct and eco-efficient access to vast gas reserves. The two additional pipeline strings of the Nord Stream 2 project will result in covering the increasing demand for additional Russian gas for Europe arriving directly into Germany.

Source: European Parliament, Policy Department: An Assessment of the Gas and Oil Pipelines in Europe. European Commission website. Oxford Institute for Energy Studies, Reducing European Dependence on Russian Gas. Forbes.

Germany as a gas transportation market

The German gas transportation system has grown and now provides a dense system owned and operated by 16 gas (TSOs). The gas transportation system of the TSOs, with a total length of about 40,000km, forms the backbone of the gas pipeline system in Germany. These are the pipelines which are defined as "long-distance pipelines" by the German Energy Industry Act ("EnWG"). The transportation system consists of a network of pipelines for domestic supply and large bulk transport pipelines (e.g. NETRA, TENP, MEGAL, MIDAL, WEDAL, OPAL and NEL) connecting important cross-border entry and exit points, storages and domestic load centres serving as the system's backbone. Natural gas is currently imported into Germany exclusively by cross-border pipelines bringing gas from Norway, Russia, the Netherlands and to a lesser extent from Denmark and the UK. There are plans, however, to build up to three LNG terminals in Germany.

Access to the transportation system is organized by the entry-exit model or "two-contract model". The system functions on the basis of the merger of the supply areas of several TSOs to form the two German market areas. Market areas facilitate technical cooperation between TSOs and ensure gas is transported throughout the network. In this respect, market areas are comparable to trading zones and simplify gas trading. Gas suppliers conclude contracts with the entry or exit network operators under which capacities at the various entry and exit points are defined. This also automatically creates a virtual trading point where gas can be delivered or offtaken. A fee is charged both for the supply of gas to the system and for the offtake of gas from the system. The fee does not depend on the transport route or distance but is determined only by the energy quantities corresponding to the entry and exit capacities agreed.

The market areas are operated by the companies GASPOOL Balancing Services GmbH and NetConnect Germany GmbH & Co. The two market area coordinators manage activities within their market areas. On behalf of the transmission system operators, they focus on operating the virtual trading point, on balancing group management and on control energy management. The two market areas will be merged into one by 1 October 2021.

German TSOs are subject to a comprehensive regulatory framework. The current regulatory framework in Germany has been set by the EnWG and several other legislative acts and the European Union's Third Energy Package for the energy market in 2009, which was transferred into national law. The activity of the German TSOs are supervised by the federal regulator, the Federal Network Agency ("FNA").

According to a decision by the FNA dating from 2009, OPAL's interconnection capacity from the German entry point in Greifswald, Germany, to the exit in the Czech Republic is largely exempt from network access and network tariff regulation for a period of 22 years from commissioning. OPAL is one of the pipelines to which Nord Stream 1 is connected. The exemption is, among others, aimed at ensuring that the OPAL pipeline could be built and at increasing is the security of supply of gas into Europe. Nevertheless, the European Commission has imposed usage restrictions on the companies with a dominant market position in the Czech Republic. Due to a settlement agreement with the FNA and Gazprom, the full OPAL capacities can be marketed. However, appeals are pending, which could change the situation again.

The strong dependence on imports means that the instruments for ensuring security of gas supply are vital, such as the diversification of supply sources and transmission routes, stable relationships with supplier countries, long-term gas supply contracts, highly reliable supply infrastructure which includes underground storage facilities. Long-term contracts for importing gas provide producers security with regards to future sales volumes and are used as an instrument to finance the considerable investments required in exploration, production and infrastructure. Due to today's liquid gas markets, the importance of short-term procurement, for buyers of gas, has increased in recent years.

Source: FNB Gas. IEA Emergency Response of IEA Countries. European Commission, Entry-Exit Regimes in Gas, a project for the European Commission. Oxford Institute for Energy Studies, The OPAL Exemption Decision. Federal Ministry for Economic Affairs and Energy, Article: Conventional Energy Sources.

BUSINESS OF THE GROUP

In this Offering Memorandum, the words the "Group," "we," "us," "its" and "Wintershall Dea," refer to Wintershall Dea GmbH together with its subsidiaries on a consolidated basis, except where otherwise specified or clear from the context. All reserves and resources data presented in this section have been estimated in accordance with PRMS guidelines and definitions. A majority of the reserves and resources data presented herein has been audited at the Group's request by internationally recognized reserves auditors, AGR, Gaffney Cline, RPS and Ryder Scott, while certain other reserves and resources data has been produced and vetted internally. Estimated reserves and resources presented herein may differ from estimates made in accordance with guidelines and definitions used by other companies in the industry. Unless otherwise indicated, the Group's production figures are presented on a working interest basis, which unless otherwise indicated, reflects its working interest. Working interest reserves in Algeria, Argentina and Egypt may not necessarily represent the Group's entitlement of the reserves due to the nature of production sharing contracts and royalty schemes in these jurisdictions. Any projections and other forward-looking statements in this section are not guarantees of future performance and actual results could differ materially from current expectations. Numerous factors could cause or contribute to such differences. See "Presentation of financial and other information", "Risk factors" and "Forward looking statements."

Overview

The Group is the leading European independent gas and oil company with full lifecycle capabilities across exploration, development and production activities, as well as a stable, cash-generative European midstream and transportation business with investments in European gas transportation assets.

The Group comprises Wintershall Dea GmbH and its subsidiaries, including Wintershall Dea Deutschland AG (formerly DEA Deutsche Erdoel AG ("Dea"). The Group was formed on 1 May 2019 through the combination of the:

- oil and gas business (including the gas transportation business) of BASF which business was held in Wintershall Holding GmbH (as the Company was named until the Merger, hereinafter "Wintershall") and its subsidiaries; and
- the oil and gas business of LetterOne, comprising Dea and its subsidiaries, (the "Merger").

The Merger created the largest independent European exploration and production ("E&P") company based on production and 2P reserves. The Group's primary mission is the secure, efficient, environmentally-conscious and sustainable production of natural gas and crude oil. It connects cost-effective energy sources from its balanced, long-life asset portfolio to strategic OECD markets.

The Group's core production, development and exploration assets are located in Northern Europe, Russia, North Africa, the Middle East and Latin America. Its material assets in North Africa and Russia, as well as its investment in Ogarrio, Mexico, benefit from investment guarantees provided by the Federal Republic of Germany. The Group operates predominantly via a partnership model with long-term joint venture arrangements with some of the world's leading oil and gas companies. Its hydrocarbon products are priced on varying bases, including Brent linked and fixed gas prices, with approximately 50 per cent. of its production priced pursuant to contracted and/or regulated prices and the remainder priced pursuant to Brent/liquids or European spot gas prices. Additionally, the Group has economic interests in onshore and offshore natural gas transportation pipelines in Northern Europe, including the transportation network of GASCADE and Nord Stream 1 and its onshore connecting pipelines OPAL and NEL, and finances an additional offshore gas pipeline project, Nord Stream 2. Headquartered in Kassel and Hamburg, Germany, the Group had approximately 2,830 full time equivalent ("FTE") employees as of 30 June 2019.

The Group's average aggregated working interest production during the 12 months ended 31 December 2018 was 589 mboe/d and 645 mboe/d during the six months ended 30 June 2019. The Group targets production of approximately 750 mboe/d by 2023. As of 31 December 2018, the Group had 1P reserves of 3.0 billion boe and 2P reserves of 3.7 billion boe (a 1P to 2P ratio of 82 per cent.) with a 2P reserve life of 18 years. The Group's 2P reserves consisted of 73 per cent. gas and 27 per cent. liquids, with 63 per cent. located in Russia, 24 per cent. in Europe, 7 per cent. in Latin America and 5 per cent. in North Africa and the Middle East. Its 1P reserves consist of 1.2 billion boe of undeveloped reserves and 1.9 billion boe of developed reserves. In addition to its reserves base, the Group also had 2C resources of 2.6 billion boe. For the 12 months ended 31 December 2018, its *pro forma* sales revenue were €6.3 billion and its aggregated EBITDAX was €3.6 billion, in each case giving *pro forma* effect for the Merger as though it has occurred on 1 January 2018. Following the Merger, the Group targets synergies of at least €200 million per year by

year three following the Merger, which are intended to be approximately evenly divided between operating synergies and capital expenditure and production-related synergies.

The tables below set out certain information relating to the Group's key production and development assets as at and for the periods indicated.

Portfolio Overview

	Working interest production (mboe/d)[1]			1P Reserves (MMboe)[2]	2P Reserves (MMboe)[2]	Reserves auditor	% of 2P Reserves audited by a Reserves auditor
	Year ended 31 December			As of 31 December 2018			
	2016	2017	2018				
Norway	152	134	140	483	642	RPS/AGR	93%
Germany[3]	64	61	54	168	228	RPS	79%
UK/Netherlands/Denmark	12	9	9	15	22	RPS	9%
Russia	245	246	252	2,066	2,345	Ryder Scott	99.6%
North Africa[4]	55	60	60	132	201	RPS	92%
Latin America[3][4]	71	71	74	167	268	Gaffney Cline/RPS	58%
Total	599	581	589	3,032	3,707	—	93%

Notes:

(1) Certain development assets have not begun production.

(2) The Group's 1P and 2P reserves are presented on a working interest basis.

(3) Reserves information contains unaudited internal data prepared by the Group.

(4) Working interest reserves in Algeria, Argentina and Egypt may not necessarily represent the Group's entitlement of the reserves due to the nature of production sharing contracts and royalty schemes in these jurisdictions.

History

The timeline below sets out certain events in the Group's corporate history.

1894 – 1949	Wintershall (1894) and Dea (1899) founded; first own oil wells for Dea (1901); first oil discovery for Wintershall (1930).
1950 – 1989	Acquisition of Wintershall by BASF (1969); Wintershall starts first activities for the subsequent production of gas and oil in Peru (1957) together with Dea, Canada (1959), Norway (1973), Argentina (1989) and Libya (1976).
	Acquisition of Dea by Texaco (1966); Dea starts production in oil fields in Egypt (1983); Mittelplate Drilling and Production Island commences production in the North Sea (1987); acquisition of Dea by RWE (1988).
1998	German upstream company Deminex broken up, with Wintershall acquiring Argentinian, Russian and Azerbaijani assets and RWE-Dea acquiring Norwegian and Egyptian assets.
2002	Sale of Dea downstream business.
2013	Wintershall completes asset swap with Equinor Energy ASA (formerly Statoil) whereby Wintershall received shares in three producing fields in Norway and Equinor Energy ASA received shares in the Edvard Grieg facility.
2015	BASF (through Wintershall) and Gazprom agree on asset swap. Dea acquired by L1 Energy; Dea completes E.ON E&P Norge Acquisition.
2019	Merger between Wintershall and Dea completed.

Wintershall

Since Wintershall's inception in 1894, it has grown both organically and through acquisitions. It completed its first discovery of crude oil in 1930 and subsequently produced liquids in Peru (1957) and Canada (1959). It was acquired by BASF in 1969. It has since continued expanding its production capabilities with entries into the Netherlands (1965), Norway (1973), Libya (1976), Argentina (1989), Russia (1992) and the United Kingdom (2011). Its first major midstream investments were made in 1991. In 1998, the German upstream company Deminex (in which it held an 18.5 per cent. interest) was broken up. Following this dissolution, Wintershall retained Deminex's Argentinian, Russian and Azerbaijani assets. Wintershall completed the takeover of Clyde Netherlands B.V. in 2002 and Norwegian RevusEnergy ASA in 2008. In 2013, Wintershall further expanded its production in Norway with its acquisition of assets from Equinor Energy AS. In November 2018, Wintershall acquired a 10 per cent. interest in Ghasha, the largest gas and condensate fields hub to be developed in the UAE.

Dea

Since Dea's founding in 1899, it has grown both organically and through acquisitions. It operated its first oil well in 1901. It was taken over by Texaco 1966 and acquired by RWE in 1988. It has since continued expanding its production capabilities with entries into Kazakhstan (1992), Denmark (2003), Libya and Algeria (2002 – 2005), the UK (2012), and Mexico (2017 – 2018). Following the dissolution of the German upstream company Deminex (of which it held an 18.5 per cent. interest), it retained all Deminex's Norwegian and Egyptian assets. In 2015, Dea was acquired from RWE by L1 Energy, and that same year, it completed the acquisition of E.ON E&P Norge, strengthening its Norwegian portfolio.

The Merger

On 1 May 2019, Wintershall and Dea merged to form the Group.

Pursuant to the Merger, LetterOne contributed its stake in Dea to Wintershall and received shares in the combined company. As a result of the Merger, BASF initially holds 67 per cent. of the Group and LetterOne holds 33 per cent. of the Ordinary Shares of the Company. This split was calculated based on the value of the two companies' E&P businesses. To take into account Wintershall's midstream business, BASF further received 5.7 per cent. in Preference Shares that will convert into Ordinary Shares of the Company within 36 months after the Merger or upon an initial public offering, whichever comes earlier, and is thereafter expected to hold an overall participation of 72.7 per cent. in the Company.

Integration of Wintershall and Dea is expected to be complete by December 2020. The integration focuses on three areas: cultural integration, target operating model and value capture. Cultural integration encompasses the integration of organisational cultures and communication and is an ongoing and iterative process. Target operating model comprises the redesign and implementation of new target organizations, including legal entity consolidation and restructuring of human resources is expected to be completed in phases by the end of 2020. Value capture aims to deliver the identified synergy targets by 2021.

Following the Merger, the Group targets synergies of at least €200 million per year by year three following the Merger, which are intended to be approximately evenly divided between operating synergies and capital expenditure and production-related synergies. The Group expects to realise cost savings through the combination of procurement, exploration and research and development functions. The Group also intends to optimise cash flow and capital expenditure by actively managing its combined operating portfolio, including by focusing on the most profitable assets and most probable discoveries. Following the Merger, the Group has also entered into transitional service agreements with BASF relating principally to IT services, treasury, risk management, HR, information and aviation. The Group expects to incur integration costs with an impact on the income statement of approximately €400 million between 2019 and 2021, comprising costs for the consolidation and integration of both legacy companies as well as the reduction of the workforce of the Group. The Shareholders continue to evaluate the optimal capital structure and strategy for the Group, including a potential future initial public offering.

Our strengths

The Group believes that the below strengths help to differentiate us from our competitors.

Leading European independent gas and oil company with a large and diversified portfolio

The Group believes that the quality, scale and diversification of its portfolio positions it as the leading European independent gas and oil company and provides a solid foundation to compete with larger U.S. and international major players globally. The Group has a large, diverse portfolio of assets balanced across production, development and exploration in multiple geographies, including production assets in Germany, Norway, Russia, Egypt and Argentina and exploration and development projects in the UAE, Mexico and Brazil. As at 31 December 2018, the Group had net working interest 1P reserves of 3.0 bn boe, net working interest 2P reserves of 3.7 bn boe and net contingent resources of 2.6 bn boe. 73 per cent. of the Group's 2P reserves are gas. The 1P reserve life of the Group's assets as at 31 December 2018 was 15 years. The Group has interests in assets across four principal regions (Northern Europe, Russia, Middle East & North Africa and Latin America) and production is diversified across these four principal regions. As of 30 June 2019, the Group's production averaged 645 mboe/d (on a working interest basis), with 45 per cent. sourced from Russia, 32 per cent. from Northern Europe, 12 per cent. from Latin America and 11 per cent. from the Middle East & North Africa. The Group has a long history of activity in each country of operation and has interests in a number of world-class assets, including:

- Achimov 1A, 4A and 5A
    - Block 1A of the Achimov formation of the Urengoy oil, gas and condensate field (hereinafter referred to as "Achimov I") (Russia) contributes natural gas and condensate from the Achimov formation in the Urengoy field which was the largest field in the world at the time of discovery, with 96 mboe/d production in 2018 and an estimated project life of approximately 40 years.
    - Block 4A and 5A Achimov formation of the Urengoy oil, gas and condensate field (hereinafter referred to as "Achimov IV & V") (Russia) represents the next milestone in the successful development of Achimov formation. The first construction phase started in 2018 with 40 production wells. The second phase is expected to include over 100 production wells, with production start-up readiness expected at the end of 2020 and significant production expected in 2021.
- Yuzhno Russkoye (Russia) is the largest producing field in the Group's portfolio, with 150 mboe/d net annualized production in 2018, currently extracting gas principally from the Cenomanian deposit with 142 wells. Production from the Turonian deposit is expected to extend plateau production with over 100 further wells. The estimated project life is 40 years.
- Aasta Hansteen (Norway) is a newly developed gas production centre in the emerging Voering basin in the Norwegian Sea, which uses a SPAR concept unique in the North Sea region. The project area also encompasses a number of undeveloped discoveries in which the Group has participating interests. Production started in December 2018.
- Mittelplate (Germany) is the largest and most productive oil field in Germany delivering more than 50 per cent. of domestic oil production. Mittelplate is 100 per cent. owned and operated by the Group and we have successfully established safe and uninterrupted production since 1987 and abides by stringent environmental standards. Production in 2018 was 21 mboe/d.
- CMA-1 (Argentina) is the largest and most prolific gas producing license in Argentina, delivering around 20 per cent. of total domestic gas production, with 51 mboe/d production in 2018. The shallow water gas assets contain world class reservoirs producing from approximately 150 wells. There is a project pipeline of several development projects for the coming years.
- Zama (Mexico) was acquired through the acquisition of Sierra Oil and Gas. The field has an estimated 400 to 800 MMboe of recoverable gross resources making this field the largest shallow water discovery in recent years. Together with its partners, the Group is looking to achieve FID for this world class discovery in 2021.
- Ghasha Concession (Abu Dhabi) is the largest undeveloped gas and condensate hub in the UAE. Production start-up is currently expected in 2022 and is expected to continue well into the 2040's.

We believe that the combination of our high quality asset base and significant near-term development pipeline, positions us well to pursue our strategy.

The Group's investments in its North African and Russia assets, as well as its investment in Ogarrio, Mexico, benefit from investment guarantees provided by the Federal Republic of Germany for direct investments made by German companies in developing and emerging countries. These investment

guarantees provide protection against a number of political risks, including expropriation, nationalization, civil wars, wars or other armed conflicts and payment embargoes or moratoria, under certain conditions.

Our portfolio is primarily gas weighted, with gas volumes accounting for approximately 66 per cent. of our production for the year ended 31 December 2018. We believe that our highly diversified product offering, with approximately 50 per cent. of our total production volumes sold at fixed and/or regulated prices, mainly in Russia and Argentina, enables us to benefit from delivering low cost gas to attractive energy markets, while diversifying our exposure away from the volatility associated with traditional oil benchmark linked and market-based pricing. Approximately 36 per cent. of our 2018 production was contracted in Russia and sold based on an agreed price formula. Approximately 15 per cent. of our current production is sold through gas contracts domestically in Egypt (4 per cent.) and through regulated prices in Argentina (11 per cent.). The remaining portion of our current production is sold at European spot gas prices (15 per cent.) and oil linked market prices (34 per cent.).

Resilience through industry leading operating costs

The Group's portfolio of low-cost assets provides it with a competitive advantage throughout the commodity price cycle, enabling resilience in a low-price environment and enhancing net cash flow when commodity prices are higher. In recent years, the Group been successful in further reducing its already low average unit production costs, which averaged $4.5/boe over the period from 2016-2018. The Group has principally achieved this through cost saving initiatives, realizing economies of scale and increased utilization of technology, innovation and digitalization to optimise its overall production performance. The Group's combined unit production costs decreased by 39 per cent. from $7.1/boe in 2014 to $4.3/boe for the six months ended 30 June 2019, positioning its portfolio amongst the lowest unit cost producing portfolios in the industry. As a result, the Group has achieved attractive cash margins from our producing assets and has generated aggregated free cash flow from continuing operations of €1,182 million in the year ended 31 December 2018.

The Group expects to be able to extract further synergies following the Merger, targeting €200 million per annum by the third year post Merger completion. Key areas identified for additional costs savings are the combination of its operating capabilities in Germany and Norway, as well as through joint procurement costs. The Group is committed to continuing to upgrade our portfolio and focus on low-cost, high-margin assets, with the ultimate goal of optimising its capital allocation and cash flow generation.

Strong partnerships with world class partners

Over 80 per cent. of the Group's assets are either operated through long-term joint venture partnerships or directly operated. The Group has a strong track record of establishing mutually beneficial partnerships with large, international holders of resources in valuable energy markets, including Gazprom in Russia, Equinor, Lundin and Aker BP in Norway, BP in Egypt and Total in Argentina, as well as constructive relationships with key national oil companies, including EGPC in Egypt, Pemex in Mexico and ADNOC in Abu Dhabi.

The Group seeks to maintain and grow its operating capabilities in countries where it can add value through the deep knowledge and experience in engineering, reservoir management, execution and operations of its in-house technical and operating team. The Group's world class environmental management and drilling expertise at the wholly owned and operated Mittelplate field in Germany is an example of its leadership and operating track record. The asset has over 30 years history of safe and uninterrupted production and is located in the Wadden Sea, a UNESCO World Heritage site. It was developed with a mix of onshore extended reach drilled production wells and offshore multilateral wells from an artificial island, as well as onshore and offshore pipelines and processing facilities.

The Group's in-house drilling knowledge, particularly our expertise in extended reach drilling, combined with third party expertise in these areas, has contributed to its world class drilling expertise and strong production performance over the last five years. This has allowed us to deliver industry leading levels of production efficiency and cost control. The above is valid for the operated Brage field in the Norwegian North Sea, where it has successfully drilled several over eight kilometres of stepout wells from the platform.

High visibility on medium term profitable growth

The Group believes it is well placed to deliver-medium term sustainable growth from its existing portfolio of both producing and undeveloped assets. The Group currently expects its production at the end of 2019 to be 635 mboe/d and to grow to approximately 750 mboe/d by 2023, underpinned by identified projects within its 1P and 2P reserve inventory.

The principal assets expected to contribute to this increase in production include Achimov IV & V in Russia, the Njord, Ærfugl, Dvalin and Nova fields in Norway, the Ghasha project in the UAE, and the start-up of unconventional production at the Group's Aguada Federal and Bandurria Norte projects in Argentina. These development assets are currently in various stages of development with the majority of them expected to come onstream in 2020 – 2021.

In addition to the assets already in development, the Group expects to complete FID Fenix and Aguada Federal & Bandurria Norte in 2019 – 2020, with production to commence in 2021 onwards. For Zama, we expect to select a preferred development concept by the end of 2019 and submit for and investment decision in 2020; the production is expected to come onstream in 2024.

Major European pipeline distribution network providing stable and highly visible cash flows

The Group believes that its exposure to the non-cyclical European gas infrastructure network provides it with a key differentiating factor compared to many of its European competitors. As Germany continues to gain increasing importance as the largest European gas market and distribution hub in Europe, the midstream business, including a network of strategic access point pipelines into Germany and elsewhere in Northern and Central Europe, plays an instrumental role in securing the region's security of supply. In 2018, approximately 36 per cent. of Europe's gas supply was sourced from Russia. With gas supply from other European countries expected to further decrease in the medium term and pipeline gas from Russia providing a competitive source of gas with a low carbon intensity compared to LNG alternatives, the European reliance on gas imports from Russia is expected to remain strong.

The Group's economic interest in the low risk midstream business generated over €200 million of reliable stable cash in 2018, representing approximately 17 per cent. of the overall free cash flow.

The participation of the Group's unbundled subsidiaries in the German regulated gas pipeline network provides revenue from stable fixed tariffs over each regulatory period without exposure to volume or price risks. While the Group's subsidiaries own and operate both regulated and partly regulated onshore pipelines, the long-term nature of the capacity sale contracts, including the GASCADE network and both Nord Stream 1 onshore connecting pipelines, OPAL and NEL, provides an attractive investment proposition, with no exposure to volume or price risks and a return protection mechanism. This is also true for the Group's unregulated Nord Stream AG offshore shareholding.

The Group's financing of the Nord Stream 2 project, together with the EUGAL pipeline engagement of the Group's subsidiary, GASCADE, shows its commitment to participating in new infrastructure developments, given their importance to addressing the increasing demand for natural gas in Europe. While the Group's participation in Nord Stream 2 as financing partner is expected to generate attractive cash returns, the structure of its financing commitments eliminates our equity risk and volume exposure. The EUGAL project has been confirmed by the FNA as being in line with expected demand and has been regulatorily accepted by way of an investment measure.

Robust financial policy underpinned by commitment to Baa2/BBB credit rating and disciplined capital allocation framework

The Group is committed to ensure financial stability through our long-term commitment to a Baa2/BBB credit rating. Its net debt as of 30 June 2019 was €5.7 billion, implying a net debt to EBITDAX ratio of 1.63x, based on our LTM EBITDAX of €3,474 million. The Group targets a net debt to EBITDAX ratio of 1.5-2.0X in the medium term. The Group will continue to monitor its business performance with the aim to provide a long-term balance between shareholder returns and profitable growth, whilst maintaining a conservative financial profile and a strong balance sheet through the commodity cycle. The Group's robust balance sheet is reinforced by its strong free cash flow generation. The Group generated EBITDAX of €3.6 billion during and the year ended 31 December 2018 and €1.0 billion during the four months ended 30 April 2019, on a *pro forma* aggregated basis. The EBITDAX for 2018 was derived from the sale of gas and oil products in Northern Europe (63 per cent., including Other which mainly comprises Corporate

functions), Russia (12 per cent.), Latin America (11 per cent.) and Middle East & North Africa (6 per cent.), as well as from the midstream gas transportation business (8 per cent.).

The Group generated free cash flow of €1.2 billion during and the year ended 31 December 2018 and €151 million during the six months ended 30 June 2019 (excluding M&A). The Group expects its gas and oil production to further increase in the medium term and we will continue to focus on cost control and cash management. As a result, operating cash flow and free cash flow are expected to continue to grow going forward.

In order to ensure the Group's ratings commitment, its capital distribution framework will prioritize distributions as follows: (i) maintenance capital to sustain production, (ii) balance sheet strength and maintaining investment grade rating, (iii) shareholder returns and (iv) profitable organic/inorganic growth. The Group's investment and M&A plans will be in line with its commitment to its rating target.

Highly experienced management team with strong corporate governance

The Group's senior management team has a wealth of experience in the oil and gas industry, with an average of more than 20 years of industry experience individually. The members of the Management Board in particular have extensive international industry experience at a wide range of global oil and gas companies as well as within legacy Wintershall and Dea.

The leadership team brings a broad range of oil and gas industry specific, business, financial, commercial and other relevant experience, which we believe is vital to managing an expanding international company. The Group believes that its leadership team with its extensive experience and proven track record provides a strong platform to deliver sustainable performance and long-term, value-generating growth.

In addition, the Group's governance structure provides the appropriate level of representation and oversight from its Management and Supervisory Boards, as well as its shareholders, to further ensure the company explores for and produces gas and crude oil worldwide in the most efficient and responsible way. The Group is committed to work closely with its stakeholders to meet future energy demand in a sustainable manner and have set high internal ESG standards to drive a number of initiatives with focus on climate change and operational stewardship, such as its progressive No-Flare policy and ambition to contribute to the world's energy transition.

Our strategy

The Group's strategy is to reinforce its position as the leading European independent upstream gas and oil company. The Group will seek to grow its business through active portfolio management, supported by disciplined cash prioritization and a prudent financial framework.

Continue to demonstrate strong financial discipline to maintain our Baa2 / BBB credit rating

Moody's and Fitch recently awarded us strong investment grade credit ratings of Baa2 and BBB, respectively with a stable outlook. The Group's financial strategy aims to provide a long-term balance between shareholder returns and profitable growth, whilst maintaining a conservative financial profile and balance sheet strength through the commodity price cycle. The Group will ensure financial stability through our long-term commitment to a Baa2/BBB credit rating.

The Group is focused on maintaining cashflow discipline and active cash management will be a priority.

The Group will manage capital commitments to generate positive cash flow from operation to sustain its dividend, investment capacity and create financial flexibility through the economic cycles. The Group's capital distribution framework will prioritize distributions as follows: (i) maintenance capital to sustain production, (ii) balance sheet strength and maintaining investment grade rating, (iii) shareholder returns and (iv) profitable organic/inorganic growth.

Enhance the value of the business through balanced profitable growth and sustainable shareholder distributions

The Group expects our existing portfolio will enable it to reach production of approximately 750 mboe/d by 2023. The Group has a strong project pipeline which we expect to organically enhance its production levels over the next three years. Much of this pipeline is front-weighted, with a significant number of major developments due to come on-stream within the next 18-24 months. To that end, the Group is also focused on ensuring our portfolio is balanced across all its core geographies and end-markets. The Group has six major development projects in Norway, in Russia it has one major development and one producing field

undergoing further development, and additional development projects in Egypt, and pre-FID development projects in Argentina, UAE and Mexico.

In all the Group's exploration and development activities, it seeks to focus on high quality opportunities in well-established E&P geographies. Beyond its existing established production and development portfolio in Germany, Russia, Norway, Argentina and Egypt, the Group has significant growth opportunities through our portfolio of exploration and appraisal assets in the UAE, Mexico, and Brazil. The Group's exploration activities focus on what it considers to be attractive regions, including Mexico and Brazil, as well as opportunities for mainly infrastructure-led exploration in Norway.

The Group may consider select bolt-on acquisitions which are believed to be value-enhancing. Additionally, the Group will continue to actively manage its portfolio, including taking advantage of opportunities to streamline it through select divestments, particularly in relation to very mature assets. Following the Merger, the size of our existing portfolio allows it to selectively reduce our asset base, including through partnership arrangements, to ensure that it maintains the most efficient and high value portfolio. As part of this strategy, the Group recently signed an agreement for the farm-down to ConocoPhillips of 45 per cent. of the Aguada Federal block and 50 per cent. of the Bandurria Norte block in Argentina. While it will retain a 45 per cent. and 50 per cent. share, respectively, as well as operatorship of the blocks, the Group believes that the shale experience of ConocoPhillips, combined with our local expertise, will allow it to expedite the development of the two blocks.

In addition to the profitable growth from the existing and future development projects, as well as the Group's exploration and M&A activities, its shareholders will receive a competitive return on their investment through cash dividends. The Group will establish a long-term, dividend policy commensurate with our Baa2/BBB credit rating.

Continued focus on operational excellence and corporate social responsibility

The Group has established a strong operational track-record through decades of delivering major projects across multiple geographies. Since the year 2000, the Group has delivered more than 15 major projects across Europe, Russia, the Middle East & North Africa and Latin America. Operating in multiple geographies, often in challenging conditions, has enabled the Group to develop a strong and highly capable technical organization. The Group aims to deploy this expertise across our operations as it works to maintain, and where possible enhance, its operating and technical performance. The use of advanced imaging and digital modelling, as well as big data analysis will be employed more regularly and it expects that this will help it to make faster and better-informed decisions, leading to a reduction in time to first oil and enhanced efficiency through reduced and optimised opex costs. The Group has successfully reduced combined production costs by 39 per cent. between 2014 and the six months ended 30 June 2019 and now have one of the lowest production costs bases in its industry. Going forward, the Group will continue to focus on low-cost and high value operations and endeavouring to optimise its production costs.

The Group is committed to exploring, developing, producing and transporting gas and oil in an efficient and responsible way. The Group strives to create trust through transparency, constantly minimizing its ecological and operational footprint, using resources efficiently, enforcing high social standards in all we do and engaging actively with our stakeholders. The Group has integrated an ESG framework encompassing economic, environmental and social responsibility, into our corporate strategy and endeavour to address these issues across all its activities. The Group reports on its ESG performance regularly, guided by the international recommendations of the Global Reporting Initiative, as well as by the oil and gas industry guidance on voluntary sustainability reporting developed by IPIECA. We support the UN Global Compact, a voluntary initiative based on company commitments to implement universal sustainability principles and to advance UN goals such as the Sustainable Development Goals. In Germany, the Group is also a member of the EITI (Extractive Industries Transparency Initiative) multi-stakeholder group for improving financial transparency, representing the oil and gas industry.

The Group is committed to reducing the environmental impact of our operations as it seeks to meet future energy demands in a sustainable manner. The Group believes that natural gas will play a crucial role in future energy supply and support the development of innovative natural gas technologies. For example, the Group is one of the partners of the innovation Award of the German Gas Industry and the founders of the "Zukunftswerkstatt Erdgas" project which serves to promote new hydrogen solutions from natural gas.

Throughout the Group's operations it plans to continue to maintain a strong focus on its health and safety performance and constantly work with our partners and industry bodies to ensure that best practice and the most up-to-date processes are implemented across our Group. The Group is committed to maintaining a safe working environment and constantly seeks to identify, understand and manage any safety or security risks that could impact its employees and operations. Moreover, the Group works towards aligning its internal guidelines and processes with the UN Guiding Principles on Business and Human Rights. The Group has an inclusive culture with over 60 nationalities represented by its workforce and its share of female employees is over 30 per cent. which is above the industry average.

In addition to the Group's technical, development and operational expertise, its extensive focus on high ESG and HSEQ standards supports its operating success. The Group is committed to operating responsibly and have an integrated ESG and HSEQ framework in place which underpins its cultural development and policies. The Group is committed to constant improvement in minimizing our ecological footprint and use of resources. Over 70 per cent. of its current equity production is from cleaner, low-carbon gas and we have no routine flaring in our operations. Additionally, the Group is an active member of the Methane Emission Group. The Group had strong HSEQ performance levels in 2018, including a Lost Time Incident Frequency Rate ("LTIF") of 0.2 LTIF, well below the 0.7 LTIF levels in Europe by the International Association of Oil & Gas Producers over the same period.

Maintain reputation as partner of choice across global energy markets

Partnerships are critical to the success of the Group's business model. The majority of the Group's portfolio in terms of equity production in 2019 is JV-operated and 67 per cent. of its production in 2018 came from JV-operated entities. The Group is proud of its history and track-record of maintaining these critical partnerships, not least its relationship with Gazprom, which it has maintained for over 30 years. This partnership extends beyond the Group's significant upstream and midstream operations and encompasses technological and scientific R&D, as well as collaboration on talent development issues, including training. A central component of the Group's strategy is to maintain and enhance its existing partnerships as we believe they enable it to operate and grow our portfolio most efficiently, as well as to attract new business opportunities. The strong partnerships in the Group's existing markets with large holders of resource position it well for future development and exploration opportunities and provide it with a competitive advantage.

Additionally, the Group believes its midstream business is a key differentiator for the Group. By connecting low cost gas resources with Europe's gas end-markets, we further reinforce the Group's relationships with regional partners.

Management is committed to replicating this partnership model across a number of the Group's new geographies and has already built beneficial relationships with a number of key resource holders in our core and growth business units, including ADNOC in the UAE and Pemex in Mexico. The Group believes that these relationships will allow it access to further opportunities in these regions.

Meeting global energy demand growth and facilitating the energy transition

Despite gains in energy efficiency, global primary energy demand is expected to continue to grow. The Group recognizes the need to meet this demand, as well as the increasing focus from governments, the investor community and communities around the world on reducing the impact of climate change and the importance of the decarbonisation agenda.

In the future, as many countries and regions look to reduce CO_2 emissions, the importance and scale of renewable energy as part of the power generation mix will grow significantly. However, the Group believes that hydrocarbons will also be required for the foreseeable future. We believe that natural gas in particular, with its lower-emissions, compared to coal, will be required to replace coal and nuclear generation in the mid-term. The Group believes that it is uniquely positioned to be able to supply this future gas demand, through the composition of our reserve base, with gas comprising 71 per cent. of its 2P reserves.

Summary of historical reserves, resources and operating data

The reserves and resources information in this Offering Memorandum represents estimates only. Typical to the industry in which the Group operates, there are a number of uncertainties inherent in estimating quantities of 1P and 2P reserves. Reserves and resources assessment is a subjective process of estimating underground accumulations of oil and gas that cannot be measured in an exact manner. The accuracy of any reserves or resources estimate is a function of a number of variable factors and assumptions, many of which are beyond the Group's control, including the quality of available data and of engineering and geological interpretation and judgement. As a result, estimates of different reserves assessors may vary. In addition, results of drilling, testing and production subsequent to the date of an estimate may justify revising the original estimate. Accordingly, due to the inherent uncertainties and the limited nature of reservoir data and the inherently imprecise nature of reserves or resources estimates, the initial reserves or resources estimates are often different from the quantities of oil and gas that are ultimately recovered. The accuracy of such estimates depends primarily on the accuracy of the assumptions upon which they were

based. For a summary of certain assumptions used in reporting the Group's estimates, see "*Presentation of financial and other information*".

Internal Controls over Reserves Estimates

The Group's policy regarding internal controls over the recording of reserves is structured to objectively and accurately estimate its gas and oil reserves quantities and values in compliance with 2018 SPE/AAPG/WPC/SPEE/SEG/SPWLA/EAGE PRMS. These definitions and guidelines are designed to provide a common reference for the international petroleum industry, including national reporting and regulatory disclosure agencies, and to support petroleum project and portfolio management requirements. They are intended to improve clarity in global communications regarding petroleum resources.

Wintershall's and Dea's appointed reserves personnel have maintained oversight for its internal reserves estimate process and arranged either for the provision of appropriate data to its External Auditors for the annual estimation of its year-end reserves or otherwise ensured an internal measure of quality control. In the case of Dea, all reserves and selected resources were subject to an evaluation of independent auditor. At Wintershall, reserves were audited internally on an annual basis and these internal estimates were benchmarked by a predefined (though not strictly annual) schedule.

1P and 2P reserves are estimated using recognized evaluation techniques. The estimates for each asset are prepared by management and audited as indicated above, by the External Auditors annually. The Group provides the External Auditors with technical information including production, geological, geophysical, petrophysical, engineering and financial data as well as fiscal terms applicable to the various assets. Future development costs are provided consistent with the activities required to produce the 1P and 2P reserves. The External Auditors audit the information provided and recommend changes to the technical assumptions as required.

Following the Merger, the Group is in the process of integrating and aligning its reserves and resources reporting, which will be audited by a single reserves auditor in the future.

Qualifications of third-party engineers

The technical personnel responsible for preparing the certification of its reserves estimates at each of its External Auditors meet the requirements regarding qualifications, independence, objectivity and confidentiality set forth by the Society of Petroleum Engineers. All External Auditors are independent consultancies and do not own an interest in its properties and are not employed on a contingent fee basis.

Portfolio Overview

Key producing assets

The Group has production assets located in Northern Europe, Russia, North Africa and the Middle East and Latin America. Set out below is a description of its key production assets by geography.

Northern Europe

In Northern Europe, the Group operates in Norway, Germany, the Netherlands, UK and Denmark. Norway and Germany are the key producing hubs in this region, with the Netherlands, UK and Denmark containing a number of smaller fields in different stages of their life-cycle. The focus in the Netherlands, UK and Denmark is on improving production and extending field life through technology and optimised remotely controlled operations from onshore through our technologically-advanced remote control centre in Den Helder in the Netherlands. The Group's midstream business is also located in Northern Europe.

Norway

Norway is Europe's largest oil and gas producing country and the Group has had a presence there since the 1970s. Norway provides a stable fiscal and operating environment with low political risk. The Group's Norwegian assets are also some of its most technologically advanced, and have allowed the Group to develop its expertise in areas such as extreme extended reach drilling and digitization to optimise operations.

In the year ended 31 December 2018, Norway accounted for 23.8 per cent. of the Group's aggregated production (140 mboe/d). The Group participates in a number of key producing platforms, where several nearby tieback fields are also producing or are being developed. This focus on infrastructure synergy

enables significant operational benefits, including the sharing of operational expenditure between the host fields and the tiebacks, which leads to lower costs, longer asset life and maximisation of ultimately recoverable reserves. In addition to the key production assets described below, the Group has interests in a number of the other production assets which in the year ended 31 December 2018 had production of 26 mboe/d. The Group also holds interests in certain development assets such as Njord, Dvalin, Ærfugl, Nova and other projects, many of which are adjacent, connected to, or use common infrastructure with the Group's key producing assets. See "*Key development assets*" and "*Material agreements relating to the Group's assets*".

The Group's net reserves associated with its Norway assets as of 31 December 2018 are shown in the following table:

	Gas (bcf)	Oil (MMbbl)	Total (MMboe)
Proved Reserves (1P)	1,549	220	483
Proved plus probable Reserves (2P)	2,038	298	642

Source: RPS Report, AGR Report and Wintershall Petroleum Resources Report 2018 (internal, not audited)

Gjøa

Overview

Gjøa is a gas and oil field discovered in 1989 and located in the North Sea, approximately 50 kilometres north-east of the Troll field. The water depth in the area is 360 meters. Production began in 2010.

The development comprises four subsea templates with 11 production wells tied to a semi-submersible production and processing facility. The Gjøa facility is partly supplied with power from shore, thereby having low emissions and a low CO_2 footprint. The Vega fields are tied to the Gjøa facility for processing and export.

The table below sets out key details relating to the field:

Partners:	Neptune (30%, operator); Petoro (30%); Wintershall Dea (28%); OKEA (12%)
Offshore/onshore:	Offshore
Gas/liquids of reserves:	70%; 30%
2018 Production (mboe/d):	29
Start of production:	2010

Field technical background and development

Gjøa is drained by pressure depletion with a total of 11 production wells. Segments P1 and P5 are produced by one crestal gas producer each, while the oil zones are drained by seven horizontal oil producers, of which four are dual branched, giving a total of 11 laterals in the reservoir. Gas lift is available if required. The field is now in the blow-down phase and started low-pressure production in 2017.

Stabilized oil produced is exported through a pipeline for further transport to Mongstad. Rich gas is exported by pipeline to the Far North Liquids and Associated Gas System (FLAGS) on the UK continental shelf, for further transport to the St. Fergus terminal.

Future plans and outlook

The Gjøa P1 project for the drilling of three new wells was sanctioned in February 2019, approved in June 2019 and is expected to come on-stream in the first quarter of 2021. Future tie-backs to the Gjøa facility are planned for the Nova and Duva projects.

Skarv

Overview

Skarv comprises several gas and oil reservoirs: the Skarv and Idun fields and the Gråsel and Ærfugl discoveries. The assets are located in the Norwegian Sea, approximately 45 kilometres north of the

Heidrun field. Skarv was discovered in 1998 and Idun in 1999 and production started from both fields on 31 December 2012. The water depth in the area ranges from 350 to 450 meters.

The development is comprised of a purpose-built, large floating production storage and offloading unit ("FPSO"), five subsea templates with 24 well slots currently holding 15 subsea development wells.

The table below sets out key details relating to the field:

Partners:	Equinor (36%); Wintershall Dea (28%); Aker BP (24%, operator); PGNiG (12%)
Offshore/onshore:	Offshore
Gas/liquids of reserves:	70%; 30%
2018 Production (mboe/d):	27
Start of production:	2012

Field technical background and development

Skarv's production strategy is to initially maximize liquids production by gas injection. In total, there are eleven producers and four injectors. The oil produced is offloaded and exported via dedicated tankers and gas exported via the Åsgard Transportation System ("ÅTS") to Kårstø in the southwest of Norway for processing and onward transmission for sales in Europe.

The production plan currently entails blowing down oil reservoirs, lowering inlet pressure and recovering additional liquids by breaking pre-installed glass plugs in some of the wells.

Future plans and outlook

Key future activities include continued production optimisation of the Skarv and Idun production wells. In the medium-term, further infield wells are being evaluated together with drilling of exploration wells. The development plan for the Ærfugl subsea tie-back (in which the Group has a 28 per cent. equity stake) to Skarv is in progress and production is expected to begin in the last quarter of 2020.

Vega

Overview

Vega is a field located in the northern part of the North Sea, 28 kilometres west of the Gjøa field. The water depth in the area is 370 metres. Vega was discovered in 1981. The field consists of three separate deposits: Vega Nord, Vega Sentral and Vega Sør. The field has been developed with three subsea templates with four slots, tied to the processing facility on the Gjøa field. A total of six production wells have been drilled. Production started in 2010.

The table below sets out key details relating to the field:

Partners:	Wintershall Dea (56%, operator); Petoro (28%); Spirit (7%); Idemitsu (4%); Neptune (4%)
Offshore/onshore:	Offshore
Gas/liquids of reserves:	50%; 50%
2018 Production (mboe/d):	27
Start of production:	2010

Field technical background and development

Hydrocarbons at Vega are produced by pressure depletion. The field produces gas condensate from Middle Jurassic shallow marine sandstone in the Brent Group. Additionally, Vega Sør has an oil zone overlying the gas condensate deposit.

Oil and gas condensate are transported from Vega to the Troll Oil Pipeline II for further transport to the Mongstad terminal. The rich gas is exported to the Far North Liquids and Associated Gas System (FLAGS) on the British continental shelf for further transport to St. Fergus in the UK.

Future plans and outlook

Three infill wells have been sanctioned and are expected to be drilled between 2020 and 2021 through existing subsea templates to increase the production and recovery from the field.

Edvard Grieg

Overview

Edvard Grieg is a field in the Utsira High area in the central North Sea, 35 kilometres south of the Grane and Balder fields. The water depth in the area is 110 metres. Edvard Grieg was discovered in 2007. The field is developed with a steel jacket stand-alone platform with full process facility and living quarters. It utilizes a jack-up rig for drilling and completion of wells. Edvard Grieg also received and processes the wellstream from the Ivar Aassen field where the Group holds a 6.46% share. Production started in 2015.

The table below sets out key details relating to the field:

Partners:	Lundin (65%, operator); OMV (20%); Wintershall Dea (15%)
Offshore/onshore:	Offshore
Gas/liquids of reserves:	10%; 90%
2018 Production (mboe/d):	15
Start of production:	2015

Field technical background and development

Hydrocarbons at the field are produced by pressure support from water injection. Edvard Grieg produces undersaturated oil from alluvial, aeolian and shallow marine sandstone and a conglomerate of Late Triassic to Early Cretaceous. Oil is also proven in the underlying basement. The oil is exported by pipeline to the Grane Oil Pipeline, which is connected to the Sture terminal. The gas is exported in a separate pipeline to the Scottish Area Gas Evacuation ("SAGE") system in the UK.

Future plans and outlook

Development plans for the Solveig oil field (in which the Group has a 15 per cent. equity stake) which is planned to be tied back to Edvard Grieg have been approved and work onboard Edvard Grieg for the tie-in has started. Further drilling of infill wells in the Edvard Grieg field is planned for 2020.

Maria

Maria was discovered in 2010 and is located on Haltenbanken in the Norwegian Sea, 25 kilometres east of the Kristin field. The water depth in the area is 300 metres. The field is a subsea development with two templates comprising five producer wells and two water injector wells. The field is tied to four host installations with the production going to the Kristin platform. Water for injection is supplied from Heidrun and gas for gas lift is supplied from the Åsgard B facility via the Tyrihans D template. Production started in 2017. Maria was the first development project operated by the Group in Norway and was delivered well ahead of schedule and significantly under budget.

The table below sets out key details relating to the field:

Partners:	Wintershall Dea (50%, operator); Petoro (30%); Spirit (20%)
Offshore/onshore:	Offshore
Gas/liquids of reserves:	10%; 90%
2018 Production (mboe/d):	12
Start of production:	2017

Field technical background and development

Hydrocarbons at Maria are produced by water injection for pressure support, and the production wells are equipped with gas lift. The reservoir lies at a depth of 3,800 metres. The well stream is routed to the Kristin platform for processing and further export. Stabilized oil is transported from Kristin to Åsgard C and

further offloaded to shuttle tankers. The rich gas is sent via the Åsgard Transport System (ÅTS) to the Kårstø terminal, where NGL and condensate is extracted.

Future plans and outlook

Production started nine months earlier than estimated in the PDO. Production in 2018 was lower than forecast due to limited pressure support from the water injectors. Two infill wells are expected to be drilled in late 2019 and early 2020 to improve pressure support and recovery. A Phase II project has been initiated for further recovery.

Aasta Hansteen

Aasta Hansteen is the deepest field development on the Norwegian continental shelf and is located in the northern part of the Norwegian Sea, 120 kilometres northwest of the Norne field. The water depth in the area is 1,270 metres. It includes three subsea templates on a floating platform with a vertical cylindrical hull moored to the seabed (referred to as a "spar platform"). Subsea templates are tied back to the platform. It is the largest spar platform in the world and began production in December 2018.

The table below sets out key details relating to the field:

Partners:	Equinor (51%, operator); Wintershall Dea (24%); OMV (15%); ConocoPhillips (10%)
Offshore/onshore:	Offshore
Gas/liquids of reserves:	100% Gas
2018 Production (mboe/d):	<1
Start of production:	End-2018

Field technical background and development

Gas at Aasta Hansteen is produced by pressure depletion and natural aquifer drive. The development includes two satellite subsea templates with four slots each and two subsea templates with one slot each. Gas from Aasta Hansteen is transported via the Polarled pipeline to the Nyhamna terminal. Light oil is offloaded to shuttle tankers and transported to the market.

Future plans and outlook

There are plans for developing future tie-ins, including existing and future discoveries like Asterix, Balderbrå and Gullstjerne. The Snefrid Nord Well is expected to come online in the third quarter of 2019.

Brage

Brage is the Group's first manned platform in Norway. Located in the northern North Sea, 125 kilometres west of Bergen, it is one of the oldest producing platforms in Norway. First discovered in 1980, the field came into production in 1993. Brage has been developed as a fixed integrated production, drilling and accommodation facility with a steel jacket. The main drainage strategy is water injection, with gas lift utilized in most wells. Brage oil is exported via the Oseberg Transport System to the Sture terminal. The gas is exported via a pipeline to Kårstø. Brage is a fully integrated platform with living quarters, auxiliary equipment module, process modules, drilling modules, well and manifold areas. The cabin capacity is 130 people. Through Brage, the Group gained significant operational and technical competencies in operating a large and complex platform. A significant infill drilling program is successfully underway which targets several yet untapped areas in the field.

The table below sets out key details relating to the field:

Partners:	Wintershall Dea (35%, operator), Repsol (34%), DNO North Sea (14%), Vår Energy (12%), Neptune (4%)
Offshore/onshore:	Offshore
Gas/liquids of reserves:	15%/85%
2018 Production (mboe/d):	3
Start of production:	1993

Snorre Unit

The Snorre field was discovered in 1979 in the Tampen area in the northern part of the North Sea approximately 140 kilometres west of Florø. The water depth in the area is 300-350 metres. The field was developed with the facilities at Snorre A, located in the southern part of the field, and the subsea production facility at Snorre UPA. Snorre A is a floating tension-leg platform for accommodation, drilling and processing. Production from Snorre A started in 1992. In 2001, production started from Snorre B, a semi-submersible integrated drilling, processing and accommodation facility located in the northern part of the field. In 2018, the Snorre Expansion Project was approved. This subsea development will be tied back to Snorre A and will consist of six subsea templates, each with four wells.

The table below sets out key details relating to the unit:

Partners:	Equinor (33%, operator); Petoro (30%); ExxonMobile (17%); Idemitsu (10%); Wintershall Dea (9%); Core Energy (1%)
Offshore/onshore:	Offshore
Gas/liquids of reserves:	Oil, Associated Gas, NGL
2018 Production (mboe/d):	8
Start of production:	1992

Field technical background and development

In total, 11 successful appraisal wells have been drilled on the structure since discovery. Exploration drilling to the south of Snorre has resulted in a number of oil discoveries in the Tordis and Vigdis areas. The area around Snorre is still believed to have exploration potential with several leads and prospects identified and being matured within both the PL057 and PL089 licenses.

Hydrocarbons at Snorre are produced with pressure support from water injection, gas injection and water alternating gas injection.

Oil and gas are transported in separate pipelines to Statfjord A for final processing and export. In 2019, Snorre A will cease export to Statfjord A, and will reroute production to the Vigdis process module. Stabilized oil will be exported through the existing Vigdis pipeline to Gullfaks A. The oil will be stored and loaded onto shuttle tankers at the Gullfaks field. All gas, from both Snorre and Vigdis, will be reinjected into the Snorre field. Fully processed oil from Snorre B is transported by pipeline to Statfjord B for storage and loading onto shuttle tankers.

Future plans and outlook

Upgrades of the Snorre A platform are planned to accommodate the future projects, including construction of a new riser hang off module and bundling of the process train. The Snorre Expansion Project is planned to start production in early 2021 and will contribute to prolonging the life of the Snorre field. In 2018, both Snorre A and Snorre B received consent to continue using the facilities through 2040.

Germany

The Group is the largest oil producer in Germany, with 100 per cent. working interest in gas and oil fields with the highest annual production levels in the country. In the year ended 31 December 2018, Germany accounted for 9 per cent. of the Group's aggregated production (54 mboe/d). In addition to the assets described below, the Group also holds interests in the Emlichheim project (with significant EOR activities), which in the year ended 31 December 2018, had production of 3 mboe/d, and other immaterial assets.

The net reserves associated with the Group's German assets as of 31 December 2018 are shown in the following table.

	Gas	Oil	Total
	(bcf)	(MMbbl)	(MMboe)
Proved Reserves (1P)	424	98	168
Proved plus probable reserves (2P)	535	139	228

Source: RPS Report and Wintershall Petroleum Resources Report 2018 (internal, not audited)

Mittelplate

Overview

The Mittelplate field, which sits in a UNESCO World Heritage site, is the largest and most productive oil field in Germany, delivering more than 50 per cent. of domestic oil production and remaining, for over 30 years, incident free. It was discovered in 1980 and is located in the Elbe estuary mouth within the North Sea tidal flats of the Wadden Sea, approximately 8 kilometres offshore. The Group has drilled 39 wells along with 18 sidetracks and laterals. There are currently 28 producers and 10 injectors, eight of which are active. The wells are operated from an artificial island in the Wadden Sea, as well as an onshore production site at Dieksand.

The table below sets out key details relating to the field:

Partners:	Wintershall Dea (100%, operator)
Offshore/onshore:	Offshore/onshore
Gas/liquids of reserves:	100% Liquids
2018 Production (mboe/d):	21
Start of production:	1987

Field technical background and development

The field consists of various sandstone reservoirs (Dogger Beta, Gamma, Delta, Epsilon, Bückeberg) that are being developed from two different locations, the offshore platform Mittelplate A and Dieksand, a nearby onshore facility. A pipeline through the Wadden Sea connects the Group's offshore facility with the onshore crude oil terminal.

The oil produced on Mittelplate Island is pumped through a 10 kilometre pipeline to the Dieksand onshore treatment facilities. Associated gas separated from the oil on the Mittelplate Island is used for power generation. Water extracted from the oil is injected back into the reservoir for pressure maintenance. The oil from Mittelplate and Dieksand is routed to the processing plant at the Dieksand Land Station, where it is de-gassed, de-watered and de-salted. The oil is then stored in four flat-bottomed tanks and exported via pipeline to Brünsbuttel and Heide refineries. The water separated from the oil is pumped back via a pipeline to the Mittelplate Island. The associated gas is compressed and dehydrated before entering the pipeline to Brünsbuttel.

Electric submersible pumps ("ESP") have been put in place, along with permanent downhole pressure and temperature gauges and ESP production metering. Water flooding as a means of pressure support has been in place since the early production phase of the Dogger Beta sandstone, the largest of the Mittelplate reservoirs in terms of reserves.

The artificial island is continuously improved by maintenance and upgrades, including scour protection and new living quarters.

Future plans and outlook

The Group plans to drill the next extended reach drilling wells, with lengths up to 8,500 meters, south of Mittelplate Island. Specific engineering and well delivery process has started for the next Beta-South wells. This includes multi-lateral drilling combined with extended reach drilling. Continuous drilling of the Dogger Beta sandstone will proceed until 2023. Various enhanced oil recovery ("EOR") methods are under investigation. Field tests for polymer flooding and water shut-off measures are in preparation.

Völkersen

Overview

Völkersen is an onshore gas field located in Northern Germany, approximately 30 kilometres southeast of Bremen. It is one of the major gas producers in the Lower Saxony Rotliegend Fairway and has been on-stream since 1994. In 2018, it was the most productive gas field in Germany, accounting for 12 per cent. of domestic gas production.

The table below sets out key details relating to the field:

Partners:	Wintershall Dea (100%, operator)
Offshore/onshore:	Onshore
Gas/liquids of reserves:	100% Gas
2018 Production (mboe/d):	14
Start of production:	1994

Field technical background and development

The main field development commenced in 1996 and is still ongoing. The development consists of eight drilling sites and 18 production wells. The wellheads are connected to eight decentralized gas processing plants and two central processing plants in Langwedel for water and hydrocarbon dewpointing. Approximately 30 kilometres of gas flowlines, mainly for dry gas, route gas from the wells to the processing plants and to the central compression station in Brammer. A sixth well central unit is connected to the rest of the field by a local pipeline infrastructure.

Future plans and outlook

The Group's primary focus for the Völkersen gas field is to optimise production and sidetrack less productive wells to infill locations. Furthermore, as the field is prepared for its tail end phase, the Group plans to incorporate velocity strings and improve facilities such an additional compression train in Brammer. One additional sidetrack is currently being drilled.

Russia

Russia is the largest supplier of natural gas to the European Union, with approximately one-third of Germany's fossil fuel demand covered by imports from Russia. Russia is therefore an important core region for the Group, and the Group has had a strong presence in Russia since the early 1990s, with a number of strategic assets exporting oil and gas to Europe.

The Group's core producing assets in Russia operate based on combined (geological survey, exploration and production) subsoil licenses granted by the Russian state authorities, which provide ownership rights to the extracted resources to the holder of the relevant license.

In Russia, the Group participates in three joint ventures with Gazprom group companies and one joint venture company with RITEK, a subsidiary of Lukoil. The Group's participation in its Russian joint ventures is established either via direct shareholding in the license holding company (Yuzhno Russkoye) or a shareholding in a service company which has operating agreements with the license holder (all other joint ventures). The marketing of gas and condensate is conducted through long-term take-or-pay agreements via its own trading companies or marketed directly by the Gazprom group.

In the year ended 31 December 2018, Russia accounted for 43 per cent. of the Group's aggregated production (252 mboe/d). In addition to the assets described below, the Group also holds interests in the Achimov IV & V development projects.

The net reserves associated with its Russian assets as of 31 December 2018 are shown in the following table.

	Gas	Oil	Total
	(bcf)	(MMbbl)	(MMboe)
Proved Reserves (1P)	9,022	455	2,066
Proved plus Probable Reserves (2P)	10,337	499	2,345

Source: Ryder Scott Report and Wintershall Petroleum Resources Report 2018 (internal, not audited)

Yuzhno Russkoye

Overview

Yuzhno Russkoye is one of Russia's largest gas fields, discovered in 1969. It is also the largest producing field in the Group's portfolio. It is located in the Krasnoselkupsky District of the Yamal-Nenets Autonomous Area, with a concession surface area of 722 square kilometres. Its current reserves are all accumulated in the Cenomanian and Turonian deposits, with some additional 2C resources in the lower

layers. The Cenomanian and Turonian formations were commissioned in 2007, with Wintershall being the first German company to produce natural gas in Western Siberia.

The table below sets out key details relating to the field:

Partners:	Gazprom (40%); Wintershall Dea (35%)[1]; OMV (25%)
Offshore/onshore:	Onshore
Gas/liquids of reserves:	100% Gas
2018 Production (mboe/d):	150
Start of production:	2007

Note:

(1) Represents the Group's economic interest, the Group has a 25 per cent. legal interest in the project. For further detail, see "*Material agreements relating to the Group's assets*".

Field technical background and development

The field wellheads are connected to a centralized gas processing plant with the compressor station and to the Siberian gas pipeline. The joint venture's license includes three fields: Yuzhno Russkoye, Yarovoye and part of Zapadno-Chaselskoye. The current license expires in 2043 but is expected to be extended. In addition, the Yuzhno Russkoye license comprises sandstone formations in Lower Cretaceous and Jurassic strata which are up to 4,000 meters deep and related to Yuzhno-Russkoye and Yarovoye fields, respectively. The Lower Cretaceous deposits have been tested with six appraisal wells during 2015 – 2017. There are two further appraisal wells in the Jurassic layers planned to be drilled through the end of 2021.

The main field development commenced from the Cenomanian formation in 2007 and is ongoing. The first pilot well production from the Turonian formation began in 2011. Compared to the deeper Cenomanian layer which has been developed, production from the Turonian formation is more challenging as the reservoirs are subject to low temperatures, which mean measures must be taken to prevent hydrates from forming. In addition, there is higher reservoir pressure and lower permeability in the Turonian reservoir rocks.

Future plans and outlook

There are plans for the development of 14 new wells in 2019 and a further 121 wells between 2020 and 2033 as part of the production start-up from the Turonian formation, which will extend the production plateau at Yuzhno Russkoye.

Achimov I

Overview

Achimov I produces natural gas and condensate from the Achimov formation in the Urengoy field. The field, discovered in 1966, is one of the largest onshore gas, condensate and oil reservoirs in the world. It is located in Western Siberia in the Yamal-Nenets Autonomous Area, approximately 3,500 kilometres northeast of Moscow. Achimov I currently has five processing lines.

First production at Achimov I of gas and condensate from six pilot wells began in 2008 and has been extensively extended during the full field development, which started in 2011.

The table below sets out key details relating to the field:

Partners:	Wintershall Dea (50%); Gazprom (50%, operator)
Offshore/onshore:	Onshore
Gas/liquids of reserves:	70%; 30%
2018 Production (mboe/d):	96
Start of production:	2011

Field technical background and development

With the completion of the full field development the field will be produced from 108 wells by end of 2019. Hydrocarbons produced at Achimov I are collected and transported to the Achimgaz facility, where gas is further exported through a five kilometre long gas pipeline to the Eastern Pipeline Corridor, while

condensate is transferred through a 37 kilometres long pipeline to a de-ethanization processing plant in Novy Urengoy. From there the condensate is transported via pipelines to a Stabilisation plant in Surgut / Western Siberia. The current production license expires in 2038, but is expected to be extended.

Future plans and outlook

After production plateau is reached, the Group targets natural gas production for as long as possible at a peak level, while maximising the condensate production. A sixth processing line is currently under construction to increase the capacity of the processing facility. Compressors will be required at a later stage to maintain planned production.

North Africa

The Group is active in Egypt, Algeria and Libya. In the year ended 31 December 2018, North Africa accounted for 8.9 per cent. of its aggregated production. A majority of the Group's assets in North Africa are covered by German federal investment guarantees. See "*Business of the Group—Insurance*".

The Group's key assets in North Africa are all located in Egypt and described below (2018 production of 26 mboe/d). Additionally, the Group holds interest in a number of other smaller producing assets in Algeria (Reggane) and Libya (various onshore and offshore licenses).

The net reserves associated with its North African assets as of 31 December 2018 are shown in the following table.

	Gas	Oil	Total
	(bcf)	(MMbbl)	(MMboe)
Proved Reserves (1P)[(1)]	635	29	133
Proved plus Probable Reserves (2P)[(1)]	974	42	201

Source: RPS Report and Wintershall Petroleum Resources Report 2018 (internal, not audited)

Notes:

(1) Working interest reserves in Algeria, Argentina and Egypt may not necessarily represent the Group's entitlement of the reserves due to the nature of production sharing contracts and royalty schemes in these jurisdictions.

West Nile Delta

Overview

West Nile Delta ("WND") is the first IOC-operated production asset in Egypt. It consists of a subsea development of five fields: Taurus, Libra, Giza, Fayoum and Raven. Production from the Taurus and Libra fields began in March 2017, followed by Giza and Fayoum fields in February 2019, and Raven is expected to come on-stream by late 2019.

The table below sets out key details relating to the field:

Country:	Egypt
Partners:	BP (82.75%, operator); Wintershall Dea (17.25%)
Offshore/onshore:	Offshore
Gas/liquids of reserves:	90%; 10%
2018 Production (mboe/d):	11
Start of production:	2017

Field technical background and development

WND is one of the largest developments in the Mediterranean Sea, located offshore of Egypt, and provides critical gas supply to the domestic market. The project offers unique governance terms and is the first IOC-operated production asset in Egypt, with no traditional joint venture operation or cost recovery structure.

WND consists of a development of five fields in the Mediterranean Sea. The Taurus and Libra fields were fast-tracked through an offshore tie-in to the third-party Burullus subsea and onshore infrastructure. Production in these fields commenced in 2017. In 2019, the Giza and Fayoum wells started production. Giza and Fayoum, along with Raven, are integrated field developments with common MEG and subsea controls and shared land fall and beach crossings, but there are separate pipelines and additional greenfield facilities for Raven.

Future plans and outlook

The largest of the five fields, Raven, is expected to come on-stream in late 2019.

When fully on-stream in the fourth quarter of 2019, combined production at the five fields is expected to reach 1.4 bcfd, equivalent to about 20 per cent. of Egypt's gas production at the end of 2018. All the gas produced will supply the domestic Egyptian market.

There is also an ongoing update of seismic mapping at the asset to mature some of the existing potential Miocene segments.

Gulf of Suez

Overview

Since 1983, the Gulf of Suez fields have been successfully developed to produce more than 650 MMboe of crude oil.

The table below sets out key details relating to the field:

Country:	Egypt
Partners:	SUCO (operator Ras Budran and Zeit Bay); EGPC (50%); Wintershall Dea (50%)
Offshore/onshore:	Offshore
Gas/liquids of reserves:	30%; 70%
2018 Production (mboe/d):	11
Start of production:	1983

Field technical background and development

There are two offshore crude legacy oil fields in the Gulf of Suez: Ras Budran and Zeit Bay. Both licenses were extended in March 2019 and have a renewal option in three years for a further five years.

Future plans and outlook

Further developments are ongoing at Ras Budran to improve production. There is also an ongoing work programme for maintaining asset integrity at the Ras Budran and Zeit Bay facilities.

Disouq

Overview

Disouq is a gas field which has been producing since 2013. It currently has 18 producing wells. It is a 322 square kilometre concession located in the highly prolific Nile Delta province. It comprises two development areas: Disouq Area-1 and NorthWest Khilala.

The table below sets out key details relating to the field:

Country:	Egypt
Partners:	Wintershall Dea (50%); EGAS (50%)
Offshore/onshore:	Onshore
Gas/liquids of reserves:	95%; 5%
2018 Production (mboe/d):	5
Start of production:	2013

Field technical background and development

The central treatment plant's maximum processing capacity is 150 mscfd, with a capacity upgrade potential of up to 200 mscfd. The central treatment plant can serve as a hub to the western part of the onshore Delta and service other companies (for example in providing gas processing services).

Gas and condensate produced at this field are delivered into Egypt's national transportation systems.

Future plans and outlook

All Phase B wells have been tied-in. Two more wells, DSQ 1-4 and DSQ 1-6, will be drilled until end the of 2019. In addition, BU Egypt is currently maturing the development of the liquid rich area North West Sidi Ghazi with envisaged DG2 in the fourth quarter of 2019.

Latin America

The Group has been active in Argentina since 1978 and is the fourth largest gas producer with operated and non-operated acreage in Vaca Muerta and participation in 19 other gas and oil fields. The Group has been present in Mexico since 2015 and increased its assets in Mexico through the acquisition of Sierra Oil and Gas in 2018. Additionally, the Group targets Brazil, where it already holds seven licenses, as a high growth region for exploration and development projects. In the year ended 31 December 2018, Latin America accounted for 12.6 per cent. of the Group's aggregated production (Argentina 71 mboe/d, Mexico 3 mboe/d). In addition to the assets described below, the Group also holds interests in the Aguada Pichana East and San Roque (Argentina) concession blocks, which, in the year ended 31 December 2018, had production of 19 mboe/d, and Ogarrio field in Mexico, which, in the year ended 31 December 2018, had production of 3.2 mboe/d.

The working interest reserves associated with its Latin American assets as of 31 December 2018 are shown in the following table.

	Gas	Oil	Total
	(bcf)	(MMbbl)	(MMboe)
Proved Reserves (1P)[1]	818	22	167
Proved plus Probable Reserves (2P)[1]	1,292	38	268

Source: Wintershall Petroleum Resources Report 2018 (internal, not audited); Gaffney Cline Report and RPS Report

Notes:

(1) Working interest reserves in Algeria, Argentina and Egypt may not necessarily represent the Group's entitlement of the reserves due to the nature of production sharing contracts and royalty schemes in these jurisdictions.

CMA-1

Overview

CMA-1 began production in 1989. It currently consists of seven fields (Antares-Ara-Cañadon Alfa, Hidra, Ara South, Kaus, Carina, Aries and Vega-Pleyade) and five offshore platforms. Approximately 20 per cent. of the gas produced in Argentina today comes from CMA-1. Two onshore processing plants (Cañadon Alfa and Rio Cullen) receive and process production from the seven fields.

The table below sets out key details related to the field:

Country:	Argentina
Partners:	Total (37.5%, operator); Wintershall Dea (37.5%); Pan American (25%)
Offshore/onshore:	Offshore/onshore
Gas/liquids of reserves:	90%; 10%
2018 Production (mboe/d):	51
Start of production:	1989

Field technical background and development

All fields are located offshore, except for Antares-Ara-Cañadon Alfa, which produces from both on- and offshore reservoirs. Around 150 wells have been drilled in this field from onshore locations, including five extended reach wells from onshore to offshore.

Gas production from the field is treated in the Cañadón Alfa gas treatment plant ("CAGTP") located in the Cañadón Alfa central processing facilities ("CACPF"). The CAGTP consists of a Turbo Expander Facility (TEF) together with two low temperature separation units. After treatment, the gas is exported through a 24 inch 3 kilometres pipeline to the national gas network pipeline. The TEF unit extracts propane and butane from the produced gas and has been operational since 2000. The LPG production is exported.

Liquids production (oil, condensate and gasoline extracted in the CAGTP) is received and treated in the Rio Cullen treatment facilities and exported via an offshore buoy.

Two offshore platforms have been installed to support production from the Hidra and Ara South fields, and three additional offshore platforms support Aries, Carina and Vega-Pleyade gas fields.

Future plans and outlook

The next development in the greater CMA-1 area is the satellite Fenix PH I project, with the first gas production anticipated in 2022. Following Fenix PH I, additional incremental development phases in Fenix and Carina are envisaged.

Key development assets

The Group's portfolio of development assets is integral to its long-term strategy of maintaining a high-quality reserves base. Its current investment cycle is set to peak in 2020, which will help the Group achieve its planned production volumes of approximately 750 mboe/d by 2023. The Group has development assets located in Northern Europe, Russia, the Middle East and Latin America. Set out below is a description of its key development assets.

Northern Europe

Norway

The Group considers its key development assets in Norway to be Njord, Ærfugl, Nova, Dvalin, and the Snorre Extension.

Njord

Njord is the re-development project of Njord A, a floating steel platform, which aims to add an additional 20 years of production to the site. Njord A has an integrated deck, with drilling and processing figures, which have been shut down since 2016 for extensive upgrades to the platform of Njord A and the storage vessel Njord Bravo. The Njord A column top extensions are near completion and the Njord B refurbishment work is underway, with production to re-start in late 2020.

The table below sets out key details relating to the field:

Partners:	Wintershall Dea (50%); Equinor (27.5%, operator); Neptune (22.5%)
Start of production:	2020
Development concept:	Floating steel platform and storage vessel
Plateau Production:	40 mboe/d

Ærfugl

Ærfugl is a subsea development project tying back to Skarv. The plan for development and operation was approved in April 2018 and consists of Phase 1, with the production of three wells to start in 2020, and Phase 2, with debottlenecking studies of the gas processing facilities to start from 2021.

The table below sets out key details relating to the field:

Partners:	Equinor (36%); Wintershall Dea (28%); Aker BP (24%, operator); PGNiG (12%)
Start of production:	2020
Development concept:	Subsea tie-back to Skarv FPSO
Plateau Production:	25 mboe/d

Nova

Nova is a Group-operated field in the northern part of the North Sea, 17 kilometres southwest of the Gjøa field. The water depth in the area is 370 meters. The planned development consists of two four-slot subsea templates, one for oil production and one for water injection, each with three wells tied back to the Gjøa platform. Hydrocarbons from the field will be produced by pressure support from water injection and with gas lift, both supplied from Gjøa. The well stream will be routed by pipeline to the Gjøa platform for

processing and export. The oil will be transported further through the Troll Oil Pipeline II to Mongstad, and the gas will be exported via the FLAGS pipeline to St. Fergus in the UK. The plan for development and operation was approved in September 2018, and production is scheduled to begin in 2021.

The table below sets out key details relating to the field:

Partners:	Wintershall Dea (45%, operator); Capricorn (20%); Spirit (20%); Edison (15%)
Start of production:	2021
Development concept:	Subsea tie-back to Gjøa
Plateau Production:	30 mboe/d

Dvalin

Dvalin is a Group operated field in the central part of the Norwegian Sea northwest of Heidrun. The water depth is 400 metres. The development concept is a subsea template with four gas producers tied back to the Heidrun platform. The well stream will be transported to the Heidrun platform for processing in a new dedicated gas processing module and exported to Nyhamna via a new pipeline from Heidrun connecting to the Polarled pipeline. Drilling of the production wells is due to start in August 2019, with the first gas production planned for 2020.

The table below sets out key details relating to the field:

Partners:	Wintershall Dea (55%, operator); Petoro (35%); Edison (10%)
Start of production:	2020
Development concept:	Subsea tie-back to Heidrun
Plateau Production:	30 mboe/d

Snorre Expansion Project

In 2018, the Snorre Expansion Project was approved. This subsea development will be tied back to Snorre A and consists of six subsea templates, each with four wells.

The table below sets out key details relating to the field:

Partners:	Equinor (33%, operator); Petoro (30%); ExxonMobile (17%); Idemitsu (10%); Wintershall Dea (9%); Vår Energy (1%)
Start of production:	2021
Development concept:	Subsea tie-back to Snorre A

Hywind Tampen

Between the two concessions, Snorre and Gullfaks, an offshore windfarm is planned to be developed to directly supply approximately 35 per cent. of the annual power demand to the five platforms at the Gullfaks and Snorre fields. The wind farm consists of 11 floating turbines with a combined capacity of up to 88 megawatts. This project will aid in the reduction of CO_2 emissions from the offshore power generation.

The table below sets out key details relating to the development:

Partners:	Gullfaks: Equinor (51%, operator); Petoro (30%); OMV (19%) Snorre: Equinor (33%, operator); Petoro (30%); ExxonMobile (17%); Idemitsu (10%); Wintershall Dea (9%); Vår Energy (1%)
Start up:	2021 – 2022
Development concept:	Floating wind farm

Russia

The Group considers its key development asset in Russia to be Achimov IV & V.

Achimov IV & V

Achimov IV & V is an onshore gas and condensate production project within the Achimov formation in the Urengoy field. The first phase of the project began in 2018, which includes the drilling of 40 production wells. In connection with the construction of start-up facilities at Achimov IV & V, the Group contributed a loan of approximately €150 million to the joint venture in July 2019. The second phase consists of the drilling of an additional 108 production wells. Achimov IV & V is planned to be start-up ready by the end of 2020, with significant gas production in 2021. Gas and condensate will be separated via a separate gas treatment plant ("UKPG") at each of Achimov IV & V. The gas will then be exported via a separate pipeline from each of the UKPGs to the Eastern Pipeline Corridor. The condensate will be transferred by a pipeline to a processing plant in Novy Urengoy for stabilisation.

The table below sets out key details relating to the field:

Partners:	Gazprom (75%); Wintershall Dea (25%)
Start of production:	2020/2021
Development concept:	Onshore gas and condensate production via pipelines
Plateau production	90 mboe/d

Middle East

The Group considers its key development asset in the Middle East to be the Ghasha field.

Ghasha

Ghasha is located in Abu Dhabi and consists of three main development hubs: Dalma, Ghasha-Hail and Deep Gas. Dalma Hub consists of three fields with tie-backs into existing onshore gas processing facilities, to begin gas production in 2022. Ghasha-Hail Hub consists of a two-field ultra-sour gas development dedicated to offshore and onshore drilling facilities, to start production in 2024. Deep Gas Hub consists of two fields with tie-backs into existing onshore gas processing facilities, to begin gas production in 2025.

The table below sets out key details relating to the field:

Country:	United Arab Emirates
Partners:	ADNOC (60%, operator); Eni (25%); Wintershall Dea (10%); OMV (5%)
Start of production:	2022
Development concept:	Offshore (sour) gas and condensate production from (artificial) islands and via pipelines
Plateau production	40 mboe/d

Latin America

The Group considers its key development assets in Latin America to be the Fenix PH I Development, Aguada Federal & Bandurria Norte Development PH I and Zama which are on track to be approved for development in the next 12 to 24 months.

Fenix PH I Development

The Fenix PH I Development is scheduled to maintain the CMA-1 gas production plateau. The planned scope of the project includes the installation of an offshore platform, three horizontal wells, a 24 inch 77 kilometre multiphase pipeline and the adaptation of onshore facilities. The final investment decision is planned for late 2019 to early 2020, with production scheduled for 2022. The table below sets out key details relating to the field:

Country:	Argentina
Partners:	Total Austral S.A. (37.5%, operator); Wintershall Dea (37.5%); Pan American (25%)
Start of production:	2022
Development concept:	Installation of an offshore platform and pipeline to adapt onshore facilities
Plateau production	15 mboe/d

Aguada Federal & Bandurria Norte Development PH I

The Aguada Federal ("AF") & Bandurria Norte ("BN") Development PH-I aims to further de-risk the unconventional oil reservoirs of the blocks and confirm commercial viability of the further developments. Both blocks will be developed at the same time to maximise the synergy opportunities. The scope of the project includes the drilling of around 20 wells in AF and eight wells in BN and the installation of early production facilities and export pipelines. The final investment decision is planned for the first half of 2020, with the first well expected to spud in August 2020.

On 24 July 2019, the Group executed a sales and purchase agreement with ConocoPhillips Argentina Ventures S.R.L. and ConocoPhillips Argentina Holdings S.a.r.l. (together, "ConocoPhillips") to jointly develop the Aguada Federal and Bandurria Norte blocks in the province of Neuquén. As part of the transaction ConocoPhillips Argentina Ventures S.R.L. will acquire a 45 per cent. interest share in the Aguada Federal block. The Group as the operator will retain a 45 per cent. share in the block (97 square kilometres). The remaining 10 per cent. is held by Gas y Petróleo del Neuquén S.A. ConocoPhillips Argentina Ventures S.R.L. will also acquire a 50 per cent. share in the nearby Bandurria Norte block (105 square kilometres). The Group will retain the other 50 per cent. and will remain operator of the block. The transaction is expected to close in 2019, subject to approval by the relevant authorities. The blocks hold significant unconventional oil and associated gas resources in the prospective Vaca Muerta shale formation. Under the terms of the agreement, the Group shall continue as operator of the licenses.

The table below sets out key details relating to the fields:

Country:	Argentina
Partners:	Aguada Federal: Wintershall Dea (45% operator); ConocoPhillips (45%); GyP (10%) Bandurria Norte: Wintershall Dea (50% operator); ConocoPhillips (50%)
Start of production:	2021
Development concept:	20 wells in AF & eight wells in BN. Early production facilities and export lines.

Zama

Overview

Appraisal operations at the Zama discovery to better define the resource potential finished in early July 2019. A total of three wells were drilled: Zama-2, Zama-2ST1 and Zama-3. The Group aims to select a preferred development concept by the end of 2019 and submit for an investment decision approval in 2020.

The table below sets out key details relating to the field:

Country:	Mexico
Partners:	Talos Energy LLC (35% operator); Premier Oil (25%), Wintershall Dea (40%)
Start of production:	Estimated to begin H1 2024

Key exploration projects

The Group's exploration framework seeks to replenish 25 per cent. over a five-year rolling average of produced reserves through the addition of new basins, blocks and prospects. The Group's plans to achieve its framework through licensing, asset swaps, acquisitions and the use of new data and technologies. In particular, the Group focuses on opportunities with a balanced portfolio with competitive cost structures. It sets an annual pre-tax budget of approximately €350 million for exploration projects and targeting findings costs of €5/boe on a five-year rolling average. Post-tax, the Group's budget is significantly lower due to the tax rebate mechanisms in Norway.

The Group's key exploration projects focus on its most attractive regions for growth, including Mexico, Brazil and Egypt, and also infrastructure-led exploration in Norway.

In Norway, the Group currently holds 37 exploration licenses (excluding producing assets and protection acreage), of which 13 are operated. In 2019 and 2020, the Group plans to drill up to 10 exploration and appraisal wells and plans to participate in upcoming bidding rounds.

In Mexico, the Group has 10 exploration blocks, three of which are operated. The Group plans to undertake further exploration activities in existing blocks. It has eight committed and non-committed wells planned between 2019 and 2020, comprising six exploration wells and two appraisal wells.

In Brazil, the Group has seven exploration licenses in the Ceara (operated), Potiguar (operated), Campos and Santos basins. The Group has ongoing plans to acquire and interpret 3D seismic data and participate in upcoming bidding rounds and is looking for partners to join its operated licenses and build a diversified portfolio in the country.

In Egypt, the Group's current exploration activities focus on exploration potential within its West Nile Delta concessions. It is currently looking for partners for the upcoming exploration drilling campaign in Nile Delta Block 10, East Damanhour, adjacent to the existing infrastructure in Disouq.

The Group also conducts exploration activities in other regions and has a wide range of operated and non-operated exploration licenses in Germany, Denmark, the Netherlands, Russia and Argentina. The Group was recently awarded two offshore exploration licenses in Argentina, and is reviewing upcoming bidding rounds in Abu Dhabi and Brazil.

Other assets

Rehden

In 2015, based on a swap agreement, Gazprom acquired the Group's remaining shares in their former JV Wingas, including the Rehden underground gas storage facility. During the operation of the storage facility, gas migration into the upper and lower layers was identified. In the course of the discussions with the Group, Gazprom has raised concerns about losses of storage volumes as well as an insufficient performance of the storage facility and conformity with certain provisions contained the agreements on which the transfer of the storage facility was based in 2015. The Group and Gazprom are continuing to discuss potential avenues for resolution of these issues. There can be no assurance that the Group will not have to bear costs relating to the implementation of any solution.

In connection with the investigations into the migration issues, reports made by the Group for the relevant mining authority ("LBEG") and an independent expert ordered jointly by the Group and Gazprom showed that the gas storage facility is in safe condition.

Libya

The Group owns 51 per cent. of Wintershall Aktiengesellschaft ("WIAG"), which holds production and development rights for two onshore areas in the Eastern Sirte Basin, Libya. WIAG has no DPLTA or parent company guarantee in place with the Group.

WIAG has been active in Libya since 1958, marking its first discovery in 1967 and first oil in 1976. Since 2011, the political and security environment in Libya has been highly volatile and marked by periods of conflict between armed groups with varied political, economic and ideological motivations. Moreover, the oil sector and its infrastructure have suffered tremendously from the effects of this situation. WIAG's ability to export its hydrocarbons have been sporadically disrupted and periodically suspended, which has severely compromised its activities. In addition, protracted shutdowns and the associated interruptions have adversely impacted the oil industry infrastructure required by the assets (including corrosion and integrity issues). Another significant complication is the major backlog of inspection and repair works that are urgently needed due to the unavailability in Libya of qualified maintenance service providers and other key oilfield service providers, which has also led to a postponement of much needed investment projects.

In early 2017, the Libyan National Oil Corporation ("NOC") temporarily excluded WIAG from the crude lifting schedules over a disagreement relating to the contractual basis of WIAG's activities in the country. In the following month, WIAG had to shut in production for economic reasons which NOC did not acknowledge. Following resumption of production in June 2017, WIAG has been recognized on the lifting programs with allocations of volumes sufficient to cover the majority of its operating expenditures. This allocation took place for operating expenses until June 2019. WIAG and NOC entered into negotiations to resolve their dispute by way of transitioning from the existing concession agreements to the Exploration and Production Sharing Agreement (EPSA) IV standard. To date, no final agreement has been signed.

In 2019, the Libyan Companies Accounting Department ("CAD") commenced a review of WIAG's activities during the period 2004-2007, which had been previously audited by the Libyan tax authorities ("Public Control Board" or "Dewan"), with a focus on operating expenses deducted by the company.

WIAG has received informal indications that as a preliminary outcome of CAD's review of 2006 and 2007, CAD is taking the view that a substantial number of tax-deducted expenses incurred in connection with WIAG's onshore production operations in Libya are either impermissible, too high or require further assessment. The review of 2004-2005 is currently still ongoing. For the period from 2008 to date, neither Dewan nor CAD audits have taken place. Limited provisions have been made for potential additional tax claims.

WIAG is also in a dispute with the terminal and export pipelines operator Zueitina Oil Company ("ZOC") over tariff adjustments charged in relation to transportation of production from the As-Sarah field during 2012, 2013 and 2014 and increased charges in relation to the transportation of production during 2015, 2016 and 2017. The basis of this dispute is an increase of up to 500 per cent. in pipeline tariff fees that WIAG believes is unwarranted. This dispute remains ongoing and WIAG has not made payments under the disputed invoices and ZOC continues to provide transportation services. ZOC has not yet taken any legal action, but WIAG has made provisions for the full amounts in dispute.

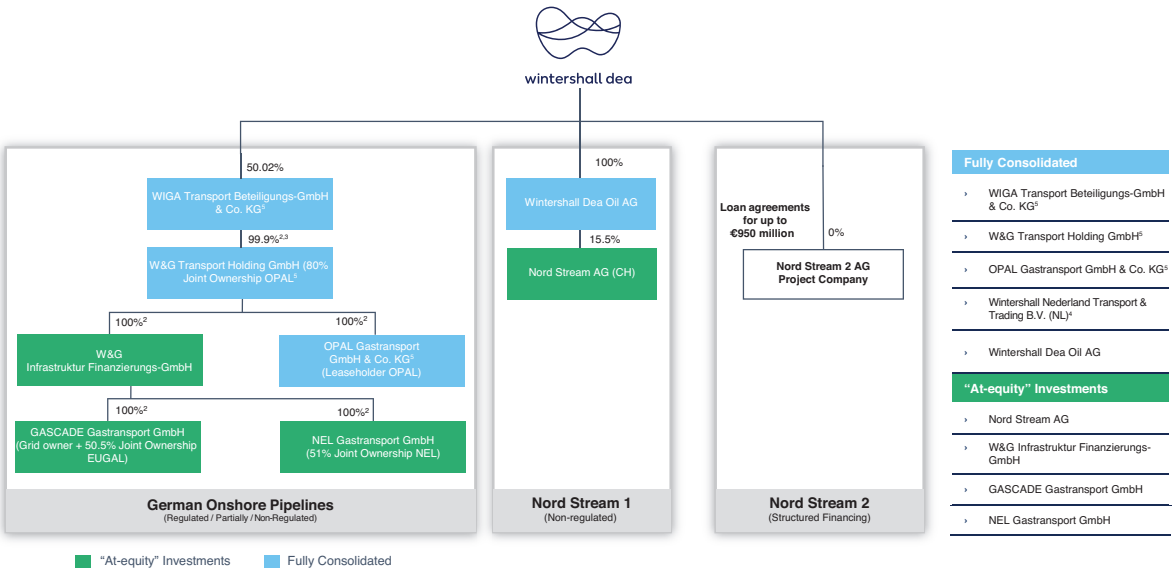
In light of the issues described above and the ongoing high volatility and instability of the political and security situation in Libya, as well as the increasingly unmanageable operational environment, the future operations and financial position of WIAG in Libya are unpredictable and highly uncertain. Consequently, the Group does not currently include any reserves, production or cash flow from these assets in its valuation or business planning.

Through its wholly owned subsidiary Wintershall Petroleum E&P B.V., the Group also holds a minority participation in the EPSA for the development of Block C137 (Al-Jurf field), which is operated by Mabruk Oil Operations, a joint venture between Total and NOC. The field is located offshore in the Mediterranean, stretching along the maritime border of Libya to Tunisia. Production operations of this asset have so far been undisturbed by the security and political situation onshore, whereas exploration activities have been suspended due to negative effects on an onshore supply base. Furthermore, the Group's wholly owned subsidiary Dea Cyrenaica GmbH holds an exploration license in Area 58 (Cyrenaica Plateau), but exploration activities have been suspended under Force Majeure since 2015.

Midstream business

Overview

The Group benefits from a strong presence in the non-cyclical European gas midstream business, which complements its upstream portfolio, including its production and developments assets in Russia. Approximately 36 per cent. of the natural gas supply to Europe in 2018 came from Russia. There is significant demand in Europe for the import of natural gas, and domestic European production, is unable to meet this demand. The Group has therefore seen a strong demand for infrastructure to transport Russian gas to Europe.



SOURCE: COMPANY INFORMATION

[1] INDIRECT OWNERSHIP. [2] PROFIT & LOSS TRANSFER AGREEMENT. [3] REMAINING 0.1% SHARES ARE HELD BY WIBG GMBH (100% SUBSIDIARY OF GAZPROM GERMANIA GMBH). THESE SHARES ONLY HAVE A SHAREHOLDER'S MINIMUM VOTING RIGHTS AND NOT GRANT ANY PROFIT PARTICIPATION RIGHTS. [4] FINANCIAL INVESTOR OF NORD STREAM 2. [5] IT IS EXPECTED THAT BY THE END OF 2019 WIGA, WGTH AND OGT WILL NO LONGER BE FULLY CONSOLIDATED IN THE GROUP'S FINANCIAL STATEMENTS AND WILL INSTEAD BE CONSOLIDATED ACCORDING TO THE EQUITY METHOD

The Group's offshore and onshore pipelines provide capacity to transport natural gas produced in Russia (including by its Russian joint venture companies) and Europe to European consumer markets. The Group has a significant share in offshore and onshore transmission systems, including a shareholding in Nord Stream AG ("Nord Stream 1"), an indirect interest in the GASCADE Network (including EUGAL, which is currently under construction) and fractional ownership in operated pipelines OPAL and NEL. The Group's midstream business also includes the financing of Nord Stream 2. As of 30 June 2019, the Group has contributed €687 million to the financing of the Nord Stream 2 project alongside other international gas and oil companies who form part of the financing consortium. The gas midstream business provides the Group with an important source of price and volume independent, predictable and stable earnings.

The table below sets forth certain information relating to the Group's direct and indirect interests in the principal midstream assets:

Pipeline	The Group's share (%)	Total Capacity (bcm p.a.)	Length (kilometres)	In operation since
GASCADE pipeline network (without EUGAL)	50.0	N/A	2,400	1992
EUGAL (will become part of the GASCADE network)	25.3	55	480	Target for first gas: end 2019
OPAL	40.0	36	473	2011
NEL	25.5	20	441	2012/2013
Nord Stream 1	15.5	55	1,220	2011/2012

Key midstream assets

Onshore

The onshore midstream activities of the Group in Germany are bundled under the holding company WIGA Transport Beteiligungs-GmbH & Co. KG ("WIGA"), which is a joint venture of Wintershall Dea and Gazprom Germania GmbH, which hold equity interests of 50.02 per cent. and 49.98 per cent., respectively.

GASCADE

The high pressure GASCADE transportation network is connected with several European countries directly and guarantees secure energy supplies in Germany and elsewhere in Northern Europe. GASCADE operates a network of natural gas pipelines, which were built in the 1990s and are approximately 2,400 kilometres long. The most important pipelines are the following:

- MIDAL (*Mitte-Deutschland-Anbindungsleitung*), central German Pipeline Link, with a length of 679 kilometres, which connects the North Sea with southern Germany. It runs from Bunde to Ludwigshafen.
- WEDAL (*Westdeutschland-Anbindungsleitung*), western German gas link, which connects the MIDAL pipeline with the Belgian natural gas grid.
- STEGAL (*Sachsen-Thüringen-Erdgas-Anbindungsleitung*), Saxony-Thuringia Natural Gas Pipeline, a 314 kilometres long pipeline, fully commissioned in 1993, which connects Olbernhau on the Czech border with MIDAL near Reckrod in the state of Hesse.
- JAGAL (*Jamal-Gas-Anbindungsleitung*), Yamal Gas Pipeline Link, which measures 338 kilometres and provides a link to the Yamal-Europe pipeline that connects gas fields in Western, Russia, with Germany through the Belarus-Polish corridor.
- RHG (*Rehden-Hamburg-Gasleitung*), Rehden-Hamburg Gas Pipeline, a 132 kilometres long pipeline which transports natural gas to the greater Hamburg region.

In total, the net regulated asset base ("Net RAB") of the regulated gas transportation companies GASCADE and NGT *(NEL Gastransport GmbH)* amounts to approximately €2,600 million as of 2019.

For the third regulatory period for 2018-2022 (defined below), the German regulatory equity returns for new assets at GASCADE and NGT are 6.91 per cent and 5.12 per cent. for old assets. GASCADE has been fully regulated and certified as an Independent Transmission Operator ("ITO") in accordance with section 4a(1) of the EnWG (defined below) since 2013. GASCADE also has an efficiency level of 100 per

cent., which has been confirmed by the FNA. NGT has been fully regulated and certified as an ITO and has an efficiency level of 100 per cent., which has been confirmed by the FNA.

EUGAL

The new European Gas Pipeline Link (EUGAL) is a joint project in fractional ownership between GASCADE (50.5 per cent.), Fluxys (16.5 per cent.), Gasunie (16.5 per cent.) and ONTRAS (16.5 per cent.), with GASCADE responsible for the construction and future operation of the pipeline. EUGAL will act as an onshore connection pipeline of Nord Steam 2, with transport capacity of 55 bcm per year, and will run parallel to OPAL from Greifswald to Deutschneudorf on the German-Czech border.

EUGAL comprises two parallel strings and has a length of approximately 480 kilometres. Further facilities, including a landfall station in Lubmin near Greifswald, a compressor station in Radeland and gas regulating and metering stations are also planned. By connecting to the JAGAL, NEL and third-party pipeline NETRA, EUGAL will be able to transport natural gas in all directions in the future. This strengthens the German and European networks, adds flexibility to gas transport and increases the security of supply within Europe.

All necessary permits are already in place, all pipes have been delivered and the construction has continued as planned. The first string is planned to be completed and ready for operation by the end of 2019 and the second string by the end of 2020. The EUGAL project has been included in the final plan for the development of Germany's network in 2018-2028, and was classified as an approved investment measure by the FNA in January 2019. Fractional ownership of 50.5 per cent. of EUGAL is expected to become part of the GASCADE network in 2019.

NEL

The North European Gas Pipeline (NEL), which is operated by NGT, connects Nord Stream 1 to the pipeline systems in Northern and Western Europe. The NEL pipeline, measuring 441 kilometres, was commissioned in October 2012. NGT (51 per cent. ownership share), a German subsidiary of the Dutch Gasunie (25.13 per cent.) and a German subsidiary of the Belgian Fluxys (23.87 per cent.) hold their shares and market their proportional capacities independently. The entry capacities of NGT are fully booked on a long-term basis. NGT has been fully regulated and certified as an ITO in accordance with section 4a(1) of the EnWG (defined below) since 2013.

After the commissioning of Nord Stream 2, which is expected in the fourth quarter of 2019, NEL will also be able to transport part of Nord Stream 2 volumes of natural gas towards Western Europe.

OPAL

The Baltic Sea Pipeline Link (OPAL), along with NEL, is a connecting pipeline to Nord Stream 1 and transports gas along a stretch of 472 kilometres to the border with the Czech Republic. The pipeline has capacity of 36 bcm of natural gas per year. It came on stream in 2011. The Group indirectly holds a 40 per cent. co-ownership share in OPAL via WIGA Group, which holds 80 per cent., while Lubmin-Brandov Gastransport GmbH, Essen, holds the remaining co-ownership interest of 20 per cent. and markets the respective capacity share of 20 per cent. OPAL is operated by OGT. OGT has been certified as an ITO, subject to conditions, in accordance with Directive 2003/55/EG, since November 2017. OPAL is, to a large extent, exempted from applying the strict regulatory requirements until 2031. For its regulated parts, OGT has an efficiency level of 100 per cent. confirmed by the FNA. OGT has a theoretical net RAB (comprising its fully regulated, partially regulated and unregulated assets) of approximately €700 million as of 2019.

Offshore

Nord Stream

Nord Stream is an offshore pipeline system which connects Russia and Germany, with a capacity of 55 bcm per year via two 1,224 kilometres subsea pipelines. Wintershall Dea has a share of 15.5 per cent. in Nord Stream AG, together with other major companies OAO Gazprom (51 per cent.), the E.ON affiliate PEG Infrastruktur AG (15.5 per cent.), N.V. Nederlandse Gasunie (9 per cent.) and ENGIE (9 per cent.).

Since commissioning in November 2011 (line 1) and October 2012 (line 2), Nord Stream 1 has transported over almost 300 bcm of natural gas. Utilization rates haves increased steadily since 2011 to 100 per cent. in

2018. In Germany, the gas is received by connecting pipelines OPAL and NEL for further transportation onto the European grid.

As a condition relating to an ongoing arbitration matter, Gazprom has undertaken not to dispose of or diminish the value of any of its shares in Nord Stream AG. This undertaking may impact Gazprom's willingness to pass a resolution for the distribution of dividends on shares in Nord Stream AG before the final resolution of this matter, which could impact the Group's ability to receive income in its shares.

Nord Stream 2

The EU's domestic gas production is in rapid decline. To offset the shortfall and secure supplies, Europe and Russia are building the Nord Stream 2 Pipeline, which will travel 1,200 km through the Baltic Sea, starting from the Leningrad coast of Russia and reaching landfall near Greifswald in Germany. The pipeline will have an annual capacity of 55bcm and is expected to be operational in late 2019.

Nord Stream 2 will, to a large extent, be similar to Nord Stream 1 and consist of two pipeline strings measuring approximately 1,220 kilometres, connecting Russia and Germany with a total capacity of 55 bcm per year. The laying of Nord Stream 2 is progressing and as of August 2019, more than 1,700 kilometres of pipe has been laid in the Baltic Sea.

Nord Stream 2 is being developed and constructed by Nord Stream 2 AG, which is a wholly-owned subsidiary of Gazprom. Wintershall Dea takes part in the project as a financial investor and has committed, together with other European partners (ENGIE, OMV, Shell and Uniper), to provide long-term financing for 50 per cent. of the total costs of the project, which is estimated to be €9.5 billion. Each company will fund up to €950 million, split into mezzanine debt of €285 million and a bridge loan of €665 million. The Group's financing is without equity risk or volume risk exposure. As of 30 June 2019, Wintershall Dea has paid out €687 million for the project. The bridge portion of the financing is expected to be refinanced externally in 2021.

Regulation

Currently, the midstream market in the EU is regulated under the Third Energy Package of the EU of 2009 and, for Germany, by the Energy Industry Act ("EnWG") which transposes the Third Energy Package into national law and a number of other legislative acts. These regulations have a significant impact on the earnings of a TSO such as the Group and consequently on the value of its midstream business. The German TSOs are subject to incentive-based regulation (the "incentive regulation") to the extent not exempted which is the case for the OPAL pipeline. The main aspects of the incentive regulation in Germany are: the applicable regulatory period, determining the base level of costs, efficiency benchmarking, setting the revenue caps and returns on investments, as described below.

The German energy regulator, the FNA, determines in advance the maximum revenue the network operator may receive on a year to year basis during a five-year period (the "regulatory period"). The audited costs for the operation of the network (determined on the basis of the regulated asset base ("RAB") set by the FNA prior to the beginning of each regulatory period), as well as the efficiency benchmarking of the network operators, provide the basis for determining the allowed revenues. For the regulatory period, the operator's costs and revenues are decoupled. By setting a fixed amount of revenue, the network operator has an incentive to increase its potential profits or reduce possible losses.

The FNA calculates and determines a rate of return on capital for each regulatory period which reflect the risks involved and the conditions in the financial markets. This rate of return, however, may be achieved by the operator if its efficiency level of 100 per cent. was confirmed by the FNA (where the actual costs of the operator, at a maximum, correspond to the set revenue cap). The incentive regulation aims to incentivise the TSOs to operate as efficiently as possible and to ensure cost efficiency. Cost reductions will be passed on to consumers. The differences between the revenue generated and revenue cap are entered onto the regulatory account and are offset in the following years after realization. The incentive regulation also provides tools that allow network operators to get an adjusted revenue cap in order to cover the costs of large expansion investments during the regulatory period.

Material agreements relating to the Group's assets

Agreements Governing Petroleum Activities

Norway

The Group's licenses in Norway operate under a standard Joint Operating Agreement (the "JOA") which governs the relationship between the licensees and is the basis for the day-to-day management of the activities, allocation of costs, decision making processes and the operators' duties. The JOA covers all phases of the license activities from exploration through development and production and cessation of the activities. The joint venture participants are primarily liable to each other on a pro rata basis in accordance with their participating interests, and in the case of default by a licensee, are jointly, and severally liable for all costs, expenses and obligations arising out of the venture's activities (excluding tax liabilities). A licensee may withdraw from a license joint venture, but only after the mandatory work obligations imposed by the authorities in connection with license award or license extensions have been fulfilled. The produced hydrocarbons are allocated in kind to the licencees in accordance with their shares in the license and sold individually by each licensee.

If a hydrocarbon deposit extends over more than one production license, the licensees must enter into a unitization agreement. The Group's unitization agreements are typically based on terms similar to the JOA and the main commercial provisions, such as the scope of the unit, the tract participation and unit interest split and voting rules are negotiated. Unit agreements create a new joint venture and a new management committee, consisting of all licensees in the respective production licenses over which the deposit extends. The hydrocarbon produced is allocated to the unit partners in accordance with their unit interest share. Pursuant to some unit agreements, tract participation and unit interest may be re-determined from time to time on the basis of the underlying licenses' contribution to reserves, production or other agreed criteria and procedures. Its economic interest in developments, which are subject to unit agreements, may therefore vary over time.

Use of existing production facilities and oil transportation pipelines are based on negotiated agreements. A regulatory framework is in place in Norway to ensure that the cost of use of existing infrastructure shall not exceed the owners' cost of use along with a reasonable profit to cover the incremental risk undertaken by the owner. Typically, the user of the infrastructure covers the cost of equipment and work required on the facilities and any tariff imposed on the production to cover operating cost and profit. In some cases, the tariff is replaced by an agreed procedure for sharing of operating expenses between the owner and the user. If the owner plans to cease operation of the existing infrastructure, the tie-in agreements may, subject to certain terms, be terminated by the owner. If no agreement on third-party access is reached through negotiations by the owner and user groups, the Ministry of Hydrocarbon and Energy can impose a solution on the parties, including the commercial terms for third-party use, such as tariffs.

Germany

The Group's German licenses are mainly covered by consortium agreements which govern the relationship between the licensees and form the basis for day-to-day management of the activities, allocation of costs, decision making processes, the operators' duties etc. The produced hydrocarbons are allocated to the licensees in accordance with their shares in the license pursuant to the consortium agreement. Generally, all partners decide unanimously about the working programme, particularly regarding the execution and financing of any new exploration and/or drilling. The agreements generally terminate upon expiration of the relevant concession or the final exploitation of the resources in that area.

If a hydrocarbon deposit extends over more than one production license, the affected licensees are required to enter into a pool agreement. The Group's pool agreements are typically based on standard terms and the main commercial provisions, such as the scope of the unit, the tract participation and unit interest split and voting rules are negotiated. The standard terms are based on the standardised consortium agreement terms. Pool agreements create a new joint venture and a new management committee, consisting of all licensees in the respective production licenses over which the deposit extends. A pool agreement governs, among other things, (i) the formation of a unit; (ii) the tract participation of each license, and how this may be re-determined from time to time, (iii) the operator's rights, duties and obligations and (iv) the work programme and the relationship between the licensees for the co-ordinated activities, including the establishment of a management committee. The hydrocarbons produced from the field(s) covered by a pool agreement are allocated to the unit partners in accordance with their unit interest share, as applicable.

Certain of its assets are also subject to an agreement on operational management, which stipulates that the parties thereto participate in any expenditures and exploitation relating to the production facilities in the same proportion as stipulated by the pool agreement.

Russia

The Group's Russian production assets are governed by shareholders' agreements, which form the basis for day-to-day management of the assets. Generally, the board of directors (including the Group's nominees) or shareholders of the Group's Russian production assets (each being a joint venture) decide by qualified majority or unanimously on material adjustments to the plans on subsoil development, the approval of the budget, amendments to the key contracts entered into by the relevant company and of material financing (as applicable).

At Achimov I and Achimov IV & V, the joint ventures operate under service agreements. The joint ventures in this case do not directly hold the licenses, but own the project infrastructure. All works for the project are done pursuant to a service agreement with the license-holding company, which is a subsidiary of Gazprom. All extracted resources are owned by a Gazprom subsidiary (as the license holder) and the joint ventures are paid under the service agreement and in respect of Achimov IV & V the joint venture purchases the extracted resources from a Gazprom subsidiary (the license holder). With respect to Yuzhno Russkoye, the joint venture holds the license, owns infrastructure, has ownership rights to the extracted resources and bears full responsibility for the project's financing and implementation.

Egypt

The Group's Egyptian assets are governed by concession agreements between it, the Arab Republic of Egypt and the Egyptian General Petroleum Corporation ("EGPC"), or the Egyptian Natural Gas Holding Company ("EGAS") or the Ganoub El Wadi Petroleum Holding Company ("GANOPE"), as applicable. EGPC, EGAS or GANOPE, as applicable, controls and performs executive activities in many aspects of the Egyptian hydrocarbon industry, including exploration, production, refining, transportation and marketing.

The concession agreements govern, among other things, the operation of the asset following commercial discovery, recovery of operating costs and expenses and production sharing between the Group and EGPC, EGAS or GANOPE, as applicable. Usually the concession agreement contains the definitions, the grant of rights, the license holder's obligations, time frames and relinquishment rules during the initial exploration period and its extension, the applicable rules in case of a commercial discovery and the production sharing terms during the production phase. Subject to these agreements, the Group funds all costs and expenses in respect of exploration, development and related operations but is entitled to recover these costs and expenses through production, to the extent such production is not used in operations and up to an annual cost recovery cap of all hydrocarbons produced. These agreements also govern the proportion of any remaining production to split between the Group and EGPC, EGAS or GANOPE, as applicable. This system does not apply to the flagship West Nile Delta project because the concession agreements for the West Nile Delta project neither contain any right to recover costs in kind nor any production split for the production from the initial reserves. However, economically the costs and expenses in respect of exploration, development and operations are reflected in the gas price and production entitlement agreed with EGPC.

Argentina

In Argentina, oil and gas exploration and exploitation licenses are normally governed by joint venture agreements. Under Argentine Law, these agreements are framed as a temporary union of companies (the "UT") regulated by Articles 1463 et. seq. of the Argentine Civil and Commercial Code. The UT does not constitute a separate legal entity with respect to the parties that comprise it, except with respect to accounting and tax matters. The UT must be registered before the Public Registry of Commerce and needs to appoint a representative to establish a domicile and to constitute a minimum operative fund for the purpose of registration. The UT governs the relationship between the parties and forms the basis for day-to-day management of the activities, allocation of costs, decision making processes, the operators' duties etc. A management committee is established as the supreme body of the UT, in which all parties are represented, and have a vote pursuant to their participating interest.

Mexico

The Group's Mexican assets are covered under consortia with different oil and gas companies. For each of these consortia, the Group has executed joint operating agreements to establish the rights and obligations of the members of the consortium in respect of the operation and the activities under the relevant grants its holders; all based on AIPN international standard terms. Under each of the consortia the Group established an operating committee, where decisions for these activities are discussed and adopted; in general, decisions are taken by at least two members of the relevant consortia, except in the event of deadlocks, where decisions to timely comply with minimum work obligations under the respective grants or other decisions specifically required to ensure safe and reliable operations ultimately are with the relevant operator, and other key decisions which require unanimity, such as voluntary relinquishment, unitization, termination of the relevant grant or its amendment.

Gas and Oil Sales Agreements within the E&P business

Norway

The Group sells its Norwegian oil and gas production under various sales and purchase agreements with third-party buyers. Such third-party buyers are generally high-quality counterparties who have strong records of timely payment. These agreements are partly term contracts and partly stipulating that the Group sells and the buyer purchases 100 per cent. of the production from a given asset (up to a maximum annual quantity). Contract durations vary. Gas prices under these contracts are usually linked to hub prices such as UK national balancing point (NBP) or Dutch TTF. The Group usually bears the transport costs up to the virtual trading points under these contracts. In some cases, fixed gas prices for a longer duration have been agreed with certain buyers. Oil sales prices in these contracts are generally linked to the reference oil such as Brent and Norwegian Norm price differential to specific blends like Oseberg Blend. Condensate/NGL contract prices usually are linked to widely used price publications.

Germany

The Group's German crude oil production volumes from Mittelplate and Emlichheim are sold to major oil companies. The Group has an established alternate marketing route for crude oil production from Mittelplate in the event that buyers do not offtake the crude oil.

Condensate produced at the Group's Mittelplate production is sold to a major industrial customer at prices linked to wholesale gas market. The crude oil sold is linked to international crude oil benchmarks such as Brent. Condensates that are produced at its Hemsbünde field are marketed under sales agreements to a major oil company, including the production shares from the other partners in the Hemsbünde consortium. The purchase of the partners' shares in production is administered under separate purchase agreements.

The Group's German gas, to the extent not used for own consumption and own production for internally used electricity, is sold either directly to third-parties mainly based on EFET standard terms or spot via the wholesale market (via brokers or PEGAS). The pricing is based on market prices (fixed or floating). The Group has several EFET agreements with major trading and gas distribution companies in place. The Group sells the gas volumes via a tender process or via OTC trades to its EFET partners at the virtual trading points.

The Group also purchases under a long-term contract physical gas from a Norwegian producer in North West European Hubs until 2023 and currently delivers most of this gas to a chemical company via regulated pipelines with delivery points in Germany and Benelux countries. All the gas not sold to end-users from this long-term contract is marketed via its direct wholesale market access.

Russia

The marketing of gas from Yuzhno Russkoye is conducted through take or pay sales agreements between the joint venture and Gazprom and indirectly through its shareholders' trading companies to Gazprom.

Natural gas and gas condensate production in Achimov I operates under a service agreement with the relevant license holder (a wholly-owned Gazprom subsidiary) which pays a service fee. The gas and gas condensate after the extraction is owned by this license holder and is marketed by Gazprom Group.

For Achimov IV & V, the joint venture provides services on hydrocarbons production to the license holder (a wholly-owned Gazprom subsidiary) under a service agreement. Under the joint venture, the license holder pays for the rendered services and the extracted hydrocarbons are purchased from this license holder. The joint venture sells these hydrocarbons to the shareholders' trading company (also owned by the joint venture) which, in turn, sells them to Gazprom for its further distribution to customers.

All of the production from the Group's Russian assets is sold via long-term agreements. A portion of the gas production is priced by reference to the regulated gas prices in Russia. These arrangements provide the Group with a high degree of visibility over revenues associated with these assets and reduces its exposure to market price fluctuations.

The other portion of the gas production is priced by reference to German and international market indices. The pricing of the liquids is also partially based on international market indices, which provides the Group with a high degree of transparency on the price level.

Egypt

In Egypt, with respect to gas production, the Group generally enters into gas and condensate sales agreements with EGAS or EGPC, as applicable. The gas sales agreements terms are linked to the life of the relevant field and the agreement remains in effect until (i) production is no longer economically sustainable in the judgement of all parties, (ii) the expiration of its rights under the relevant concession agreement or (iii) the mutual decision of both parties to terminate the gas sales agreement.

With respect to oil, the Group enters into term sales contracts with EGPC which generally have a period of 12 months. Parties may choose to extend the sales agreement not later than 90 days prior to the expiry of the respective period. Under the term sales contracts, the Group must make available to EGPC the total quantity of its share of oil production under the relevant concession agreement. As for any incremental oil production above an agreed baseline, an existing export agreement is in place, to market such incremental oil by EGPC on its behalf.

All of the production from its Egyptian assets is sold on a contracted basis with prices set by reference to quality differentials for liquids and international benchmarks such as Brent, NBP or Henry Hub for gas. The Group's major gas production from WND is priced within the range of a floor and cap, reducing its exposure to market price fluctuations. These arrangements provide the Group with a high degree of visibility over revenues associated with these assets.

The combination of life-of-field contracts for gas and the growing domestic demand in Egypt as well as the relatively fixed prices provides the Group with a degree of offtake and pricing security.

Argentina

The Group monetises the hydrocarbons it produces under sale and purchase of oil agreements and sale and purchase of gas agreements. The oil production is primarily sold to a multinational oil and gas company. Oil prices are linked to international oil prices with a specific quality and transport differential. With respect to natural gas, the Group sells equity gas to all market segments, while maximising volumes to the most profitable ones (LDC, CNG, power generation, industrial segment and exports).

A majority of the production from the Group's Argentinian assets is sold on a contracted basis with prices set by bilateral negotiations or reference to governmental regulations. The gas sales contracts currently have, on average, one year-duration but there are also very short-term basis agreements (based on daily and monthly spot prices). Prices in regulated sectors are dictated by the government, which comprises around 40 per cent. of sales. One of the largest gas buyers is CAMMESA which focuses on buying gas for power plants in the country. The other main buyers are the distribution companies ("LDC") who supply gas to residential and commercial customers. Exports to Chile through pipelines are increasing with time due to oversupply in the country.

Mexico

The production from Ogarrio is sold to Pemex. Sales are made in accordance with oil and gas purchase agreements with Pemex covering a period of two years, which is automatically renewed for periods of one year unless terminated by a party with 90 days' prior written notice.

Gas and Oil Transportation Agreements

Norway

The Group has entered into transportation agreements providing for the transport, handling and redelivery of oil produced by its Gjøa, Vega Unit, Nova, Edvard Grieg and Maria fields. Generally, these agreements remain in force until these assets cease to produce oil.

The Group has entered into agreements for transportation, processing and fractionation of gas and natural gas liquids from its Gjøa, Edvard Grieg, Nova and Vega fields to the Shell and Exxon Gas and Liquids ("SEGAL") system and SAGE terminals.

The Group has entered into an agreement for processing, storage and onward transportation of Snorre crude oil and gas with the Statfjord group participation interest holders. The agreement covers (i) the treating of the Snorre gas in the Statfjord processing facilities and the transportation of the processed gas into and through the Statfjord intrafield pipeline system and subsequent redelivery into the Statpipe pipeline, and (ii) the processing of Snorre crude oil in the Statfjord processing facilities and the transportation of the processed oil to loading facilities for subsequent redelivery into oil tankers.

The Group has entered into a Contract of Affreightment ("COA") with Teekay Shipping Norway AS for the shipment of crude oil from the Knarr field. The COA has a firm duration of six years from the start-up date with four options to extend the contract by one year at the charterer's options.

The Group has entered into an agreement for transportation, processing and fractionation (the "TPFA") of Knarr and other gas and natural gas liquids in the SEGAL system and the offtake of ethane with the SEGAL owners in the UK. The agreement regulates the capacity and right to use of the SEGAL facilities both offshore and onshore. The agreement terminates on the earlier of the date the SEGAL system permanently discontinues operations or the date when production of shipper gas permanently ceases.

The Group has entered into an individual commercial agreement with Esso Exploration and Production UK Ltd ("ESSO") for the transportation, processing and fractionation of Knarr gas and natural gas liquids. The agreement sets out the terms upon which ESSO shall provide its services under the agreement for transportation, processing and fractionation of Knarr gas and natural gas liquids. The agreement terminates on the earlier of the termination of the TPFA or October 1, 2021.

The Group has entered into an individual commercial agreement with Shell UK LIMITED ("SHELL") for the transportation, processing and fractionation of Knarr gas and natural gas liquids. The agreement sets out the terms upon which SHELL shall provide its services under the agreement for transportation, processing and fractionation of Knarr gas and natural gas liquids. The agreement shall terminate on the termination of the TPFA.

All production from its Snøhvit facility is sold on free on board terms and consequently no transportation arrangements are required.

Most of the gas and oil transportation agreements contain send or pay provisions according to which the Group has to make payments for the transportation to the agreed quantities (daily, monthly, annually) even when transportation services were not called. In addition, each party shall indemnify, with certain exceptions, the other for damages, including indirect losses ("knock-for-knock"). There are no caps on total liability.

Germany

The Group's Mittelplate crude oil is transported by pipelines owned and operated by the Group to two separate tank farms in Brunsbüttel (Schleswig-Holstein). The first is linked to the refinery in Heide (Schleswig-Holstein) where a greater share of the Group's Mittelplate crude oil is refined and the second to the local bitumen refinery in Brunsbüttel operated by a major oil company. The Group has the rights to use this tank storage in Brunsbüttel for export purposes.

The Group's Emlichheim crude oil is currently transported by railroad transport to a refinery in Lower Saxony. The railroad transportation will be replaced by a pipeline owned and operated by the Group's, the construction of which is expected to start in November 2019. The pipeline will transport the crude oil production to Osterwald, where it will be channelled into an existing pipeline operated by a joint venture including the Group to the refinery in Lingen. The start of the pipeline transportation is scheduled for November 2020 and the transportation agreement with the railroad transportation company is terminated with effect as of end of December 2020.

Oil from Hankensbüttel fields (Lower Saxony) is transported by pipeline to a terminal in Misburg (Lower Saxony), and then delivered by railway to a refinery in Northwest Germany. The two transport sections are governed by two transport contracts with regional oil logistic companies.

The Group's German gas is delivered primarily via a regulated transport system to the relevant market areas and customer exit points.

Russia

Gas from Yuzhno Russkoye field is shipped by the joint venture to the gas metering station near the western border of the Russian Federation through the gas transmission system under the respective gas transportation agreements with Gazprom. The gas transportation agreement with Gazprom contains a description of transportation services provided by Gazprom (including parameters of gas metering, gas quality, gas acceptance regime) and states the terms of payment agreed by the parties considering the applicable gas transport regulations of the Russian Federation.

Egypt

The Zeit Bay and Ras Budran oil and gas fields have their own facilities to treat, process, handle and ship oil and gas. In Zeit Bay, processing facilities are used as a hub serving not only the Group's own production, but also production from neighbouring concessions of oil and gas fields. The main services provided are storage, handling, processing and loading. Each field's transportation, storage, handling and processing services are governed by a separate agreement. All charges are at cost (in addition to a portion of the overheads) and are used to minimize the total burden of running costs in the Zeit Bay facilities.

For WND concessions production, some of the existing fields are treated in host facilities against payment of a tariff. The arrangement is governed by a transportation, processing and operating service agreement with the host. For the remaining fields under such concessions, the Group has existing self-owned infrastructure for treating and processing gas. The Group also shares a few of its services with neighbouring host facilities under a facility sharing and operating service agreement.

Argentina

The oil produced by the Group jointly with its partners in the Aguada Pichana East Block and the San Roque Block (Neuquén Basin), is transported through two different oil pipelines, owned by YPF S.A. and OLDELVAL S.A., respectively. The legal framework which regulates the access to the oil pipelines' transportation capacity establishes an open access regime, which means that any oil producer may have access to the available transportation capacity. The fees charged by the owners of the oil pipelines for the transportation service are regulated by the National State.

With respect to the natural gas production, customers of the Group usually book transport capacity as gas is usually sold at the wellhead or central processing plant.

Mexico

The gas and oil produced from the Ogarrio license is sold directly after separation. The crude oil is eventually sent for distribution to the Palomas Crude Oil Commercialisation Centre ("CCC Palomas"). After separation, the gas is sent for compression to the Ogarrio Compression Station via a gas pipeline. A portion of the compressed gas volume is sent to the gas-lift network of the field, while the other portion is sent to La Venta Gas Processing Complex.

Health and Safety

The Group actively manages the safety of all personnel working in its operations, including through the application of health and safety standards, the implementation of security measures at its facilities and internal and external audits of health and safety risks. Pursuant to its health and safety principles the Group endeavours to:

- shape HSEQ culture through its own behaviour by promoting cross-unit learning, exchanges and collaboration and driving cultural development;
- provide a safe and healthy working environment for those working on its behalf;
- identify, understand and manage security risks worldwide to protect the company, its colleagues and ensure business continuity; and
- implement and maintain robust barriers for known risks as well as practices to create awareness of early signals to minimise damage in case of accidents.

The Group has established safety cases for all operated production facilities and has robust emergency preparedness, incident management and business continuity plan in place as well as regular training for employees and contractors in all locations. Its management systems are in line with the international ISO

standard for occupational health and safety (ISO 45001) and regional certification of ISO 14001 and 50001.

The Group continuously strives for zero harm to people, the environment and its assets. In support of this, the Group uses a range of measures to track its HSE performance, such as the industry recognized metric LTIF. LTIF is benchmarked on a regional basis for closer comparison with our peers. In 2018, on a pro forma basis, the Group recorded a global LTIF value of 0.24, which lies below the industry average of 0.7 (IOGP Europe). For the 12 months ended 31 July 2019, the Group recorded a global LTIF value of 0.4 on a *pro forma* basis. To facilitate continuous improvement a process is in place to report incidents, including a systemic approach to analyses, follow-up, remedial actions and communication of results.

Environmental Protection

The Group is committed to protecting the environment for current and future generations. The Group is subject to extensive laws and regulations governing environmental matters. The Group is committed to the Paris climate targets and is working to reduce the impact of its activities on the climate.

The Group has been a member of the IPIECA since 2017 and supports the World Bank's Zero Routine Flaring by 2030 initiative. The Group stopped the routine flaring of associated gas in 2012 and instead used this gas to generate electricity, heat and steam, which has led to carbon dioxide reductions and savings, and 70 per cent. of its production is low-carbon gas.

In 2017, the Group also committed to continuously reduce its methane levels, which is released during production or transport of natural gas and the Group was one of the initial eight signatories to the Methane Guiding Principles. This commitment includes making improvements along the entire value chain and endorsing reasonable measures and regulations regarding methane emissions. The Group measures its methane emissions in exploration and production and derives action plans to reduce them.

As the Group operates in ecologically-sensitive shallow water zones, such as the North German Wadden Sea (Mittelplate), the Group believes it has a responsibility to be aware of its impact on the environment and the measures it can take to mitigate this impact. For example, at its Mittelplate asset, the Group has focused on implementing several environmental-friendly measures including zero discharges and zero flaring, supplying via low draught ships, dimmed lighting, low noise levels and adhering to environmentally sensitive pipeline construction guidelines. The Group has not had any oil-related incidents at Mittelplate for more than 30 years. In addition, the Group performs water risk assessments on several of its sites and engages in platform recycling in the North Sea.

The Group is focused on improving the technology and infrastructure for natural gas by investing in gas exploration and production worldwide in places like Norway and Russia, whose natural gas reserves are among the world's largest. At the same time, the Group also supports innovative natural gas technologies. For example, the Group is one of the partners of the Innovation Award of the German Gas Industry and initiators of the "Zukunftswerkstatt Erdgas" project to promote new power-to-gas and decarbonisation of natural gas developments.

The Group is also in the process of digitalising its core processes to support its long-term sustainability and viability in areas such as climate protection, adherence to international social standards and long-term growth. The Group has over 70 pilot digitalization projects under development, each with a pilot period of three months, aimed at optimising production plans and stabilising the problem of slugging.

Other environmental matters and proceedings

Wietze sludge pit

The Group has been summoned as a party in administrative proceedings initiated by Zweckverband Abfallwirtschaft Celle against the state of Lower Saxony, which is represented by Landesamt für Bergbau, Energie und Geologie (LBEG), the competent mining authority. Zweckverband Abfallwirtschaft Celle is a voluntary alliance of local government entities, acting as competent authority regarding waste management and soil protection in the Wietze area.

The Group previously owned and operated a sludge pit (Zentralschlammgrube Wietze) close to its facilities in Wietze. The pit was built in 1933 and in use until 1968. It was sold to the district of Celle in 1984. The district originally intended to use the pit as a landfill site, but never did so. According to the claim, the Lüneburg Administrative Court should oblige the Mining Authority LBEG to take measures

against the Group as the former operator and owner of the pit in order to safeguard and avert typical mining hazards.

A full excavation of the pit, which the Group considers unlikely to be required, would lead to costs which could exceed €20 million, depending on the method of disposal. The Group believes that sealing of the pit as proposed by an external expert would entail costs of approximately €5 million.

Emlichheim

Emlichheim is one of the oldest oil fields in Germany, situated on the Dutch border. The Group has been recovering oil there for more than 70 years. In 2018, during maintenance work on the injector wells Emlichheim 132 (Em 132) and Emlichheim 51 (Em 51), the Group discovered damage to the casing at depths of between 148 and 788 meters. Water that is also produced during oil production is returned to the oil reservoir through the wells to maintain pressure in the reservoir. Upon discovery of this damage, the Group shut down the two wells concerned and informed the responsible authorities.

Extensive investigations have been and continue to be carried out to ascertain whether and where water has leaked from the defective areas of the reservoir. A recovery test carried out on Em 132 shows that reservoir water has leaked into the surrounding formation and, consequently, further investigation of the geological and hydrochemical conditions down to greater depths is being conducted. The extent of the reservoir water leakage was determined by injection tests. The Group's initial estimates assume that between 2014 and 2018, between 140,000 and up to 220,000 cubic metres of reservoir water were leaked. To monitor the groundwater quality, suitable monitoring sites were installed close to the surface. The ongoing investigations of samples from these monitoring sites have shown that there are currently no indications of a hazard to human health. Following the discovery of the damage at Em 132 and Em 51, the remaining injection wells in operation at Emlichheim were investigated and no similar issues were found.

The Group is working with the relevant authorities to assess and remediate any contamination.

Social Responsibility

The Group's ambition is to generate economic and social value in the communities where it operates by creating local jobs and supporting local supplier development. For example, in Egypt and Algeria, all operations during field development and production are executed by operating companies established by these joint ventures and which recruit, wherever possible, local staff. Foreign expert personnel are seconded to these joint ventures only where necessary in order to add a required specific skill. Alongside the development of the Disouq gas fields in Egypt, the Group has designed a program to support the local community with agricultural projects. Furthermore, tendering procedures in the joint ventures also ensure a priority to contract services with local companies, according to defined rules taking into account capabilities and commercial aspects.

The Group is committed to being a responsible and accountable member of society that engages constructively with all relevant stakeholders. To achieve this aim, we foster dialog and regularly inform about our activities. We also support diverse social, cultural and educational projects and invest in the local people and communities in which we operate. Our social engagement is based around education and science, culture, and social participation. For example, in Germany, the Group supports external vocational training, voluntary fire brigades, and organizations supporting the homeless and has worked with school organizations to support technical and mathematical education through practical industry insights. In Norway, the Group partners with the Stavanger Symphony Orchestra and in Russia supports a circus project for disadvantaged youth. In Egypt, the Group provides scholarships for students at Alazhar University and supports the GIZ Vocational Training and the German School in Cairo. The Group is particularly focused on promoting science and technology. Together with its partner, Gazprom, the Group launched the Young Vision Award for budding scientists which honours students' sustainable and efficient technology solutions in the field of oil and gas production.

Insurance

The Group maintains the types and amounts of insurance coverage that it believes are consistent with customary industry practices in the jurisdictions in which the Group operates. Its oil and gas properties and liabilities are insured within an operational insurance package. Coverage under the terms of this insurance package includes physical damage, property damage, operators extra expense and third-party liabilities. Coverage is placed in respect of worldwide assets and oil and gas exploration and production activities.

Limits and deductibles in force are in line with international oil industry insurance standards. The Group also carries general liability, directors and officers, and marine and storage insurances. The Group believes it has adequately provisioned for, or otherwise protected its operations against, risks consistent with customary industry practices.

The Group's philosophy is to arrange such other insurance from time to time in respect of its other operations as required and in accordance with industry practice and at levels which the Group feels adequately provide for its needs and the risks that it faces. The Group has not made any material claims under its insurance policies that would either make them void or materially increase their premiums.

The Group's investments in its North African and Russia assets, as well as its investment in Ogarrio, Mexico, benefit from investment guarantees provided by the Federal Republic of Germany for direct investments made by German companies in developing and emerging countries. These guarantees cover direct investments made by German companies in developing and emerging countries and provide protection against certain political risks, including expropriation, nationalization, civil wars, wars or other armed conflicts and payment embargoes or moratoria, under certain conditions. The coverage of the guarantees is limited by the general terms and conditions. The guarantee amount is capped up to 95 per cent. of the nominal guarantee amount respectively by 95 per cent. of the time value of the project. In general, there can be no assurance that these investment guarantees will provide sufficient protection against all the types of risks the Group faces at its assets located in the relevant countries. Accordingly, there can be no assurance that these investment guarantees will provide sufficient protection against all the types of risks the Group faces at its assets located in the relevant countries.

IT

The Group has a centralized IT function headed by the SVP of Information Technology. The Group utilizes the IT system to fulfill its operational requirements in respect to functionality, availability, security, and costs for all business units and central functions. It also acts as the central reporting line for all IT resources.

After the Merger, the Group is designing a new greenfield IT organization and operating model which will consist of predominantly cloud-based services. Legacy IT structures will be modernised or replaced as part of the post-Merger implementation programme aimed at reducing maintenance efforts and improving end-user experiences. Information services and support for business know-how will be retained in-house.

Employees

The Group believes it has a strong and established team of highly competent professionals in its core disciplines of business development/M&A, exploration, development and production. Its business model involves using the services of the oil and gas industry supply chain to supplement its in-house capabilities, benefiting from the dedicated and highly experienced resources of its contracting partners for execution of its operational programmes. The Group believes it has well established working relationships with these core contracting partners.

As of 30 June 2019, the Group has approximately 2,830 FTE employees.

Certain of our employees in Germany, Norway and Argentina are unionized. The Group also has agreements with unions in Germany mainly covering salaries for workers and these are up for renewal by April 2020.

As part of the post-Merger integration process, the Group is in the process of negotiating redundancy plans with works councils and unions to reduce headcount by approximately 1,000, mainly in Germany and Norway.

The Group believes that the Group has overall good relationships with its employees and the unions involved and has not experienced any significant labour disputes, strikes or lock-outs during the last three years.

Legal and other proceedings

The Group becomes involved from time to time in various claims and lawsuits arising in the ordinary course of its business. The Group may also be impacted by claims or suits relating to its licenses or assets where it is not directly a party, for example where a party may seek to challenge a government or other

authority's award of a license or contract. Set out below are descriptions of the legal and other proceedings that the Group believes are material.

OPAL

The Group indirectly holds a 40 per cent. co-ownership share in the OPAL pipeline via WIGA and its subsidiaries, W&G Transport Holding GmbH ("WGTH") and OGT, which holds 80 per cent., while Lubmin-Brandov Gastransport GmbH, Essen, holds the remaining co-ownership interest of 20 per cent. and markets the respective capacity share of 20 per cent. There are two proceedings, one before the European Court, brought by state owned entities in Poland and Ukraine and the Republic of Poland, and the other before the Higher Regional Court of Düsseldorf, brought by state owned entities in Poland and Ukraine, in an attempt to void a settlement agreement between OGT, Gazprom, Gazprom export and the German energy regulator with the consent of the European Commission, regarding the exemption of the OPAL pipeline from certain regulatory restrictions. If the claims are successful, the settlement could be voided and OPAL would then be subject to an initial exemption which would prohibit market dominant players in the Czech Republic from booking more than 50 per cent. of the exit capacities of the OPAL pipeline to the Czech market and which would potentially result in lower bookings.

The European Court has rejected all claims for preliminary injunctions and the claims against the European Commission brought by the state owned entities, but sustained the claim against the European Commission brought by the Republic of Poland. There was an oral hearing before the European Court on 23 October 2018. The Higher Regional Court of Düsseldorf court rejected claims for preliminary injunctions and suspended proceedings until decision of European Court is announced. Should the European Court find in favour of the claimants, it is expected that the Higher Regional Court of Dusseldorf would follow that ruling even though the parties to the claim before that court differ. The European Commission and other defendants have a right of appeal, but there is currently no visibility on whether they would do so. Should the European Court find against the claimant, the claimant has the ability to appeal the ruling before the European Court of Justice.

On 10 September 2019, the European Court issued its decision in the matter involving the exemption of the OPAL pipeline from certain regulatory restrictions. The decision voided the approval by the European Commission of the modification of the 2009 exemption from regulation. As a result of the ruling, the level of bookings for the OPAL pipeline will revert to levels compliant with the 2009 exemption. It is expected that the relevant parties will enter into discussions targeting a joint way forward to address the requirements of the ruling. The European Commission and involved member states have a right of appeal, but the Group currently does not have visibility on their intentions.

These pending legal actions against the OPAL settlement agreement could limit the marketing of OPAL capacity in the future and thus adversely impact the performance of the Group.

PCA

The Group takes part in the Nord Stream 2 project as a financial investor and has committed, together with other European partners (ENGIE, OMV, Shell and Uniper), to provide long-term financing for 50 per cent. of the total costs of the project, which is estimated to be €9.5 billion. The Polish competition authority ("PCA") instigated competition proceedings on 30 April 2018 in connection with these financing arrangements. In these proceedings, the PCA alleges that the Group's subsidiary, Wintershall Nederland Transport and Trading B.V., as well as the other lenders infringed their notification obligations by participating in the financing of the Nord Stream 2 project without submitting the transaction for approval in violation of the Polish Act on Competition and Consumer Protection.

The Group believes the claim is unfounded and represents the PCA applying an unconventional approach in this case by adopting a wide interpretation of the notion of concentration. However, in light of the high profile nature of these proceedings and the Nord Stream 2 project more generally, there can be no certainty that the PCA will not find a violation and attempt to assess fines or other remedies, which could be material.

REGULATORY OVERVIEW

Oil and gas production is regulated under a wide range of statutes, rules, orders and regulations in the jurisdictions in which the Group operates, including laws related to: location of wells, drilling and casing of wells and well production limitations; spill prevention plans; surface use and restoration; platform, facility and equipment removal; the calculation and disbursement of royalties; the plugging and abandonment of wells; bonding; permits for drilling operations; and production, severance and ad valorem taxes. Oil and gas companies may encounter delays in drilling as a result of requirements for obtaining relevant permits and other authorizations. The operations of the Group are subject to regulations governing operating restrictions and conservation matters, including provisions for the unitization or pooling of oil and gas properties in fields, the establishment of maximum rates of production from oil and gas wells, and prevention of flaring or venting of natural gas. Conservation laws have the effect of limiting the amount of oil and gas the Group can produce from its wells and limiting the number of wells or the locations at which it can drill.

Below is a summary of certain key aspects of the legal and regulatory regime for the major jurisdictions in which the Group operates.

Norway

General framework

Oil and gas operations on the Norwegian Continental Shelf ("NCS") are subject to extensive regulation. The overarching objective of this regulation is to maximize production to the benefit of the Norwegian society.

According to the Norwegian Petroleum Act of 29 November 1996 No 72 (the "Petroleum Act"), the proprietary right to subsea petroleum deposits is vested in the Norwegian State. On this legal basis, the Norwegian State grants licenses to oil companies to explore and produce petroleum. It supervises and controls all phases of petroleum related activities on the NCS and participates in petroleum related activities through the State's Direct Financial Interest ("SDFI").

The Petroleum Act provides the overall principles applicable for operations on the NCS and the legal framework for the licensing system and prohibits petroleum activities such as exploration and production without a license. The Petroleum Act also regulates exploration, development, production, transportation of petroleum, decommissioning and liabilities, with more detailed regulation on these issues being set forth in regulations issued under the Petroleum Act. These regulations are also supplemented by other statutes such as the Working Environment Act and the Pollution Protection Act.

The Norwegian Petroleum Taxation Act of 13 June 1975 No 35 (the "Petroleum Taxation Act") sets out the legal basis for taxation of offshore petroleum activities.

The ultimate regulatory authority with respect to the petroleum activities on the NCS is exercised by the Norwegian Parliament ("Stortinget"). The overall responsibility for ensuring that the petroleum activities are carried out in accordance with the regulatory framework laid down by Stortinget rests with the Ministry of Petroleum and Energy (the "MPE"). Subordinated to the MPE is the Norwegian Petroleum Directorate (the "NPD") whose activities relate to resource management where it has been delegated authority and day-to-day issues. The Petroleum Safety Authority ("PSA"), the regulatory authority for technical and operational safety, including emergency preparedness, and for the working environment, is subordinated to the Ministry of Labour. Policy and legislation concerning taxation of the petroleum industry is handled by the Norwegian Ministry of Finance and annual tax assessments are carried out by the Oil Taxation Office. The Norwegian Environment Agency ("NEA") has regulatory responsibility for pollution caused by petroleum activities on the NCS.

Licensing System

The Norwegian offshore licensing system comprises various licenses, approvals, agreements and other mechanisms. Companies can apply for an exploration license for the purpose of exploration activities, typically to perform geological and other surveys (excluding drilling to oil-bearing strata) in a certain area. Such licenses are granted for a period of three years, unless another period of time is stipulated. This license does not give any exclusive rights in the relevant area nor any preferential right when production licenses are granted.

The production license is the core document in the licensing system on the NCS and gives the licensee an exclusive right to explore (including exploration drilling) for, develop and produce petroleum in the block(s) covered by the license. There are two systems for awarding new production licenses on the NCS. Production licenses may be awarded in licensing rounds, which normally are arranged every second year. In addition, unlicensed acreage in mature areas on the NCS is opened for application in annual award procedures. This second award system ensures that areas close to existing and planned infrastructure are available for the industry on a more continuous basis. This area will be expanded as new areas mature.

The production license can be awarded to one or several oil companies who are qualified to act as licensees on the NCS, and such companies become licensees upon such an award. One of them is appointed as operator by the MPE and becomes responsible for the daily operations of the parties' joint activities in accordance with the production license.

A production license usually sets out a work program that the licensees will need to complete within a specified time limit.

License interests can also be sold and purchased between oil companies. Assignments of license interest are subject to the MPE's approval, and also to a tax clearance from the Norwegian Ministry of Finance. The Ministry of Finance will apply a principle of tax neutrality, which means that the seller's gain from the sale shall not be taxable, and the purchaser's costs in acquiring the interest shall not be deductible for Norwegian tax purposes. Transfers of controlling interests in companies holding production licenses are also subject to approval.

If a company holding a license interest is dissolved or enters into debt settlement proceedings or bankruptcy proceedings, the MPE has a right to revoke the licenses held by such party. If there are fixed facilities on the field where the license is revoked, the State is given a right to take over such facilities. The Norwegian King (in practice the Norwegian Government) decides with binding effect if and to what extent compensation shall be paid for the takeover.

The revocation of a license by the MPE for whatever reason does not entail release from the financial obligations following from the Petroleum Act, regulations issued pursuant to the Petroleum Act or the license. If a mandatory work obligation or other obligation has not been fulfilled, the MPE may demand payment, in full or in part, of the amount which fulfillment of the obligation would have cost. The amount shall be stipulated by the MPE with binding effect.

If the licensee has a parent company, the parent will regularly be required by the MPE to furnish a parent company guarantee, on a standard format provided by the MPE, to guarantee fulfilment of obligations undertaken by the licensee towards the State or Norwegian public institutions, and for the licensee's other possible liabilities in connection with petroleum activities. If such security provided for the company's obligations and liabilities becomes significantly weakened, the MPE has the right to revoke the license.

The Petroleum Tax Act

Companies participating in exploration, production and pipeline transportation of petroleum on the NCS are liable to petroleum tax pursuant to the Petroleum Tax Act (the "PTA"). The total marginal income tax rate for companies engaged in such activities is 78 per cent., consisting of a 22 per cent. general corporate tax and a 56 per cent. special petroleum tax to the State. The petroleum tax is levied on a corporation net profit level, not on a ring-fenced basis.

In brief, the petroleum tax system can be described as follows:

Sales income (crude oil valued at norm prices)

- Operating costs (inclusive exploration costs and indirect taxes)
- Depreciation (16⅔ per cent. for six years)
- Interest cost (capped for special tax)
- Losses carried forward with interest
- Corporate tax base taxed at 22 per cent.
- Uplift (5.2 per cent. per year for four years)
- Special petroleum tax base taxed at 56 per cent.

Crude oil that is extracted from the NCS is for tax purposes assessed according to a norm price system, whereby the sales prices are fixed by an administrative body. The norm price shall correspond to the price at which petroleum could have been traded between independent parties in an open market. Income generated by sale of gas is, with very few exceptions, assessed on actual arm's length sales prices.

A licensee on the NCS that is subject to Norwegian petroleum tax can deduct all relevant exploration and production costs, including costs associated with exploration, research and development, financing, operations and removal.

Investments in production installations and pipelines are permitted depreciated pursuant to a straight-line method at a rate of 16.67 per cent. annually from the year in which the investments take place, i.e. deprecation for 6 years (at a tax rate of 78 per cent.). Other types of investments related to the petroleum activity on the NCS may receive depreciation deductions according to the ordinary reducing balance system (at a tax rate of 78 per cent.). In addition, an uplift of 5.2 per cent. annually is granted for four years in the special petroleum tax base (with a tax rate of 56 per cent.) based on investments made as from 2019 in production installations and pipelines. For investment costs incurred before May 5, 2013 (in addition to development costs comprised by a PDO submitted before May 5, 2013, subject to detailed transitional rules), the uplift rate is 7.5 per cent. over four years. The purpose of the uplift is to contribute to ensuring that normal returns are not subject to the special petroleum tax.

Net financial costs incurred on interest-bearing debt and related foreign currency exchange gains (losses) are deductible against income taxed at 78 per cent., but are capped as follows:

$$\text{Offshore tax deduction} = \left(\text{Net interest cost} + \text{exchange gain(loss)}\right) \text{x 50 per cent.} \, \text{x} \frac{\text{Tax value offshore assets 31.12}}{\text{Average interest-bearing debt}}$$

The tax value of the offshore assets equals capitalised cost after tax depreciation as of December 31 in the income year in question. Any costs in excess of this cap fall within the ordinary corporate tax regime (onshore) together with other general financial items, implying that such costs are deductible against income taxable at the general tax rate of 22 per cent. If the taxpayer does not have any income which is taxed under the ordinary corporate tax regime from which the excess costs can be deducted, the tax payer may deduct an amount from its offshore income but only so as to give it an effective deduction against 22 per cent. tax.

The timing of income and deductions generally follows the realization principle for tax purposes, i.e. when the income is earned or the expense is unconditionally incurred by the taxpayer. Provisions in the accounts based on prudence are generally not deductible for tax purposes.

Losses can be carried forward indefinitely. Interest is added for losses incurred in 2002 and subsequent years. The calculated interest is added to the loss carry forward at the end of each year. Losses generated by other activities taxable to Norway may as a general rule not be set off against assessed income for special petroleum tax (56 per cent.) and there are limitations on the right to set off other losses against the offshore general income tax (22 per cent.). If there remains an uncovered loss upon the discontinuation of activities that are liable to special petroleum tax, the taxpayer may claim payment from the State of the tax value of such loss.

Refund of Tax Value of Exploration Cost

Companies which are not in a tax position may annually claim a refund from the State of the tax value of direct and indirect costs, except financial cost, incurred in connection with exploration for petroleum resources on the NCS. The tax value is set to the total of relevant direct and indirect exploration costs multiplied by the tax rate, currently 78 per cent. The refund will reduce the tax loss to be carried forward correspondingly. The amount of exploration costs may not exceed the annual net loss from the petroleum activities of the taxpayer, to ensure that the costs are not already set off against taxable income. A future exploration refund claim may be used as security for financing purposes.

Refund of Tax Value of Loss Carry Forward upon Cessation

Companies may claim a refund of the tax value of loss carried forward when the entire business activity liable to the special petroleum tax ceases. The tax value is the loss carried forward multiplied with the tax rate, which is currently 78 per cent.

A loss carried forward may also be transferred to a buyer together with the entire business activity in which the loss originated. Thus, if a company sells all its production licenses, it may also transfer the loss carried

forward to the buyer, who in turn, under normal circumstances, can set off the loss against other taxable income. The same applies upon a merger with another company, where the transferring company may transfer the loss to the receiving company.

Germany

General framework

In Germany, the exploration and production of oil and gas are governed by the German Federal Mining Act of 13 August 1980 ("Federal Mining Act", *Bundesberggesetz*) and various ordinances, including the Ordinance on the Environmental Impact Assessment of Mining Projects of 13 July 1990 (*Verordnung über die Umweltverträglichkeitsprüfung bergbaulicher Vorhaben*). In addition, offshore oil and gas installations and operations are subject to the Offshore Mining Ordinance of August 2016 (*Offshore-Bergverodnung*) implementing in particular EU Directive 2013/30/EU on the safety of offshore oil and gas operations.

The Group is subject to certain EU-Regulations which apply to it directly, and don't require transfer into German law, including Regulation (EC) No 1907/2006 on the registration, evaluation, authorisation and restriction of chemicals (REACH Regulation), Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP Regulation), Regulation (EC) 2018/1999 on the governance of the Energy Union and Climate Action, amending Regulation (EC) No 715/2009 on conditions for access to the natural gas transmission networks and repealing regulation, Regulation (EC) No 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register (as amended by Regulation (EU) 2018/0205), Regulation (EU) 2017/852 on the banning of exports of metallic mercury and certain mercury compounds and mixtures and the safe storage of metallic mercury and Regulation (EC) 1013/2006 on shipments of waste. In addition, the Group's offshore oil and gas installations and operations are subject to EU Directive 2013/30/EU, which lays down minimum requirements for member states and the European Maritime Safety Agency with the aim of preventing major accidents related to offshore oil and gas operations and limiting their environmental and social consequences.

Furthermore, the Group has established a legal register with the most important German legal provisions in the HSE sector currently comprising more than 200 provisions. This register is continuously updated and the information on relevant updates is spread amongst all departments involved.

German mining law

Pursuant to the Federal Mining Act, the exploration and production of hydrocarbons such as crude oil and natural gas has to be authorised by the competent authority. In particular, mining activities are subject to a two-step authorisation procedure:

- The Federal Mining Act set forth a specific regime on mining rights necessary for mining activities, namely for the exploration and production of mineral resources. Mining rights are being granted upon application by the state mining authorities as exploration licenses (*Aufsuchungserlaubnis*), production licenses (*Gewinnungsbewilligung*) or mining property (*Bergwerkseigentum*). The holder of a mining right has the exclusive right to explore and/or produce and to appropriate the respective mineral resources in a certain field. Mining rights are only required for public mineral resources (*bergfreie Bodenschätze*). These are mineral resources of a high relevance for the public, such as coal, salt, and hydrocarbons (including oil and natural gas). Exploration licenses will be limited to a maximum of five years and can be extended by three years each time whenever the respective field could not be sufficiently explored. Production licenses and mining property will be granted for a certain reasonable period which usually shall not exceed 50 years and which can be extended if production is still ongoing.
- Any activity (e.g., seismic, drilling, production, abandonment) may only be commenced after a mining permit (*Betriebsplanzulassung*) has been issued. The operator has to submit an operating plan (*Betriebsplan*) describing the project which, by means of the mining permit, will be approved by the mining authority if all legal requirements are met. If the operator intends to deviate from an approved operating plan or to extend or modify the existing activities or installations he must submit an amended plan for approval.

The Federal Mining Act differentiates between four types or operating plans:

- the (facultative or mandatory) framework operating plan (*Rahmenbetriebsplan*),

- the main operating plan which is generally valid for no more than two years (*Hauptbetriebsplan*),
- the special operating plan for specific activities or facilities that are not suited for the main operations plan (*Sonderbetriebsplan*),
- the abandonment operating plan including the remediation and renaturation of the mining area (*Abschlussbetriebsplan*).

The main operating plan serves as the comprehensive framework of the activity and has to include a description of the scope, the technical execution and the duration of the project. All operating plans have to be approved by the mining authority which examines the technical concept, the safety and protection of workers, neighbours, environment and property, as well as compliance with the Federal Mining Act. Furthermore, in particular the requirements regarding habitats and species protection under EU Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora and EU Directive 2009/147/EC on the conservation of wild birds, each as implemented in the Federal Nature Protection Act of 29 July 2009 (*Bundesnaturschutzgesetz*) need to be considered in the approval procedure.

The Federal Mining Act further includes specific provisions on the liability for mining damage, in particular the so-called presumption of a mining damage (*Bergschadensvermutung*). In brief, it provides for a *prima facie*-proof regarding the causal link between the mining activity and the damage, and thereby modifies the general allocation of the burden of proof.

Royalties

Pursuant to the Federal Mining Act, the holder of an exploration concession or, respectively, production license or of mining property is obliged to pay an annual exploration royalty (*Feldesabgabe*) or, respectively, a production royalty (*Förderabgabe*) to the respective federal state. The royalty is calculated according to the volume of the concession field and the volume and the value of the respective mineral resource. Details are provided for in state ordinances on exploration and production royalties.

Environmental Impact Assessment and Framework

The approval of a framework operating plan is mandatory if operations require a comprehensive Environmental Impact Assessment (*Umweltverträglichkeitsprüfung*—EIA). The framework operating plan will be issued in the form of a plan approval decision (*Planfeststellungsbeschluss*) as a result of a formal plan approval procedure including EIA and participation of the public.

Projects requiring an EIA are listed in the Ordinance on the Environmental Impact Assessment of Mining Projects. According to this, an EIA is required for production of oil and natural gas with a minimum daily production volume of 500 tons of oil or 500,000 cubic meters of natural gas. For lower production quantities, an EIA is required if a general case-by-case screening (so-called preliminary EIA (*UVP-Vorprüfung des Einzelfalls*)) indicates that the project may have significant detrimental impacts on the environment. Furthermore, an EIA is mandatory in particular for the exploration and production of oil or natural gas by means of hydraulic pressure (fracking), including deep drillings and scientific test measures, for the exploration and production of oil or natural gas requiring construction and operation of offshore platforms, for the disposal and removal of reservoir water produced in the course of exploration and production of oil or natural gas, including disposal wells, to the extent environmental impacts have not been assessed in the course of any of the abovementioned four authorising procedures, as well as for deep drillings beyond 1000 meters depth for production or exploration, if a preliminary EIA indicates that the project may have significant detrimental impacts on the environment. In addition, an EIA has also to be conducted if the project is listed in Annex 1 of the Environmental Impact Assessment Act. Thus, certain installations which are usually associated with oil and gas installations, such as certain gas pipelines or large compressors may also require EIA.

Energy taxation

Oil and gas are subject to taxation under the Energy Tax Act (*Energiesteuergesetz*). The energy tax is a consumption tax which arises when energy products leave the producer or the distributor. With respect to gas, the tax arises when the gas is extracted from the grid for consumption. The producer and the distributor transfer additional costs created by the tax to the consumers who ultimately pay the indirect tax. The Energy Tax Act determines tax rates for energy products, certain deviating rates as well as specific exceptions from the tax obligation. For example, pursuant to the Energy Tax Act, energy products other

than coal and natural gas may be used for the production of energy products free of tax at the premises of the producing entity.

Russia

The most important legislation governing the geological survey, exploration and production of natural resources from the subsoil in Russian Federation is the Federal Law No. 2395-1 of February 21, 1992 "On Subsoil Resources" ("the Subsoil Resources Law") and with respect to natural gas supply is the Federal Law No. 69-FZ of March 31, 1999 "On Gas Supply in the Russian Federation" ("Gas Supply Law").

Gas Supply Law

Under the Gas Supply Law, Russian federal authorities have jurisdiction over natural gas supplies, including, among other things, the development and implementation of government policy on natural gas supply, the regulation of strategic natural gas reserves, federal state monitoring and control over the industrial and environmental safety of the natural gas supply systems, federal state control (compliance monitoring) over setting and (or) application of the state-controlled prices (tariffs) in the gas supply sector, standardisation, unification of measurement, mandatory confirmation of compliance with respect to natural gas supply and setting reliability and quality standards for gas transportation services.

With respect to gas supply, the government has the authority to, among other things: (i) set the procedure for forming and approving the projected natural gas production and sales balance in Russia based on available gas resources, technical capacity of the gas transportation system and anticipated demand for energy supplies, (ii) set the principles for determining the natural gas prices and natural gas transportation services tariffs for gas transportation through pipelines and gas distribution networks, (iii) approve procedures for compensation of losses incurred by gas distribution companies that supply gas to subsidized households, (iv) regulate natural gas deliveries, (v) approve gas utilization and gas supply regulations; (vi) set procedures for providing independent organizations with access to the natural gas transportation and distribution networks, (vii) set procedures for utilization of gas as fuel, (viii) set procedures for limitation of supply and withdrawal of gas, (ix) determine the categories of customers, including those that have the pre-emptive right for gas utilization as engine fuel, to whom natural gas deliveries cannot be restricted or suspended, (x) approve regulations as regards determination of reliability and quality of transportation services through gas distribution networks, (xi) approve regulation regarding zones of minimal distances to the trunk or field pipelines, (xii) approve standard forms of documents required for the connection (technological connection) of capital construction to the gas distribution network, and (xiii) set forth requirements for persons engaged in technical maintenance, repair and technical diagnostics of the domestic gas equipment or designate the federal authority authorised to determine such requirements.

Subsoil Licensing

In 1992, the Subsoil Resources Law introduced a licensing system governing the geological survey, exploration and production of natural resources from the subsoil in Russian Federation. Subsoil within the borders of the territory of the Russian Federation is state-owned property. Subsoil plots cannot be subject of purchase, sale, donation, inheritance, contribution, pledge or to be alienated in other form. However, minerals and other resources extracted from subsoil under the terms of a license can be in federal state-owned property, property of constituent entities of the Russian Federation, municipal, private and in other forms of ownership. Licenses are generally awarded by the federal authority responsible for management of state property in the area of subsoil use, which in accordance with Governmental Resolution No. 293 of June 17, 2004, as amended, is Rosnedra, or by its territorial branches.

The Subsoil Resources Law provides criteria for determining subsoil plots of federal importance and defines legal grounds for establishment and termination of rights to use subsoil plots of federal importance. Under the Subsoil Resources Law, subsoil plots of federal importance are awarded by the Government of the Russian Federation through auctions or without an auction procedure with respect to the subsoil plots of federal importance included in the list approved by the Government or through other procedures. The most important criterion for determining an auction winner is the amount of the proposed payment for the right to use the subsoil.

There are several categories of licenses applicable to the geological survey, exploration and production of natural resources, including: (i) licenses for geological survey; (ii) licenses for exploration and production of natural resources; and (iii) licenses for geological survey, exploration and production of natural

resources (combined licenses). Under the Subsoil Resources Law, licenses are granted either for the term stipulated in the license or for an indefinite term. Geological survey licenses may have a maximum term of 5 years (10 years for geological survey of subsoil areas of internal sea waters, territorial seas and the continental shelf and 7 years for geological survey of subsoil areas located in whole or in part in certain Russian regions with severe environmental and weather conditions which an exhaustive list is provided in the Subsoil Resources Law); exploration and production licenses may have a term of the expected operational life of the field based on a feasibility study that provides for rational use and protection of subsoil; production licenses for underground waters may have a maximum term of 25 years; licenses for the production of natural resources based on the short-term right to use subsoil plots may have a maximum term of one year. The Subsoil Resources Law allows the subsoil user to request an extension of the existing license in order to complete either the exploration and appraisal, or exploitation of the field or the procedures necessary to vacate the land once the exploration, appraisal and exploitation of the subsoil is complete, subject to compliance with the terms and conditions of the license. Indefinite term licenses (not related to production of natural resources) are provided, in particular, for the construction and operation of underground waste burial facilities and oil and gas storage facilities.

Under a license agreement, the licensee assumes certain undertakings, for instance, obligations with respect to the period and volume of exploration, provision of pre-project and project documentation, payments for subsoil use, agreed extraction volume of natural resources, compliance with environmental safety requirements, elimination of environmental pollution, and, in certain instances, assurance of employment and development of infrastructure. When a license expires, the licensee, at its own cost, shall restore the relevant subsoil plot to a condition which is adequate for future use. The licensee can incur administrative liability, including fines, or the license can be revoked, suspended or limited if the licensee breaches material terms of a license, including timing and scope of works at a subsoil plot, submission of required reports, as well as in cases of direct threat to the lives or health of the people working or residing in the area where licensed activities are carried on, in case of emergency or other circumstances.

Most of the conditions provided by license are based on mandatory provisions of Russian law; however, other provisions may be negotiated by the parties subject to mandatory provisions of the Subsoil Resources Law.

A holder of a license for subsoil use, including geological survey of natural resources, appraisal and exploration of fields, must make one-off payments for subsoil use under certain conditions as may be provided in the license including one-off payments in the event of the change of subsoil area borders, and regular payments for subsoil use. The regular payments for subsoil use based on economic and geographic conditions, size of the subsoil area, type of natural resources, period of exploration, geological profile of the subsoil plot and degree of risk. Such payments are charged separately on each type of subsoil use works and with the account for the stage of geological process and pursuant to specific rates set by Rosnedra within the range established by law.

The right to use subsoil may be subject to early termination, suspension or limitation by the bodies that have awarded the license in cases stipulated in the Subsoil Resources Law (most often—in case of material violation of the license terms by the subsoil user).

Transportation and supply of gas

The relationship between natural gas suppliers and off-takers is governed by the Gas Supply Law, the Regulation on Natural Gas Supplies in the Russian Federation approved by Government Resolution No. 162 dated February 5, 1998 ("Resolution No. 162"), as amended, and other regulations.

In order to enter into a gas supply contract, a customer shall send to a gas supplier a gas purchase request, which shall specify, among other things, required gas volumes, anticipated period of supply and the initial supply date. The gas supplier shall process the gas supply request within 30 days and send to the customer an offer, or a written motivated refusal, to enter into a contract.

Customers that purchase natural gas for the government, utility consumers and households have a priority when entering into natural gas supply agreements, and other customers seeking to extend the duration of their existing natural gas supply agreements, when extending such duration.

In accordance with the Gas Supply Law, consumers are required to pay for natural gas supplies and transportation services. The Gas Supply Law and related gas supply rules contain provisions aiming at securing payments for supplied gas and transportation services. In particular, customers having overdue debt for gas supplies exceeding twice their average monthly gas invoice are required to provide a payment

guarantee to suppliers. If the customers fail to pay for gas, suppliers have the right to impose penalties and to limit or suspend natural gas supplies to such consumers in accordance with specific procedures provided for by a number of government resolutions. Government Resolution No. 364 dated May 29, 2002 provides for special terms and conditions of gas delivery to institutions responsible for national security. The supplier may not suspend or limit gas supplies below the budget obligation limits provided by the state-related customer for its affiliated institutions.

Environmental requirements

Russian environmental legislation establishes a "pay-to-pollute" regime. The Federal Service for the Supervision of the Use of Natural Resources, which is subordinate to the Ministry of Natural Resources and Ecology of the Russian Federation, exercises supervision over use of natural resources, environmental protection (including technological and environmental impact restrictions and the handling of hazardous wastes but excluding nuclear waste), controls geological exploration, the rational use and protection of subsoil (including compliance with the relevant terms and conditions of subsoil licenses) and exercises land control over most of the land plots.

Fees are assessed for both pollution within the limits agreed on emissions and effluents and for pollution in excess of these limits. Payments for negative impact on environment are reduced by expenses incurred in connection with measures taken to mitigate such negative impact including any payments made to introduce best available technologies (technologies implementing latest scientific and technical achievements and allowing for optimal combination of various criteria for environmental protection).

Fines may be imposed for certain breaches of environmental regulations. Environmental protection laws require compensation to be paid to the budget for any environmental loss caused by pollution. In the event of a dispute concerning losses caused by breaches of environmental laws and regulations, the prosecutor's office or other authorized governmental bodies may bring suit. Courts may also impose clean-up obligations.

Subsoil licenses generally require certain environmental commitments. Although these commitments can be substantial, the penalties for failing to comply and the clean-up requirements are generally low.

Health and Safety

The principal law regulating industrial safety is Federal Law No. 116-FZ dated July 21, 1997 "On Industrial Safety of Hazardous Industrial Facilities," as amended (the "Safety Law"). The Safety Law applies, in particular, to industrial facilities where certain activities related to drilling and production of gas, among other things, are carried out. The Safety Law also contains a comprehensive list of hazardous substances and their concentrations for the purposes of classification of hazardous facilities, and extends to facilities where these substances are or can be used.

Activities of certain of our Russian subsidiaries include operation of certain hazardous industrial sites regulated by the legislation of Russian Federation, including but not limited to federal laws and regulatory acts of federal executive body—the Rostekhnadzor. Project documentation relating to laying up or liquidation of a dangerous industrial site is subject to industrial safety expert review. Project documentation in relation to reequipment of a dangerous industrial site has to be reviewed by a licensed expert with the results of the review to be submitted to the Rostekhnadzor unless the documentation is subject to expert review in accordance with the urban planning legislation. Any amendment of project documentation in respect of the construction or reconstruction of dangerous industrial sites needs to be reviewed by a licensed state expert in accordance with the Russian urban planning legislation. Any amendment of project documentation in respect of the laying up or liquidation of dangerous industrial sites is subject to industrial safety expert review. Any amendment of project documentation in respect of the technical reequipment of a dangerous industrial site is subject to industrial safety expert review and has to be agreed with the Rostekhnadzor or its territorial body unless such documentation is a part of the project documentation which is subject to expert review in accordance with the Russian urban-planning legislation.

Companies that operate hazardous industrial sites have a wide range of obligations under the Safety Law and the labour legislation of the Russian Federation. In particular, they must limit access to such sites to certified specialists without any medical contra indications, maintain industrial safety controls, carry insurance for third party liability for injuries caused in the course of operating hazardous industrial sites and form financial and material reserves that could be used to contain or liquidate consequences of an

accident on a hazardous industrial site. The Safety Law also requires these companies to enter into contracts with professional emergency-rescue companies or if provided by the legislation create their own emergency-rescue services and conduct personnel training programs, create systems to cope with and inform respective state authorities and local residents of accidents and maintain these systems in good working order.

In case of an accident, a special commission led by a representative of the Rostekhnadzor conducts a technical investigation of the cause. The company operating the industrial facility where the accident took place must bear all costs of the investigation and provide the special commission with all necessary information required to conduct an investigation. The Rostekhnadzor may suspend a company's operations or impose other administrative liability on a company or its officials.

Any company or individual violating industrial safety rules may incur administrative and/or civil liability and individuals may also incur criminal liability. A company that violates safety rules in a way that adversely impacts the health or causes death of an individual may also be liable to compensate the individual for lost earnings, as well as health related damages.

The Safety Law classifies all industrially hazardous assets into four groups: 1st hazard class or extremely dangerous assets, 2nd hazard class or highly dangerous assets, 3rd hazard class or moderately dangerous assets, and 4th hazard class or lowly dangerous assets. Depending on potential consequences of an accident for individuals and society and in accordance with a set of criteria established by the Safety Law, operational facilities are assigned relevant hazard classes upon registration of such facilities in the state register. For instance, industrially hazardous assets in gas distribution and utilization are deemed 2nd hazard class if they are designed to transport natural gas under pressure in excess of 1.2 MPa or liquefied petroleum gas ("LPG") to the extent the pressure is greater than 1.6 MPa. Gas distribution and gas utilization networks designed to transport natural gas under pressure from 0.005 MPa to 1.2 MPa or LPG under pressure from 0.005 Mpa to 1.6 MPa are deemed 3rd hazard class. Gas distribution and gas utilization networks, including LPG facilities, operating under pressure 0.005 MPa or below are not considered to be industrially hazardous assets. Safety measures to be observed in operating industrial facilities are prescribed by the hazard class applied to a particular asset. In certain cases, companies operating hazardous industrial sites must prepare declarations of industrial safety which would summarize the risks associated with operating a particular dangerous industrial site and measures the company has taken and will take to mitigate such risks and use such site in accordance with applicable industrial safety requirements. Declaration of industrial safety must be prepared in relation to 1st and 2nd hazard class assets. Such declaration must be adopted by the chief executive officer of the company, who is personally responsible for the completeness and accuracy of the data contained therein, and is subject to the state industrial safety review and registration with the Rostekhnadzor.

Egypt

General framework

The principal Egyptian legislation governing the extraction of oil and gas in Egypt and Egyptian territorial waters are the Egyptian Mining and Quarries Law No. 66 of 1953 and the Mining and Quarries Law 198 of 2014 ("Mining and Quarries Laws"). The Mining and Quarries Laws regulate and organize, among other things, the terms and conditions required for the exploration and extraction of oil and gas as well as mines and quarries.

The EGPC is the state entity charged with managing upstream activities, including infrastructure, licensing and production. EGAS is responsible for promoting the gas sector, establishing a development strategy and distributing tenders. In 2003, GANOPE was established to promote exploration and development activities in the frontier Upper Egypt area.

The Egyptian Income Tax Law No. 91 of 2005 ("Egyptian Income Tax Law") regulates the amount of taxes payable by contractors on profits realised from exploration and extraction activities under the relevant underlying concession agreement ("CA"). Under the Egyptian Income Tax Law, contractors are subject to a 40.55 per cent. tax rate. Under the terms of the relevant CA, the EGPC pays amounts owed under the Egyptian Income Tax Law on behalf of the contractor out of EGPC's share of petroleum saved.

The licensing system

The EGPC, EGAS and GANOPE are responsible for the licensing, exploration, production, refining, transporting and marketing of the country's oil and gas. Since 2003, each offer their own separate annual bid rounds. Bids are available for exploration and development and are subject to an examination and approval process of up to one year.

Exploration concessions

Exploration concessions granted under the CAs provide the holder the exclusive right to explore for hydrocarbons, e.g., oil and natural gas, (including drilling) in a defined concession area. Exploration concessions range from 7 – 9 years and are divided into three phases. The concession holder must relinquish 25 per cent. of the original area following each of the first and second phases. Following the end of the third exploration phase, the concession holder must relinquish any remaining areas of the concession that have not been converted into development leases.

Development leases

Following a commercial oil or gas discovery the extent of the whole area capable of production shall be mutually agreed by EGPC/EGAS and the contractor and will be subject to the approval of the Ministry of Petroleum. Such area will be converted automatically into a development lease without the issuance of any additional legal instrument or permission. Oil development leases typically carry an initial period of 20 years with one five-year extension period. Gas development leases are granted for a period of 25 years. For development projects, a joint venture between the EGPC or EGAS (50 per cent.) and concession holder(s) (50 per cent.) is established to operate the field. The joint venture is non-profit and all capital and operating costs are funded by the concession holder(s) to be recovered via a cost recovery mechanism agreed by virtue of the relevant CA.

Production sharing

Since 1973, all E&P companies doing business in Egypt operate under CAs. The contract parties to a CA include the Egyptian government, the EGPC or EGAS or GANOPE and the concession holder(s). While the concession holder bears all exploration risks under the CA, the cost recovery and production sharing terms are negotiable. CAs are generally structured as follows:

- *Bonuses:* signature, production and other bonuses are payable;
- *Costs:* a percentage of production is available for the recovery of operating and capital costs;
- *Profit:* remaining production after cost recovery is divided between the concession holder and EGPC/EGAS on a sliding scale basis linked to production shares; and
- *Royalties and Taxes:* royalties and taxes are paid by EGPC/EGAS on the concession holder's behalf based on its share of production.

United Arab Emirates

General framework

Oil and gas is generally regulated on a provincial level in the UAE, with each Emirate governing the sector through its regulatory bodies. The natural resources and wealth in each Emirate are deemed to be public property of that Emirate, and the ruler of each Emirate retains ultimate control over the exploration, extraction and management of its own natural resources.

The Ministry of Energy organises and develops general policies and legislation pertaining to oil and gas, subject to the constitutional rights of the Emirates and under their consultation.

In Abu Dhabi, the Supreme Petroleum Council ("SPC") established under Law No. 1 of 1988 formulates and oversees the implementation of Abu Dhabi's petroleum policy. SPC received all roles, duties, and authorities of the Board of Directors of the Abu Dhabi state-owned National Oil Company ("ADNOC") and the Petrol Department on establishment.

The applicable laws and decrees governing the industry in Abu Dhabi are:

- Abu Dhabi Tax Decree of 1965, as amended.
- Abu Dhabi Law No. 7 of 1971, as amended (establishing ADNOC).
- Abu Dhabi Law No. 2 of 1973, as amended (petroleum ports).
- Abu Dhabi Law No. 8 of 1978 (conservation of petroleum resources).
- Abu Dhabi Law No. 1 of 1988 (establishing the SPC).

- Abu Dhabi Law No. 4 of 1976 (Gas Ownership Law), which grants ADNOC the right to exploit and use all such gas either solely or through joint agreements or projects concluded with third parties, provided ADNOC's participation is not less than 51% (Article 6, Gas Ownership Law) and to claim all rights derived from agreements concluded by the Abu Dhabi Government related to gas (Article 4, Gas Ownership Law).

Licensing and Fees

As mentioned above, each Emirate has constitutionally entrenched ultimate ownership and control of its own natural resources. The rights are granted by the government through concessions to the following companies:

- State-owned oil and gas exploration companies.
- Consortium of foreign companies as minority shareholders, with a state-owned company as majority shareholder, forming a concession project company.

The concessions are granted by the government to ADNOC. In 2015, ADCO onshore concessions were granted to foreign companies, who were given minority shareholders' rights. ADNOC holds a majority shareholding in concessions. When approvals for concession were in process, ADNOC was operating independently.

The commercial terms are laid down in the concession agreement. Depending on the concession, the successful party accepted as sharing participating interest pays a license fee and/or signing bonus. In addition to equity participation, the host government also earns royalties based on gross revenue and/or a profit tax based on net income if commercial production occurs, both of which are based on the quantity of production and the price at which the production is sold, subject to any deviation as stated in the concession agreement.

Tax

Tax is applicable only on oil and gas companies as chargeable persons for "dealing in oil" at the rates set out in concessions. "Dealing in oil" has been defined in Article 2(15) of the Abu Dhabi Income Tax Decree 1965.

Exploration and production companies are subject to tax rates on taxable income including capital gains (Abu Dhabi Income Tax Decree 1965, as amended). Taxable income exceeding AED 5 million attracts tax of 55 per cent. In practice, the SPC issues financial notices that may take precedence over the tax decree. The tax payable can be 55 per cent. or more, subject to the examination of specific terms of the concessions granted by each Emirate for different projects.

Health, Safety and Environment

Federal Law No. 24 of 1999 for the Protection and Development of the Environment (Federal Environmental Law) governs the EIA requirements, which include:

- Obtaining the license for starting a project, establishment or activity including environmental impact assessment (Article 4, Federal Environmental Law).
- Ensuring that parties who are licensed to prospect, extract or exploit onshore or offshore oil and gas fields carry out periodical monitoring of the environmental impact resulting activities taking place in the production fields, land and marine transportation routes (Article 20, Federal Environmental Law).

The Petroleum Resource Conservation Law provides requirements for associated gas in production of oil and such other processes. The Federal Law No. 24 of 1999 for the Protection and Development of the Environment (Federal Environmental Law) provides for regulations for obtaining permits. Administrative Order No. 211 of 1991 on Issue of Executive Regulations issued under Local Order No. 61 of 1991 under Article 29 and 12 aims to prevent air pollution and the burning of fuels in oil and gas operations. It does not extend the permissible limits set out for emanating gases and vapours. The operating entities must take precautionary measures to prevent pollution, and the government must be compensated by operating entities for any loss caused or wastage of oil and hydrocarbons made.

Argentina

General framework

The main regulatory authority for oil related activities is the Under Secretariat of Hydrocarbons (Subsecretaría de Hidrocarburos), who forms part of the Governmental Secretary Energy (Secretaría de Gobierno de Energía). The regulatory authority for natural gas activities is the Governmental Secretary of Energy. There is also a specialised regulatory body for the transportation and distribution of natural gas, the Federal Gas Regulatory Authority (Ente Nacional Regulador del Gas) ("ENARGAS"). This was created in 1992 at the federal level and is regulated by Decree No. 2255/92.

Argentina follows a federal system, and is divided into 23 provinces, and the autonomous city of Buenos Aires, each of which has its own regulatory authority for health, safety and environment and regulates the local activities in connection with these matters.

The principal laws governing and regulating the oil and gas sector include:

- Law No. 17,319 (1967, the "Hydrocarbons Law"), as amended by, Law No. 26,197 (2006) and Law No. 27,007 (2014), which contain the basic framework applicable to oil and gas exploration and production in Argentina.
- Law No. 24,076, relating to the transport and distribution of natural gas.
- Law No. 26,659 (2011, as amended by Law 26,915), regulating offshore exploration and production activities.
- Hydrocarbons Act (Law No. 27,007) (2014), promoting, among other things, long term foreign oil and gas investment.
- Resolution No. 46-E/2017, creating a program to encourage investment in natural gas production from non-conventional reservoirs in the Neuquén basin. The program is valid until 31 December 2021.
- Decree No. 629/2017, issued to comply with the policies of the National Government to improve the productivity and competitiveness of local producers.
- Resolution No. 65/2018, detailing the terms and conditions for the international bidding process aimed at granting permits to conduct off-shore exploration and exploitation.

The Hydrocarbons law

In Argentina, the hydrocarbons industry is ruled by the Law on Hydrocarbons No. 17.319 ("Hydrocarbons Law"). This federal law was passed in 1967 and amended by Laws Nos. 26,197 (2007) and 27,007 (2014). Such amendments served as the definitive legal framework for the exploration and production of hydrocarbons. To this it should be added that the1992 Law on Natural Gas No. 24,076 set the guidelines leading to the deregulation of the transport and distribution of natural gas. The Executive issues regulations as a supplement to these laws.

According to the Hydrocarbons Law, the exploration, exploitation, industrialization, transport and commercialization of hydrocarbons are dealt with by companies from the public and the private sectors or through a combination of both. Exploration permits and exploitation concessions are granted by means of a bidding process and their holders must acknowledge a sound financial position and be technically apt for proper performance in this industry.

Furthermore, the Hydrocarbons Law states that permit and concession holders will be entitled to property rights on the extracted hydrocarbons and, as such, they may transport, commercialize or industrialize them or trade their derived products while complying with all the regulations that govern such activities.

Licensing System

The exploration and production of oil and natural gas is carried out through exploration permits and exploitation concessions. Under the Hydrocarbons Law, the federal and/or competent provincial authorities may grant exploration permits after submission of competitive bids. The holder of an exploration permit has the exclusive right to perform the operations necessary or appropriate for the exploration of oil and gas within the area specified by the permit. Each exploration permit may cover only unproved areas not to exceed 10,000 square kilometres (15,000 square kilometres offshore), and may have

a term of up to 11, 13 or 14 years, for conventional onshore exploration, non-conventional exploration and offshore exploration, respectively.

An exploration permit allows the holder to (among other things):

- Search and explore for hydrocarbons in a certain specified area for a specified period of time.
- Obtain a production concession (in case of commercial discovery).
- Construct the necessary infrastructure for hydrocarbon exploration (roads, buildings and other installations).
- Own the extracted hydrocarbons.

An exploration permit is usually granted through a public tender. Permits (or rights of association) are usually granted to the bidder that offers the most amount of investment in the applicable area.

A production concession allows the holder to (among other things):

- Explore and produce the hydrocarbon reserves located in the area.
- Obtain a transport concession.
- Carry out the acts required to produce hydrocarbons (including the construction of oil treatment and refinement plants, roads, buildings and other installations).
- Own the hydrocarbons extracted.
- Lease/license/concession term

Additionally, the Hydrocarbons Law permits surface reconnaissance of territories not covered by exploration permits or exploitation concessions. Information obtained through surface reconnaissance must be provided to the office of the corresponding authority, which is prohibited from disclosing such information for a period of two years without the prior authorization of the party that conducted the exploration, except in connection with the granting of exploration permits or exploitation concessions.

In the event that holders of an exploration permit discover commercially exploitable quantities of oil or gas, such holders will be entitled to obtain an exclusive concession for the production and exploitation of the relevant reserves. The exploitation concession provides its holder the exclusive right to produce oil and gas from the area covered by the concession. An exploitation concession also entitles the holder to obtain a transportation concession for transporting of the oil and gas produced.

Under the Hydrocarbons Law, holders of exploration permits and exploitation concessions are required to carry out all necessary works to find or extract hydrocarbons, using appropriate techniques, and to make the investments specified in their respective permits or concessions. In addition, holders must avoid damage to oil and gas fields and hydrocarbon waste, must undertake adequate measures to prevent accidents and damage to agricultural activities, the fishing industry, communications networks and ground water, and must comply with all applicable federal, provincial and local laws and regulations.

Failure by the holder of permits or concessions to make the relevant investments or take the measures required to avoid damages entitles the federal or provincial government who granted such permits or concessions may revoke or terminate them early, as applicable. Permits and concessions may become void before expiration of their time period in these cases: (i) failure to make the annual payment regarding rights to develop activities in the area once the three-month period for such payment has expired; (ii) failure to pay royalties after three months from their due date; (iii) material or unjustified breach of obligations related to productivity, conservation, investment, works or special benefits; (iv) failure to submit such information as required by law, refusal to have the examinations or surveys according to law or non-compliance with operative regulations; (v) non-performance of the obligations set forth in Sections 22 and 32 of the Law; (vi) court decision stating the permit or concession holder is insolvent; (vii) death of permit or concession holder or dissolution of the company holding such permits or concessions, though subject to certain exceptions; and (viii) failure to transport hydrocarbons pursuant to section 43. Before a permit or concession is declared void, the competent authority will give its holder the chance to cure the relevant breach within a given time period.

Taxation

Argentina has three tiers of taxation: federal taxes, provincial taxes and municipal assessments. Oil and gas production is also subject to royalties. The most important taxes that apply to companies extracting oil and gas from Argentina are the following:

- Income tax (comprising of corporate tax at the rate of 30 per cent. for the fiscal years 2018 and 2019, and 25 per cent. for the fiscal year 2020 and onwards, and dividend distribution withholding tax at the rate of 7 per cent. for the fiscal years 2018 and 2019 and 13 per cent. for the fiscal year 2020 and onwards)
- Value Added Tax (VAT) (at the rate of 21 per cent. (10.5 per cent. for certain goods and services, and 27 per cent. for public utilities)
- Personal assets tax (between 0 to .75 per cent.)
- Royalties on oil and gas production (varying from 12 to 15 per cent. The Hydrocarbons Act also provides for reduced royalties when the business forecast for a given project proves that production would not be possible considering the standard royalties but it would still be viable considering a reduced one.)
- Turnover tax (varying by province and activity, and generally 3 per cent. for upstream and 3.5 per cent. for downstream)
- Stamp tax (varying from 1 per cent. to 1.5 per cent. by province)
- Withholding taxes

Dividends/profits are not subject to income tax if they are distributed by SAs (*Sociedades Anónimas*), SRLs (*Sociedades de Responsabilidad Limitada*) or other entities to legal entities in general.

Argentina also imposes export duties and applies a foreign exchange control regime.

Health, safety and the environment

Oil and gas activities in Argentina are subject to general environmental rules and specific regulations relating to oil spills, gas flaring, safety restrictions and others. The federal government sets the minimum standards for environmental protection in the General Environment Law No. 25,675 (GEL) (2002). Law 19,587 and Executive Order No. 351/99 also sets general health and hygiene guidelines and standards applicable to all activities (including the oil and gas industry).

In addition, the following health and safety laws could impact the oil and gas industry:

- Industrial and service waste (Law No. 25,612).
- Hazardous waste (Law No. 24,051).
- The prevention of risks in plants where fuel-related activities are performed (Law No. 13,660).
- Health and safety requirements (Law No. 19,587).
- Resolution No. 236/1996 and No. 143/1998 (issued by the former Secretariat of Energy) on gas venting limits and requirements.
- Law No. 24,051 and Executive Order No. 831/93 on the generation and management of hazardous waste.

The provinces can also issue regulations in addition to national legislation. For example, the Neuquén Province passed Decree No. 1483/2012, which establishes the rules and procedures for the exploration and exploitation of unconventional reservoirs in its province. The Decree incorporates the regulations under Provincial Law No. 1,875, which sets out the guiding principles for the preservation, conservation, protection and improvement of the environment.

In addition, Argentina has an environmental permit regime system in place for any activities that could negatively affect the environment. Under both federal and provincial regulations, any company that intends to conduct activities that could negatively affect the environment must first perform and file an environmental impact assessment ("EIA") and obtain its approval. Applicants must complete and file an EIA before being able to conduct hydrocarbon exploration or exploitation activities.

Recent developments

On 1 September 2019, the Argentine Government issued Executive Decree No. 609/2019 which reinstated certain foreign exchange restrictions, most of which had been progressively repealed as from 2015. Decree 609 was further regulated by Communiqué A6770 of the Argentine Central Bank ("BCRA"). The restrictions are expected to be in place until 31 December 2019. The restrictions comprise, among other things:

- Requirements for the repatriation of export receivables: Argentine exporters will need to repatriate into Argentina export proceeds and have to exchange those funds into ARS within five business days from collection;
- Requirements for approval by the BCRA to access the foreign currency market for purposes of accumulating assets in foreign currency abroad;
- Access to the foreign exchange market for payment of debts and other obligations in foreign currency among residents agreed as of 1 September 2019 is prohibited. Access to the foreign exchange market is permitted for obligations existing as of 30 August 2019 and formalized through public records;
- Acquisition of foreign currency by Argentine residents for the payment of dividends requires the approval of the BCRA; and
- Acquiring foreign currency for paying services to foreign affiliates requires approval of the BCRA.

On 12 September 2019, the BCRA published Communiqué "A" 6780, which introduces clarifications and adjustments to the new exchange control regime that has been in force since 1 September 2019. The new regulation requires that Argentine residents repatriate and exchange into ARS, collections in foreign currency, paid either in Argentina or abroad, for the disposition of "non-financial, non-produced assets" within five business days from collection thereof. The new regulation is expected to apply to a purchase price that the Group will receive from the recent farm-down transaction regarding the Aguada Federal and Bandurria Norte blocks, and any subsequent distribution of dividends in the near term.

Mexico

General framework

The main regulatory bodies for hydrocarbon activities in Mexico, such as oil and gas, are the Energy Ministry ("SENER"), the National Hydrocarbon Commission ("CNH"), the Energy Regulatory Commission (Comisión Reguladora de Energía, or "CRE"), the National Agency of Industrial Safety and Environmental Protection of the Hydrocarbons Sector (Agencia Nacional de Seguridad, Industrial y de Protección al Medio Ambiente del Sector Hidrocarburos) ("ASEA"), and the National Centre of Natural Gas Control ("CENAGAS").

The SENER is responsible for designing, planning, executing and coordinating energy public policies, including monitoring the energy policy is conducted in accordance with the protection of the environment and sustainable development; manage the natural energy resources which are property of the Mexican nation; grant and revoke concessions to individuals for the exploitation of energy resources; and head the board of directors of Petróleos Mexicanos.

The CNH is responsible for supervising and regulating oil activities by, among other things:

- Organising tender procedures to award contracts for the exploration and extraction of hydrocarbons (oil and gas).
- Managing and supervising contracts that have been awarded.

Natural gas activities are supervised and regulated by the CRE and CENAGAS. CRE is the regulatory government body that issues all permits related to gas activities. CENAGAS manages, administers, and operates the National Natural Gas Transportation and Storage System and to ensure continuity and safety in the provision of natural gas throughout Mexico.

ASEA is a governmental body of the Environmental and Natural Resources Ministry. It was created in 2014 to monitor and ensure that all hydrocarbon activities are carried out under sustainability principles, and to respond to and resolve an accident or emergency in the industry. ASEA's responsibilities include the supervision of health, safety and environmental protection derived from hydrocarbon activities.

The key regulations and laws for onshore and offshore oil and gas exploration and production are Articles 25, 27 and 28 of Mexico's Federal Constitution, and the Hydrocarbons Law and its Regulations, published in the Federal Official Gazette on 11 August 2014 and 31 October 2014. These laws regulate private individuals and companies that participate in and carry out exploration and production activities, the participation of the Mexican Government through the CNH in exploration and extraction contracts, and rules regarding midstream and downstream activities.

Additionally, the Hydrocarbons Revenues Law, published in the Federal Official Gazette on 11 August 2014, provides the tax regime for the different types of exploration and extraction contractual plans.

2013 Energy Sector Reforms

In 2013, Mexico's energy industry has undergone reforms aimed at encouraging growth and modernization.

The reforms primarily granted the E&P sector more independence from PEMEX, the state owned oil and gas company. Prior to the reform, the Mexican Constitution stated that Pemex must carry out, by itself, all of the activities of the country related to the oil and gas industry. With the energy reform, Exploration and Production Agreements ("E&P Agreements") allowed private companies to participate in the national energy sector, including E&P activities as operators or non-operators, with the ability to report oil and gas reserves in their financial statements. Pemex, through the reforms, was allowed to partner with private companies to carry out various activities of the productive chain of the sector, giving Pemex access to much advanced capital, technology and know-how, as well as allowing it to become a more efficient state-owned productive enterprise.

Licensing and Ownership

According to the Mexican Federal Constitution, no private property in hydrocarbons is allowed. All underground hydrocarbons, including oil and gas, are government-owned property. However, private companies are permitted to participate in exploration and extraction activities. Reforms to the legal framework in 2013 permitted private companies to participate in bidding procedures awarding exploration and extraction contracts. Where private companies are awarded extraction contracts, the resources can be used on the basis of the relevant contract plan.

Rights to oil and gas depend on the contractual plan applicable to exploration and extraction activities. This can be, *inter alia*, one of the following:

- Share profit contract: the total production derived from the contract is delivered to a vendor who will sell the product. The profit resulting from the sale will be distributed between the government and contractor.
- Share production contract: a percentage of the production is given to a contractor. The contractor assumes all costs and risks related to the activities.
- License agreement: the government exclusively owns underground hydrocarbons until they are extracted from the subsoil and, after being extracted, they can be sold to private entities.

For a license contract, the term established is 35 years, which can be extended two additional times, for a term of five or ten years. The CNH must have previously approved the extension period.

For a production sharing contract, the term is 30 years and can be extended for up to two additional times for periods of five years each.

Reserves and Resources Certification

In 2015, CNH published a set of guidelines (the "CNH Guidelines") that governs the valuation and certification of Mexico's reserves and the related contingency resources. The CNH Guidelines follow the same SPE/WPC/AAPG international standards.

Taxation and Fees

Taxes and government fees vary, depending on the contractual plan for the exploration/extraction area. Fees are set forth in the Hydrocarbons Revenue Law.

The relevant taxes, royalties, and other consideration are determined by a combination of the offer made in the bidding procedure, the rules set out in the Hydrocarbons Revenue Law, and the rules set out in

bidding procedures. Finally, different fees and royalties apply, depending on the contract type, whether license contract, production sharing contract, or profit sharing contract. The contractual rates cannot be modified as they form an integral part of the contract.

Health, Safety and Environment

All matters related to safety and environmental in hydrocarbons activities are regulated by the SEMARNAT through ASEA. The ASEA Law, states that it has, among others, the obligation to prevent and attend emergency situations in the industry, as well as to issue regulations in connection with environmental and industrial protection.

The health and safety regime for exploration, extraction and transportation activities is governed by the following legislation:

- Environmental Protection and Ecologic Balance General Law and its Regulations.
- Hydrocarbons Law.
- Environmental Responsibility Federal Law and its Regulations.
- Hazardous Management and Prevention General Law.

Municipalities in Mexico, especially those in which hydrocarbon activities are executed as well as those in which underground pipelines have been constructed, have civil protection plans to respond to and attend accidents or other negative consequences derived from such activities.

The Mexican Federal Environmental Liability Law (*Ley Federal de Responsabilidad Ambiental*) enacted on July 7, 2013 regulates environmental liability arising from damages to the environment including remediation and compensation. This liability regime is independent from administrative, civil or criminal liability regimes, which may be applicable depending on the performed conduct.

Environmental liability may be attributed to an entity for conduct carried out by its representatives, managers, directors, employees, or officers who are directly involved in operations. The statute of limitations to claim environmental liability is twelve years from the date of the environmental damage. The law allows the interested parties to solve disputes by means of alternative dispute resolution mechanisms, provided that public interest or third party rights are not affected.

One of the main requirements to participate in and pre-qualify for the tender procedures to award exploration and extraction contracts is to present documents evidencing experience in industrial safety and environmental protection for at least five years prior to the tender procedure. These requirements can vary depending on the tender procedure and the type of block to be tendered (for example, whether it relates to ultra-deep waters, shallow waters or offshore blocks).

In addition to the above, the CNH has issued flare and vent regulations for the use of natural gas associated with exploration and extraction of hydrocarbons. The Mexican regulatory framework also has rules for the correct management of waste products, especially waste with hazardous characteristics.

Overview of the Group and its Shareholders

The Group was formed in May 2019 through the combination of the oil and gas business (including the gas transportation business) of BASF which was bundled in Wintershall and its subsidiaries and the oil and gas business of LetterOne comprising Dea and its subsidiaries.

BASF, a European stock corporation headquartered in Ludwigshafen am Rhein, Germany, is a global chemicals company that is active worldwide in more than 80 countries, including in Europe, North America, Asia-Pacific, South America, Africa and Middle-East with a portfolio ranging from chemicals, plastics, performance products, crop protection products to oil and gas. In the gas and oil industry, BASF supplies a wide range of products for different applications for oil fields, including drilling, cementing, stimulation, production and enhanced oil recovery.

BASF is a shareholder of the Company, holding after completion of the Merger together 67 per cent. of the Ordinary Shares (*Stammgeschäftsanteile*) as well as all non-voting Preference Shares (*Vorzugsgeschäftsanteile*) in the Company, translating into an overall participation of BASF in the registered share capital (*Stammkapital*) of the Company of 72.7 per cent.

LetterOne, a Luxembourg public limited company (*société anonyme*) with its registered seat in Luxembourg, is a privately-owned investment holding company targeting investments in the energy sector. Pursuant to the Merger, LetterOne contributed its 100 per cent. stake in Dea into the Company and received by way of a capital increase shares in the Company as compensation. Following such contribution LetterOne holds indirectly via L1E Acquisitions the remaining 33 per cent. of the Ordinary Shares, translating into an overall participation of 27.3 per cent. of the registered share capital of the Company.

LetterOne and BASF together hold 100 per cent. of the shares in the Company and are hereinafter jointly referred to as the "Shareholders".

The Company is a German limited liability company (*Gesellschaft mit beschränkter Haftung, GmbH*) with its registered seat in Celle, Germany. In accordance with applicable German law, the Company has a two-tier board system consisting of five managing directors (the "Managing Directors") forming the Management Board (*Geschäftsführung*) and a Supervisory Board (*Aufsichtsrat*). The corporate bodies of the Company further comprise the Shareholders' Meeting (*Gesellschafterversammlung*) in which the Shareholders adopt resolutions in relation to the Company. The Shareholders have further set up a shareholders' committee (the "Shareholders' Committee") to consult on certain relevant matters and align their interests in relation to the Company, in particular, prior to taking any (relevant) decisions in the Shareholders' Meeting. The details of the corporate governance architecture of the Company are set out in and regulated by the Company's Articles of Association (*Satzung*), the rules of procedure (*Geschäftsordnung*) for the Management Board and for the Supervisory Board as well as a shareholders' agreement entered into by the Shareholders and the Company (the "Shareholders' Agreement").

Management Board

The Managing Directors conduct the day-to-day operations of the Company and are responsible for the overall management of the Group in accordance with the business plans and the annual budget.

The Management Board consists of five managing directors, including the chairman (the chief executive officer) to be nominated by BASF, the deputy chairman to be nominated by LetterOne (the deputy chief executive officer) and three additional members. The power to designate and remove members of the Management Board rests with the Shareholders' Meeting.

Each Managing Director manages his/her business segment independently unless the extraordinary nature of a matter requires the approval of the entire Management Board. The Management Board decides on a matter if required by applicable law, the Articles of Association or the rules of procedure for the Management Board.

The following table sets out the current composition of the Management Board and each Managing Director's respective area of responsibility.

Name	Year of Birth	Position
Mario Mehren	1970	Chairman of the Board and Chief Executive Officer (CEO)
Maria Moræus Hanssen[(1)]	1965	Member of the Board, Chief Operating Officer (COO) and Deputy CEO, Region EMEA
Paul Smith	1971	Member of the Board, Chief Financial Officer (CFO)
Thilo Wieland	1969	Member of the Board, Region Russia, Latin America and Transportation
Hugo Dijkgraaf	1975	Member of the Board, Chief Technology Officer (CTO)

Note:

(1) Maria Moræus Hanssen will leave the Company effective 31 December 2019. Until that time, she will continue in her present role providing board-level leadership of the EMEA business units and the Merger integration. The Group has started a search for her replacement.

Set out below are biographies of the members of the Management Board:

Mario Mehren

Mario Mehren is the CEO of the Company. He has more than a decade of experience in senior roles in exploration and production and has served in various leadership positions at the Company since 2006, including as chief executive officer, member of the Board of executive directors responsible for exploration and production in Russia, North Africa and South America and as head of finance and information management.

Mr. Mehren completed his studies in Business Administration at Saarland University in Saarbrücken, Germany, and began his professional career in 1998 as specialist adviser in BASF Schwarzheide's group accounting section. In 2001, Mr. Mehren became head of finance and accounting at BASF, and in 2003 moved to BASF's operations in Chile to become managing director of finance and administration.

Maria Moræus Hanssen

Maria Moræus Hanssen is the COO of the Company with responsibility for the business units of Germany, Norway, Netherlands, the United Kingdom and Denmark, Egypt, Libya, Algeria, the United Arab Emirates and the integration of Wintershall and Dea following the Merger. She served as chief executive officer of Dea from 2018 until the Merger. She has 25 years of experience in exploration and production, and was previously Head of E&P Business International SA and CEO of ENGIE E&P, the CEO and Managing Director of GDF Suez E&P Norge and the Investment Director at Aker ASA. Ms. Hanssen has occupied a diverse range of roles during her tenure in the oil and gas industry, including reservoir engineering, exploration management, field development, offshore operations and business development.

Ms. Hanssen has trained as a reservoir engineer and petroleum economist, has a degree in Petroleum Economics and Management from Ecole Nationale Supérieure du Pétrole et de Moteurs in Paris and a degree in Petroleum Engineering from the Norwegian University of Science and Technology.

Paul Smith

Paul Smith is the CFO of the Company. Mr. Smith has over 25 years of extensive international experience in the oil and gas industry and has served in a variety of positions, including as co-founder at and chief financial officer of Vesta Energy and as chief financial officer and executive vice president of Talisman Energy. At Talisman, Mr. Smith was responsible for all finance, treasury, mergers and acquisitions, investor relations, tax and marketing activities, and had extensive exposure to capital markets.

Mr. Smith worked in a variety of commercial, finance and operational leadership roles at BP, where he began his career in 1993, including as Senior Vice President West Siberia at TNK-BP, Business United leader of BP's North Sea activity, chief financial officer of BP's business in Trinidad and Tobago and as member of the team appointed to lead the integration of BP and Amoco.

Mr. Smith studied business organization at the Heriot-Watt University in Edinburgh.

Thilo Wieland

Thilo Wieland serves as the Russia, Latin America and Midstream Business board representative for the Group. He has held various other positions at Wintershall since 1999, including general manager, Libya, head of department natural gas supply west and member of the Board of Executive Directors. Until 2013, he represented Wintershall's shareholder interests in the Nord Stream and South Stream projects before becoming vice president, strategy and portfolio management. He has over 20 years of experience in exploration and production.

Mr. Wieland studied Industrial Engineering at the Technical University of Berlin.

Hugo Dijkgraaf

Hugo Dijkgraaf is the CTO of the Company and is responsible for digital transformation, technology and innovation, integrated reservoir management, global exploration, global development and engineering, global production and operational excellence. Previously, Mr. Dijkgraaf was the managing director of Wintershall Norge and has been with the Company since 2000. He has previously served as the vice president and project director of the Maria development in Norway. Mr. Dijkgraaf worked across a broad range of disciplines including subsurface, strategic planning and development and operations, including offshore platform management. He has extensive international experience in the Group's worldwide core regions, including Germany, the Netherlands, Argentina and Norway.

Mr. Dijkgraaf has a master's degree in Petroleum Engineering from Delft University of Technology.

Supervisory Board

The Supervisory Board of the Company is primarily responsible for the supervision of the Management Board. It is composed of nine members including three employee representatives and six members to be appointed by the Shareholders, with four of those six members to be nominated by BASF and the remaining two members to be nominated by LetterOne. The chairman of the Supervisory Board alternates every 15 months between a BASF nominee and a LetterOne nominee.

While the Supervisory Board may not exercise any management functions, the Management Board requires the consent of the Supervisory Board for certain transactions and measures set out in the Articles of Association, including:

- acquisition, sale and encumbrance of real property if the value of the asset in the individual case exceeds €1 billion;
- acquisitions of any businesses and interests in businesses, if the value exceeds €1 billion in the individual case;
- the entering into enterprise agreements and agreements pursuant to the German Transformation Act (*Umwandlungsgesetz*); and
- integrations and squeeze outs, takeover offers and resolutions on such measures in portfolio companies.

The following table sets out the current composition of the Company's Supervisory Board.

Name	Position
Dr. Hans-Ulrich Engel	Chairman
Lord Browne of Madingley	Deputy Chairman
Michael Winkler	Deputy Chairman, employee representative
Michael Heinz	Member
Saori Dubourg	Member
Dr. Wolfgang Haas	Member
German Khan	Member
Birgit Böl	Member, employee representative
Sabine Brandt	Member, employee representative

Set out below are biographies of the Members of the Supervisory Board:

Dr. Hans-Ulrich Engel

Dr. Hans-Ulrich Engel has been with BASF since 1988, when he first joined the legal department of BASF Aktiengesellschaft. He has served BASF for over three decades, including as the president of legal, taxes and insurance, member of the board of executive directors, chief financial officer of BASF in the United States and chief executive officer of BASF Corporation in the United States.

Dr. Engel has a degree in law from the University of Göttingen in Germany. He did his clerkship from 1984 to 1987 at the Higher Regional Court, Oldenburg, Germany, before completing his doctorate at the University of Göttingen in 1990.

Lord Browne of Madingley

Lord Browne of Madingley has been the executive chairman of L1 Energy since 2015. He was chief executive of BP plc, from 1995 to 2007, and a Partner and Managing Director of Riverstone LLC from 2007 to 2015. Lord Browne has also served as non-executive director of Smithkline Beecham, Intel, Daimler Chrysler, and Goldman Sachs. He is a non-executive director of IAS Markit and Pattern Energy.

Lord Browne is chairman of the Francis Crick Institute and a former President of the Royal Academy of Engineering. Since 2001, he has served as a crossbench member of the House of Lords. He holds degrees in Natural Sciences from the University of Cambridge and an MS in Business from Stanford University.

Michael Winkler

Michael Winkler has been member of the supervisory board of Wintershall since 2003. Mr. Winkler has been working with Industriegewerkschaft Bergbau, Chemie, Energie ("IG BCE"), the industrial union for mining, chemical industry and energy, since 1991. He has been acting for IG BCE, Hannover, Germany, as the union secretary of bargaining policy for the last 20 years. At IG BCE, he was responsible for various industry branches, including power, oil and gas and petroleum.

Mr. Winkler studied at RWTH Aachen University and has a degree in mining engineering.

Michael Heinz

Michael Heinz joined BASF in 1985 and has served BASF in varying capacities across the globe. He has been a member of the board of executive directors at BASF since 2011 and has been responsible for a range of BASF's operations, including its dispersions and pigments, environmental protection, engineer and technical expertise, advanced materials and systems research and South America regional divisions. Previously, he has served as the chief executive officer and integration lead of Ciba AG in Switzerland, and the group vice president and agricultural products division president of BASF in Limburgerhof, Germany.

Mr. Heinz has a degree in Business Administration at the College of Applied Sciences in Ludwigshafen, Germany, as well as a master's in business administration from Duke University in the United States.

Saori Dubourg

Saori Dubourg has been a member of BASF for over two decades, first joining BASF's regional marketing European division in Ludwigshafen, Germany. She has worked across BASF's German, United States, Japan, Singapore, and Hong Kong operations, and served as the president of BASF's Asia Pacific and nutrition and health divisions, as well as senior vice president of diversity and inclusion and global human resources. She has been a member of BASF's board of executive directors since 2017.

Ms. Dubourg has a degree in Strategic Management and Industrial Marketing from the University of Trier, Germany.

Dr. Wolfgang Haas

Dr. Wolfgang Haas joined Wintershall in 1992, from where he moved to BASF Aktiengesellschaft in 1994. He took on various tax responsibilities with BASF's taxes and customs division, including serving as the deputy head and head of BASF's taxes, customs and foreign trade law divisions.

Dr. Wolfgang Haas has a degree in financial administration from the University of Baden-Württemberg.

German Khan

German Khan was one of the original founders of LetterOne, and is a member of the board of directors of both LetterOne Holdings and LetterOne Investment Holdings S.A.

From 2003 to 2013, Mr. Khan served as executive director and member of the management board of TNK-BP Management. Currently, Mr. Khan holds various positions at Alfa Group Consortium including a member of the supervisory board of Alfa Group Consortium.

Mr. Khan studied mechanical engineering at the Kiev-Pedagogical College. He earned a subsequent degree from the Moscow Institute of Steel and Alloys, where he specialised in the study of steel production.

Birgit Böl

She joined Wintershall in 1984 and started a training as industrial management assistant. Thereafter, she did a supplementary training in business administration (Wirtschaftsassistentin) and worked in the accounting department in 1987. Since 1990 she has been involved in the works council as an ordinary member and since 2002 she has been chairwoman of the works council in Kassel and of the joint works council of Wintershall. Since 2002 she has been member of the supervisory board of Wintershall and vice chairwoman of the general works council of BASF.

Sabine Brandt

After her occupational education in the medical area Sabine Brandt joined Wintershall Dea in 1981. At first she held different positions in various departments prior to working in the procurement department for ten years. Since 2005 she has been working in the HSE department where she is responsible for safety and occupational health for the Wintershall Dea German activities in Germany. In 2006 Ms. Brandt started her engagement for the works council and became chairwoman of the works council for the then Wintershall (today Wintershall Dea) German activities in 2012. In the same year she was elected vice chairwoman of the joint works council of Wintershall Dea.

Shareholders' Meeting

An ordinary Shareholders' Meeting will be held at least once a year during the first eight months of each fiscal year of the Company. The Management Board shall convene an extraordinary Shareholders' Meeting if required by law or at the request of a Shareholder. Shareholders' Meetings will be chaired by a member of the Supervisory Board, determined by the Supervisory Board members that were elected by the Shareholders' Meeting. Each Euro of an Ordinary Share grants one vote. Unless the Articles of Association or mandatory statutory provisions require otherwise, Shareholders' resolutions are passed with a simple majority of the votes cast.

The Shareholders' Meeting will resolve, *inter alia*, on the appropriation of the balance sheet profit (*Bilanzgewinn*), the formal approval of the acts (*Entlastung*) of Managing Directors and members of the Supervisory Board, the appointment of the auditors of the annual accounts, the election of members of the

Supervisory Board, and where provided for by law, the adoption of the annual accounts (*Feststellung des Jahresabschlusses*). The Shareholders' Meeting will further resolve upon the transactions and measures set out in the Rules of Procedure (*Geschäftsordnung*) for the Management Board requiring the prior consent of the Shareholders' Meeting as well as certain other matters referred to the Shareholders' Meeting by operation of applicable law. Such transactions and measures (the "Reserved Matters") include material acquisitions or disposals, the discontinuation or commencement of business activities, material settlements of legal disputes or arbitration proceedings, changes in the composition of the Management Board and the rules of procedure, the election of the chairman of the Supervisory Board, the issuance of new equity or capital contributions by Shareholders and decisions on dividends.

Shareholders' Committee

The Shareholders have set up a Shareholders' Committee to discuss at shareholder level relevant matters and co-ordinate their interests in relation to the Company. Decisions of the Shareholders' Committee have no legally binding effect for the Company. The Shareholders have agreed in the Shareholders' Agreement, however, to adhere to and use commercially reasonable best efforts to implement decisions taken by the Shareholders' Committee to the extent legally permissible.

The Shareholders' Committee consists of six members of which four members are appointed by the Shareholders (two by each of LetterOne and BASF) (the "SC Members") and two members are appointed by the Shareholders jointly (the "Independent SC Members"). The Independent SC Members have adviser status with no voting rights, but shall be granted full SC Member rights including voting rights at the earlier of the proposed initial public offering ("IPO") of the Group or the expiry of a 30-month period following the closing of the Merger. The Shareholders' Committee has two co-chairmen, one designated by each of BASF and LetterOne, and the presiding chairman alternates on a meeting-by-meeting basis. The current SC Members are also members of the Supervisory Board (Michael Heinz, Dr. Hans-Ulrich Engel, Lord Browne of Madingley and German Khan). Until the proposed IPO of the Company, all decisions of the Shareholders' Committee require a unanimous vote.

The Shareholders' Committee is responsible for any matter referred to it by the Shareholders and in particular for passing decisions on any Reserved Matter (see above).

Shareholders' Agreement

The Shareholders' Agreement entered into by LetterOne, L1E Acquisitions, BASF SE, BHE and the Company governs the ongoing legal relationships between LetterOne and BASF as ultimate shareholders of the Company following the implementation of the Merger. The Shareholders' Agreement provides for, *inter alia*, the overall corporate governance structure of the Group, a conversion of the Preference Shares held by BASF into Ordinary Shares of the Company on a share by share basis at the earlier of 36 months after the closing of the Merger or the date on which the Company announces the IPO share price, the implementation of a conversion of the Company into the legal form of a stock corporation (*Aktiengesellschaft*) under German law together with a full corporate governance catalogue including changes to the composition and competencies of the corporate bodies of the Company and the Shareholders' Committee (including draft articles of association and rules of procedure) as well as, following such conversion, details of a proposed IPO of the Company. The Shareholders' Agreement further contains provisions relating to the right of each Shareholder to withdraw from joint control over the Company, the strategic roadmap and integration plan for the Group, the business plans and annual budgets, the Group's main objectives and policy principles, the financing of the Company and dividend policy, share transfers, transfer rights and change of control, potential sanctions being imposed on a company of the Group or a Shareholder and compliance.

Certain relationships and related party transactions

In the course of their ordinary business activities, the Company may from time to time enter into purchase and supply agreements, cashless settlement agreements, service agreements or other agreements with, render services or deliver goods to, or obtain services or goods from other Group companies or related parties.

The Group believes that all such transactions between the Group companies or the Group companies and related parties are negotiated and conducted on a basis equivalent to those that would have been achievable on an arm's-length basis, and that the terms of these transactions are comparable to those currently contracted with unrelated third-party suppliers, manufacturers and service providers.

In accordance with IAS 24, transactions with persons or companies that are, inter alia, members of the same group as the Company, or that are in control of or controlled by the Company, are disclosed in the financial statements unless they are already included as consolidated entities in the Company's consolidated financial statements. Control exists if a shareholder has the power to control the financial and operating policies of a company's management by virtue of owning more than one half of the voting rights in a company or, by virtue of an agreement. The disclosure requirements under IAS 24 also extend to transactions with associated companies (including joint ventures) as well as transactions with persons who have significant influence on the Company's financial and operating policies. This includes the members of the Management Board and of the Supervisory Board and close members of their families, as well as those entities over which the members of the Management Board and of the Supervisory Board or their close family members are able to exercise a significant influence or in which they hold a significant share of the voting rights.

Details on the transactions with related parties of the Company for the two months ended 30 June 2019 are set forth in note 6 of the Interim Financial Information. Details on the transactions with related parties of Wintershall for the fiscal years ended 30 April and 31 December 2018 and 2017 are set forth in note 30 to the financial statements as of and for the short fiscal year ended 30 April 2019 and notes 31 to each of the financial statements as at and for the year ended 31 December 2018 and 2017, respectively. Details on the transactions with related parties of Dea for the fiscal years ended 30 April and 31 December 2018 and 2017 are set forth in note 22 to the financial statements as of and for the short fiscal year ended 30 April 2019 and note 21 to the financial statements as at and for the year ended 31 December 2018 and note 20 to the financial statements as at and for the year ended 31 December 2017, respectively.

ANLEIHEBEDINGUNGEN („Anleihebedingungen")

Diese Anleihebedingungen sind in deutscher Sprache abgefasst. Eine Übersetzung in die englische Sprache ist beigefügt. Der deutsche Text ist bindend und maßgeblich. Die Übersetzung in die englische Sprache ist unverbindlich.

§ 1 Währung, Stückelung, Form

(a) *Währung; Stückelung*. Die Wintershall Dea Finance B.V. (die „Emittentin") begibt am 25. September 2019 (der „**Begebungstag**") Schuldverschreibungen (die „**Schuldverschreibungen**") in Euro (die „**Festgelegte Währung**") im Gesamtnennbetrag von EUR 1.000.000.000 eingeteilt in Schuldverschreibungen im festgelegten Nennbetrag von je EUR 100.000 (der „**Nennbetrag**").

Die Schuldverschreibungen werden von der Wintershall Dea GmbH (die „**Garantin**") garantiert.

(b) *Form*. Die Schuldverschreibungen lauten auf den Inhaber.

(c) *Vorläufige Globalurkunde, Austausch*. Die Schuldverschreibungen sind zunächst in einer vorläufigen Globalurkunde (die „**Vorläufige Globalurkunde**") ohne Zinsscheine verbrieft.

Die Vorläufige Globalurkunde wird insgesamt oder teilweise und unentgeltlich am oder nach dem Tag, der 40 Tage nach dem Beginn des Angebots bzw. dem Begebungstag liegt, je nachdem, welcher Tage später ist, gegen Nachweis über das Nichtbestehen wirtschaftlichen U.S.-Eigentums im Sinne des U.S.-Rechts (*non-U.S. beneficial ownership*) in der in der Vorläufigen Globalurkunde vorgesehenen Form, für den Inhaber von Schuldverschreibungen gegen eine dauerhafte Globalurkunde (die „**Dauer-Globalurkunde**") (die Vorläufige Globalurkunde und die Dauer-Globalurkunde jeweils auch eine „**Globalurkunde**") ohne Zinsscheine eingetauscht. Ein Recht der Anleihegläubiger auf Ausgabe und Lieferung von Einzelurkunden oder Zinsscheinen besteht nicht.

(d) *Clearingsystem*. Die Vorläufige Globalurkunde und die Dauer-Globalurkunde werden solange von einem Clearingsystem oder im Auftrag eines Clearingsystems verwahrt, bis sämtliche Verpflichtungen der Emittentin aus den Schuldverschreibungen erfüllt sind.

TERMS AND CONDITIONS ("Terms and Conditions")

These Terms and Conditions are written in the German language and provided with an English language translation. The German text shall be controlling and binding. The English language translation is non-binding.

§ 1 Currency, Denomination, Form

(a) *Currency; Denomination*. The Notes are issued on 25 September 2019 (the "Issue Date") by Wintershall Dea Finance B.V. (the "**Issuer**") in Euro (the "**Specified Currency**"), in the aggregate principal amount of EUR 1,000,000,000 divided into notes in the specified denomination of EUR 100,000 (the "**Principal Amount**") each (the "**Notes**").

The Notes are guaranteed by Wintershall Dea GmbH (the "**Guarantor**").

(b) *Form*. The Notes are issued in bearer form.

(c) *Temporary Global Note, Exchange*. The Notes are initially represented by a temporary global Note (the "**Temporary Global Note**") without interest coupons.

The Temporary Global Note shall be exchanged, in whole or in part and free of charge to the holder of Notes, on or after the day that is 40 days after the later of the commencement of the offering and the Issue Date for a permanent global Note (the "**Permanent Global Note**") (the Temporary Global Note and the Permanent Global Note, each a "**Global Note**") without interest coupons upon certification as to non-U.S. beneficial ownership in the form set out in the Temporary Global Note. The right of the Noteholders to require the issue and delivery of definitive notes or interest coupons is excluded.

(d) *Clearing System*. Each of the Temporary Global Note and the Permanent Global Note will be held in custody by or on behalf of a Clearing System until all obligations of the Issuer under the Notes have been satisfied.

„**Clearingsystem**" bedeutet jeweils Folgendes: Clearstream Banking S.A., Luxemburg („**CBL**") und Euroclear Bank SA/NV, Brüssel („**Euroclear**") (CBL und Euroclear jeweils ein internationaler Zentralverwahrer von Wertpapieren (*international central securities depositary*) („**ICSD**" und zusammen die „**ICSDs**")) sowie jeden Funktionsnachfolger eines ICSD.

Die Schuldverschreibungen werden in Form einer New Global Note („**NGN**") ausgegeben und von einem gemeinsamen Wertpapierverwahrer (*common safekeeper*) im Namen beider ICSDs verwahrt.

Der Gesamtnennbetrag der durch die Globalurkunde verbrieften Schuldverschreibungen entspricht dem jeweils in den Registern beider ICSDs eingetragenen Gesamtbetrag. Die Register der ICSDs (unter denen man die Register versteht, die jeder ICSD für seine Kunden über den Betrag ihres Anteils an den Schuldverschreibungen führt) sind schlüssiger Nachweis über den Gesamtnennbetrag der durch die Globalurkunde verbrieften Schuldverschreibungen, und eine zu diesen Zwecken von einem ICSD jeweils ausgestellte Bestätigung mit dem Nennbetrag der so verbrieften Schuldverschreibungen ist ein schlüssiger Nachweis über den Inhalt des Registers des jeweiligen ICSD zu diesem Zeitpunkt.

Bei Rückzahlung oder einer Zinszahlung bezüglich der durch die Globalurkunde verbrieften Schuldverschreibungen bzw. bei Kauf und Entwertung der durch die Globalurkunde verbrieften Schuldverschreibungen stellt die Emittentin sicher, dass die Einzelheiten über Rückzahlung, Zahlung bzw. Kauf und Entwertung bezüglich der Globalurkunde *pro rata* in die Register der ICSDs eingetragen werden und dass nach dieser Eintragung vom Gesamtnennbetrag der in die Register der ICSDs aufgenommenen und durch die Globalurkunde verbrieften Schuldverschreibungen der Gesamtnennbetrag der zurückgezahlten bzw. gekauften und entwerteten Schuldverschreibungen abgezogen wird.

"**Clearing System**" means Clearstream Banking S.A., Luxembourg ("**CBL**") and Euroclear Bank SA/NV, Brussels ("**Euroclear**") (CBL and Euroclear each an international central securities depositary ("**ICSD**" and together the "**ICSDs**")) as well as any successor in respect of the functions performed by each ICSD.

The Notes are issued in new global note ("**NGN**") form and are kept in custody by a common safekeeper on behalf of both ICSDs.

The aggregate principal amount of Notes represented by the Global Note shall be the aggregate amount from time to time entered in the records of both ICSDs. The records of the ICSDs (which expression means the records that each ICSD holds for its customers which reflect the amount of such customers' interest in the Notes) shall be conclusive evidence of the aggregate principal amount of Notes represented by the Global Note and, for these purposes, a statement issued by an ICSD stating the principal amount of Notes so represented at any time shall be conclusive evidence of the records of the relevant ICSD at that time.

On any redemption or interest being made in respect of, or purchase and cancellation of, any of the Notes represented by the Global Note the Issuer shall procure that details of such redemption, payment or purchase and cancellation (as the case may be) in respect of the Global Note shall be entered *pro rata* in the records of the ICSDs and, upon any such entry being made, the aggregate principal amount of the Notes recorded in the records of the ICSDs and represented by the Global Note shall be reduced by the aggregate principal amount of the Notes so redeemed or purchased and cancelled.

Bei Austausch eines Anteils von ausschließlich durch eine vorläufige Globalurkunde verbrieften Schuldverschreibungen wird die Emittentin sicherstellen, dass die Einzelheiten dieses Austauschs *pro rata* in die Aufzeichnungen der ICSDs aufgenommen werden.

Die Vorläufige Globalurkunde und die Dauer-Globalurkunde tragen jeweils die eigenhändige Unterschrift von einem Vertretungsberechtigten der Emittentin sowie die eigenhändige Unterschrift eines Kontrollbeauftragten der Hauptzahlstelle.

(e) *Anleihegläubiger*. Den Inhabern von Schuldverschreibungen („**Anleihegläubiger**") stehen Miteigentumsanteile oder vergleichbare andere Rechte an der Globalurkunde zu, die gemäß anwendbarem Recht und den Bestimmungen und Regeln des Clearingsystems übertragen werden können.

§ 2 Status, Negativerklärung und Garantie

(a) *Status*. Die Schuldverschreibungen begründen nicht nachrangige und, vorbehaltlich der Garantie, nicht besicherte Verbindlichkeiten der Emittentin, die im gleichen Rang untereinander und, im Falle der Insolvenz, der Auflösung oder der Liquidation der Emittentin oder eines der Abwendung der Insolvenz der Emittentin dienenden Verfahrens, im gleichen Rang mit allen anderen gegenwärtigen und zukünftigen nicht besicherten und nicht nachrangigen Verbindlichkeiten der Emittentin stehen, mit Ausnahme von Verbindlichkeiten, die nach geltenden Rechtsvorschriften vorrangig sind.

On an exchange of a portion only of the Notes represented by a Temporary Global Note, the Issuer shall procure that details of such exchange shall be entered *pro rata* in the records of the ICSDs.

The Temporary Global Note and the Permanent Global Note shall each bear the manual signature of one duly authorised officer of the Issuer as well as the manual signature of an authentication officer of the Principal Paying Agent.

(e) *Noteholders*. The holders of Notes ("**Noteholders**") are entitled to co-ownership participations or other comparable rights in the Global Note, which are transferable in accordance with applicable laws and the rules and regulations of the Clearing System.

§ 2 Status, Negative Pledge and Guarantee

(a) *Status*. The Notes constitute *unsubordinated* and, subject to the Guarantee, unsecured obligations of the Issuer ranking *pari passu* among themselves and, in the event of the insolvency, dissolution or liquidation of the Issuer or any proceeding to avoid insolvency of the Issuer, *pari passu* with all other present and future unsubordinated and unsecured obligations of the Issuer, save for such obligations which may be preferred by applicable law.

(b) *Negativerklärung der Emittentin*. Solange noch Kapital- oder Zinsbeträge aus den Schuldverschreibungen ausstehen, jedoch nur bis zu dem Zeitpunkt, an dem alle auf die Schuldverschreibungen gemäß diesen Anleihebedingungen zu zahlenden Beträge an Kapital und Zinsen dem Clearingsystem zur Verfügung gestellt worden sind, verpflichtet sich die Emittentin, kein Grundpfandrecht, Mobiliarpfandrecht, Pfandrecht oder sonstiges dingliches Sicherungsrecht (jedes ein „**Sicherungsrecht**") an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder Teilen davon zur Besicherung einer Maßgeblichen Fremdkapitalverbindlichkeit zu gewähren oder bestehen zu lassen, ohne zuvor oder gleichzeitig entweder die Anleihegläubiger gleichrangig und anteilig an einem solchen Sicherungsrecht zu beteiligen oder zu Gunsten der Anleihegläubiger ein anderes, gleichwertiges Sicherungsrecht zu bestellen, welches von einem unabhängigen Sachverständigen als gleichwertige Sicherheit beurteilt wird.

Die Verpflichtung nach Satz 1 dieses § 2(b) findet keine Anwendung auf ein Sicherungsrecht, das

(i) von der Emittentin an gegenwärtigen oder zukünftigen, tatsächlichen oder bedingten Forderungen bestellt wird, die der Emittentin gegen die Garantin oder eine andere Tochtergesellschaft der Garantin aufgrund der darlehensweisen Weiterleitung des Emissionserlöses aus der Begebung von Wertpapieren zustehen, sofern ein solches Sicherungsrecht der Besicherung der Verpflichtungen der Emittentin aus den jeweiligen Wertpapieren dient;

(ii) gesetzlich vorgeschrieben ist oder kraft Gesetzes entsteht;

(iii) eine Maßgebliche Fremdkapitalverbindlichkeit besichert, die infolge einer zukünftigen Akquisition zu einer Verbindlichkeit der Emittentin wird; oder

(iv) der vollständigen oder teilweisen Verlängerung, Erneuerung oder Ersetzung (oder wiederholte Verlängerungen, Erneuerungen oder Ersetzungen) eines der vorstehend in den Klauseln (i) bis (iii) aufgeführten Sicherungsrechte dient.

(b) *Negative pledge of the Issuer.* So long as any amounts of interest or principal remain outstanding under the Notes, but only up to the time all amounts payable to Noteholders under the Notes in accordance with these Terms and Conditions have been placed at the disposal of the Clearing System, the Issuer undertakes not to create or permit to subsist any mortgage, charge, pledge or other form of encumbrance *in rem* (each a "**Security Interest**") over the whole or any part of its present or future assets or revenues to secure any Relevant Indebtedness, without prior thereto or at the same time letting the Noteholders either share equally and rateably in such Security Interest or benefit from an equivalent other Security Interest which will be approved by an independent expert as being equivalent security.

The undertaking pursuant to sentence 1 of this § 2(b) will not apply to any Security Interest which

(i) is provided by the Issuer over any present or future, actual or contingent claims of the Issuer against the Guarantor or another Subsidiary of the Guarantor arising from the on-lending of the proceeds from the issuance by the Issuer of any securities, provided that any such Security Interest secures the obligations of the Issuer under any such securities;

(ii) is mandatory according to, or created by operation of, applicable laws;

(iii) secures a Relevant Indebtedness that becomes an obligation of the Issuer as a consequence of a future acquisition; or

(iv) is provided for any extension, renewal or replacement (or successive extensions, renewals or replacements) in whole or in part of any Security Interest referred to in clauses (i) through (iii) above.

Ein nach § 2(b) zu leistendes Sicherungsrecht kann auch zu Gunsten eines für die Anleihegläubiger handelnden Treuhänders bestellt werden.

„**Maßgebliche Fremdkapitalverbindlichkeiten**" bezeichnet jegliche Fremdkapitalverbindlichkeiten in Form von (oder verbrieft durch) Anleihen, Schuldverschreibungen, Schuldtitel oder sonstige Wertpapiere, soweit sie an einer Börse oder im Freiverkehr oder in einem anderen Wertpapiermarkt notiert, zugelassen oder gehandelt werden oder notiert, zugelassen oder gehandelt werden können sowie Schuldscheine.

(c) *Garantie*. Die Garantin hat die unbedingte und unwiderrufliche Garantie für die fristgerechte Zahlung von Kapital, Zinsen und sonstigen aus den Schuldverschreibungen zu zahlenden Beträgen gemäß einer Garantie datiert September 2019 (die „**Garantie**") übernommen. Die Garantie ist ein Vertrag zugunsten jedes Anleihegläubigers als begünstigtem Dritten gem. § 328 Absatz 1 BGB, der das Recht begründet, die Garantin unmittelbar aus der Garantie auf Erfüllung in Anspruch zu nehmen und Ansprüche aus der Garantie gegen die Garantin unmittelbar durchzusetzen.

(d) *Negativerklärung der Garantin*. In der Garantie hat sich die Garantin verpflichtet, solange noch Kapital- oder Zinsbeträge aus den Schuldverschreibungen ausstehen, jedoch nur bis zu dem Zeitpunkt, an dem alle auf die Schuldverschreibungen gemäß diesen Anleihebedingungen zu zahlenden Beträgen an Kapital und Zinsen dem Clearingsystem zur Verfügung gestellt worden sind,

(i) kein Sicherungsrecht an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder Teilen davon zur Besicherung einer Maßgeblichen Fremdkapitalverbindlichkeit zu gewähren oder bestehen zu lassen; und

Any Security Interest which is to be provided pursuant to § 2(b) may also be provided to a person acting as trustee for the Noteholders.

"**Relevant Indebtedness**" means any indebtedness which is in the form of, or represented or evidenced by, bonds, notes, debentures, loan stock or other securities which for the time being are capable of being, quoted, listed or dealt in or traded on any stock exchange or over-the-counter or other securities market, as well as loan notes (*Schuldscheine*).

(c) *Guarantee.* The Guarantor has given an unconditional and irrevocable guarantee pursuant to a guarantee dated September 2019 (the "**Guarantee**") for the due payment of principal of, and interest on, and any other amounts expressed to be payable under the Notes. The Guarantee constitutes a contract for the benefit of the Noteholders from time to time as third-party beneficiaries in accordance with § 328 paragraph 1 of the German Civil Code (*Bürgerliches Gesetzbuch*), giving rise to the right of each Noteholder to require performance under the Guarantee directly from the Guarantor and to enforce the Guarantee directly against the Guarantor.

(d) *Negative Pledge of the Guarantor*. In the Guarantee the Guarantor has undertaken, so long as any amounts of interest or principal remain outstanding under the Notes, but only up to the time all amounts payable to Noteholders under the Notes in accordance with these Terms and Conditions have been placed at the disposal of the Clearing System,

(i) not to create or permit to subsist any Security Interest over the whole or any part of its present or future assets or revenues to secure any Relevant Indebtedness; and

(ii) zu veranlassen (soweit rechtlich möglich und zulässig), dass keine Tochtergesellschaft ein Sicherungsrecht an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder jeweiligen Teilen davon zur Besicherung einer Maßgeblichen Fremdkapitalverbindlichkeit gewährt oder bestehen lässt,

(ii) to procure (to the extent legally possible and permissible) that no Subsidiary will create or permit to subsist any present or future Security Interest over the whole or any part of its assets or revenues to secure any Relevant Indebtedness,

ohne zuvor oder gleichzeitig entweder die Anleihegläubiger gleichrangig und anteilig an einem solchen Sicherungsrecht zu beteiligen oder zu Gunsten der Anleihegläubiger ein anderes, gleichwertiges Sicherungsrecht zu bestellen, welches von einem unabhängigen Sachverständigen als gleichwertige Sicherheit beurteilt wird.

without prior thereto or at the same time letting the Noteholders either share equally and rateably in such Security Interest or benefit from an equivalent other Security Interest which will be approved by an independent expert as being equivalent security.

Die in Satz 1 dieses § 2(d) beschriebene Verpflichtung findet keine Anwendung auf ein Sicherungsrecht, das

The undertaking described in sentence 1 of this § 2(d) will not apply to any Security Interest which

(i) von einer Tochtergesellschaft an gegenwärtigen oder zukünftigen, tatsächlichen oder bedingten Forderungen bestellt wird, die der Tochtergesellschaft gegen die Garantin oder eine andere Tochtergesellschaft der Garantin aufgrund der darlehensweisen Weiterleitung des Emissionserlöses aus der Begebung von Wertpapieren zustehen, sofern ein solches Sicherungsrecht der Besicherung der Verpflichtungen der Tochtergesellschaft aus den jeweiligen Wertpapieren dient;

(i) is provided by any Subsidiary over any present or future, actual or contingent claims of the Subsidiary against the Guarantor or another Subsidiary of the Guarantor arising from the on-lending of the proceeds from the issuance by the Subsidiary of any securities, provided that any such Security Interest secures the obligations of the Subsidiary under any such securities;

(ii) gesetzlich vorgeschrieben ist oder kraft Gesetzes entsteht;

(ii) is mandatory according to, or created by operation of, applicable laws;

(iii) eine Maßgebliche Fremdkapitalverbindlichkeit besichert, die infolge einer zukünftigen Akquisition zu einer Verbindlichkeit der Garantin oder einer Tochtergesellschaft wird;

(iii) secures a Relevant Indebtedness that becomes an obligation of the Guarantor or any Subsidiary as a consequence of a future acquisition;

(iv) der vollständigen oder teilweisen Verlängerung, Erneuerung oder Ersetzung (oder wiederholte Verlängerungen, Erneuerungen oder Ersetzungen) eines der vorstehend in den Klauseln (i) bis (iii) aufgeführten Sicherungsrechte dient.

(iv) is provided for any extension, renewal or replacement (or successive extensions, renewals or replacements) in whole or in part of any Security Interest referred to in clauses (i) through (iii) above.

Ein nach § 2(d) zu leistendes Sicherungsrecht kann auch zu Gunsten eines für die Anleihegläubiger handelnden Treuhänders bestellt werden.

Any Security Interest which is to be provided pursuant to § 2(d) may also be provided to a person acting as trustee for the Noteholders.

„**Tochtergesellschaft**" bezeichnet eine Rechtsträger, dessen Abschluss aufgrund gesetzlicher Vorgaben oder nach Maßgabe allgemein anerkannter Rechnungslegungsgrundsätze zu einem beliebigen Zeitpunkt mit dem der Garantin zu konsolidieren ist (Vollkonsolidierung).

§ 3 Zinsen

(a) *Zinssatz und Zinszahlungstage*. Die Schuldverschreibungen werden bezogen auf ihren ausstehenden Nennbetrag ab dem 25. September 2019 (der „**Verzinsungsbeginn**") (einschließlich) bis zum Endfälligkeitstag (ausschließlich) verzinst.

Die Schuldverschreibungen werden mit jährlich 0,452% verzinst. Die Zinsen sind nachträglich an jedem Zinszahlungstag zahlbar.

„**Zinszahlungstag**" bezeichnet den 25. September eines jeden Jahres, erstmals den 25. September 2020.

(b) *Zinstagequotient*. Zinsen für einen beliebigen Zeitraum (ausgenommen ist ein etwaiger Zeitraum, für den ein Bruchteilzinsbetrag festgelegt ist) werden auf der Grundlage des Zinstagequotienten berechnet.

„**Zinstagequotient**" bezeichnet bei der Berechnung des Zinsbetrages für einen beliebigen Zeitraum (ab dem ersten Tag dieses Zeitraums (einschließlich) bis zum letzten Tag dieses Zeitraums (ausschließlich)) (der „**Zinsberechnungszeitraum**"):

(i) wenn der Zinsberechnungszeitraum der Feststellungsperiode entspricht, in die er fällt, oder kürzer als diese ist, die Anzahl von Tagen in dem Zinsberechnungszeitraum dividiert durch die Anzahl von Tagen in der betreffenden Feststellungsperiode; und

(ii) wenn der Zinsberechnungszeitraum länger als eine Feststellungsperiode ist, die Summe aus:

(A) der Anzahl der Tage in dem betreffenden Zinsberechnungszeitraum, die in die Feststellungsperiode fallen, in der der Zinsberechnungszeitraum beginnt, dividiert durch die Anzahl der Tage in der betreffenden Feststellungsperiode; und

"**Subsidiary**" means any entity whose financial statements at any time are required by law or in accordance with generally accepted accounting principles to be fully consolidated with those of the Guarantor.

§ 3 Interest

(a) *Rate of interest and Interest Payment Dates*. The Notes bear interest on their outstanding principal amount from and including 25 September 2019 (the "**Interest Commencement Date**") to but excluding the Maturity Date.

The Notes bear interest at the rate of 0.452 per cent. per annum, such interest being payable in arrear on each Interest Payment Date.

"**Interest Payment Date**" means 25 September in each year, commencing on 25 September 2020.

(b) *Day Count Fraction*. If interest is required to be calculated for any period of time (other than any period of time for which a broken interest amount has been fixed), such interest shall be calculated on the basis of the Day Count Fraction.

"**Day Count Fraction**" means, in respect of the calculation of an amount of interest on any Note for any period of time (from and including the first day of such period to but excluding the last day of such period) (the "**Calculation Period**"):

(i) if the Calculation Period is equal to or shorter than the Determination Period during which it falls, the number of days in the Calculation Period divided by the number of days in such Determination Period; and

(ii) if the Calculation Period is longer than one Determination Period, the sum of:

(A) the number of days in such Calculation Period falling in the Determination Period in which the Calculation Period begins divided by the number of days in such Determination Period; and

(B) die Anzahl der Tage in dem betreffenden Zinsberechnungszeitraum, die in die nachfolgende Feststellungsperiode fallen, dividiert durch die Anzahl der Tage in der betreffenden Feststellungsperiode.

Dabei gilt Folgendes:

„**Feststellungstermin**" bezeichnet den 25. September eines jeden Jahres;

„**Feststellungsperiode**" bezeichnet jeden Zeitraum ab einem Feststellungstermin (einschließlich), der in ein beliebiges Jahr fällt, bis zum nächsten Feststellungstermin (ausschließlich).

(c) *Ende des Zinslaufs*. Der Zinslauf der Schuldverschreibungen endet an dem Ende des Tages, der dem Tag vorausgeht, an dem sie zur Rückzahlung fällig werden. Falls die Emittentin die *Schuldverschreibungen* bei Fälligkeit nicht einlöst, wird der ausstehende Betrag ab dem Tag der Fälligkeit (einschließlich) bis zum Tag der vollständigen Zahlung an die Anleihegläubiger (ausschließlich) mit dem gesetzlich bestimmten Verzugszins verzinst.[1].

§ 4 Rückzahlung

(a) *Rückzahlung bei Endfälligkeit*. Soweit nicht zuvor bereits insgesamt oder teilweise zurückgezahlt oder angekauft und eingezogen, werden die Schuldverschreibungen zu ihrem Nennbetrag am 25. September 2023 (der „**Endfälligkeitstag**") zurückgezahlt.

(b) *Rückkauf.* Die Emittentin kann jederzeit im Markt oder auf andere Weise Schuldverschreibungen ankaufen und verkaufen. Sofern solche Käufe durch öffentliches Angebot erfolgen, muss dieses Angebot allen Anleihegläubigern gemacht werden.

(B) the number of days in such Calculation Period falling in the next Determination Period divided by the number of days in such Determination Period.

Where:

"**Determination Date**" means 25 September in each year;

"**Determination Period**" means each period from and including a Determination Date in any year to but excluding the next Determination Date.

(c) *Cessation of Interest Accrual*. The Notes shall cease to bear interest from the end of the day preceding their due date for redemption. If the Issuer fails to redeem the Notes when due, interest shall continue to accrue on the outstanding amount from (and including) the due date to (but excluding) the day on which such payment is received by or on behalf of the Noteholders at the default rate of interest established by statutory law.[2]

§ 4 Redemption

(a) *Redemption at maturity*. To the extent not previously redeemed in whole or in part or purchased and cancelled the Notes shall be redeemed at their Principal Amount on 25 September 2023 (the "**Maturity Date**").

(b) *Purchases*. The Issuer is entitled to purchase and resell Notes at any time in the market or otherwise. If such purchases are made by tender, tenders for such Notes must be made available to all Noteholders of such Notes alike.

---

1 Der gesetzliche Verzugszinssatz entspricht dem von der Deutschen Bundesbank von Zeit zu Zeit veröffentlichten Basiszinssatz zuzüglich fünf Prozentpunkten, §§ 288 Abs. 1, 247 Abs. 1 BGB.

2 The default rate of interest established by statutory law is five percentage points above the basis rate of interest published by Deutsche Bundesbank from time to time, §§ 288 paragraph 1, 247 paragraph 1 of the German Civil Code (*Bürgerliches Gesetzbuch*).

(c) *Vorzeitige Rückzahlung nach Wahl der Emittentin*.

(i) Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) mit Wirkung zu jedem Tag während des Zeitraums ab dem Begebungstag der Schuldverschreibungen (einschließlich) bis zum 25. Juni 2023 (ausschließlich) durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen zum Wahl-Rückzahlungsbetrag (wie nachstehend definiert) zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin (der „**Wahl-Rückzahlungstag**") in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

Definitionen:

Der „**Wahl-Rückzahlungsbetrag**" je Schuldverschreibung entspricht dem höheren von:

(i) dem Nennbetrag; oder

(ii) dem Abgezinsten Marktwert.

Der Wahl-Rückzahlungsbetrag wird von der Berechnungsstelle berechnet.

Der „**Abgezinste Marktwert**" ist die Summe aus

(a) dem auf den Wahl-Rückzahlungstag abgezinsten Wert des Nennbetrags der zurückzuzahlenden Schuldverschreibung, der ansonsten am Endfälligkeitstag fällig werden würde; und

(b) den jeweils auf den Wahl-Rückzahlungstag abgezinsten Werten der verbleibenden Zinszahlungen, die ansonsten an jedem *Zinszahlungstag* nach dem Wahl-Rückzahlungstag bis zum Endfälligkeitstag (einschließlich) fällig werden würden (ausschließlich etwaiger, bis zum Wahl-Rückzahlungstag (ausschließlich) aufgelaufener Zinsen).

Die Berechnungsstelle errechnet den Abgezinsten Marktwert gemäß der Marktkonvention auf einer Grundlage, die der Berechnung von Zinsen gemäß § 3 entspricht, wobei sie die Benchmark-Rendite zuzüglich 0,20% zugrunde legt.

(c) *Early redemption at the option of the Issuer*.

(i) The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) with effect as of any date during the period from and including the Issue Date to but excluding 25 June 2023. In the case such notice is given, the Issuer will redeem the remaining Notes at the Call Redemption Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice (the "**Call Redemption Date**").

Definitions:

The "**Call Redemption Amount**" per Note shall be the higher of:

(i) the Principal Amount; or

(ii) the Present Value.

The Call Redemption Amount shall be calculated by the Calculation Agent.

The "**Present Value**" will be the sum of

(a) the principal amount of the Note to be redeemed which would otherwise become due on the Maturity Date, discounted to the Call Redemption Date; and

(b) the remaining interest payments which would otherwise become due on each Interest Payment Date falling after the Call Redemption Date to and including the Maturity Date (excluding any interest accrued to but excluding the Call Redemption Date), each discounted to the Call Redemption Date.

The Calculation Agent will calculate the Present Value in accordance with market convention on a basis which is consistent with the calculation of interest as set out in § 4, using the Benchmark Yield plus 0.20%.

Die „**Benchmark-Rendite**" bezeichnet die am Rückzahlungs-Berechnungstag bestehende Rendite der 0,0% Bundesobligation—Serie 178, basierend auf dem Referenzpreis für diese Referenz-Anleihe an diesem Tag, wie um oder gegen 12:00 Uhr mittags (Frankfurter Zeit) an diesem Tag auf der Bloomberg Seite DE0001141786 Govt HP (unter Nutzung der Einstellung „Fixing Price" und der Preisquelle „FRNK") abgelesen, oder wie von einer anderen, durch die Berechnungsstelle festgelegten, Quelle hergeleitet oder veröffentlicht oder sollte die Rendite zu diesem Zeitpunkt nicht verfügbar sein, bezeichnet die Benchmark-Rendite eine ersetzende Referenzanleihe, die von der Berechnungsstelle festgesetzt wird, die jeweils mit einer Laufzeit, die mit der verbleibenden Restlaufzeit der Schuldverschreibung bis zum Endfälligkeitstag vergleichbar ist, und die im Zeitpunkt der Auswahlentscheidung und entsprechend der üblichen Finanzmarktpraxis zur Preisbestimmung bei Neuemissionen von Unternehmensanleihen mit einer bis zum Endfälligkeitstag der Schuldverschreibung vergleichbaren Laufzeit verwendet werden würde.

„**Rückzahlungs-Berechnungstag**" ist der sechste Geschäftstag vor dem Tag, an dem die Schuldverschreibungen gemäß § 5(c)(i) zurückgezahlt werden.

(ii) Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) mit Wirkung zu jedem Tag während des Zeitraums ab dem 25. Juni 2023 (einschließlich) bis zum Endfälligkeitstag (ausschließlich) durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin zum Nennbetrag zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

The "**Benchmark Yield**" means the yield at the Redemption Calculation Date of the 0.0% Bundesobligation—Serie 178, based on the reference price for such benchmark security on such day, as observed at or about noon (Frankfurt time) on such date on Bloomberg page DE0001141786 Govt HP (using the setting "Fixing Price" and the pricing source "FRNK"), or as derived or published by such other source as determined by the Calculation Agent, and if such yield is not available at that time the Benchmark Yield shall be the yield of a substitute benchmark security chosen by the Calculation Agent, in each case as having a maturity comparable to the remaining term of the Note to the Maturity Date, that would be used at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the Maturity Date.

"**Redemption Calculation Date**" means the sixth Business Day prior to the date on which the Notes are redeemed in accordance with this § 5(c)(i).

(ii) The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) with effect as of any date during the period from and including 25 June 2023 to but excluding the Maturity Date. In the case such notice is given, the Issuer will redeem the remaining Notes at the Principal Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice.

(d) *Vorzeitige Rückzahlung durch die Emittentin bei geringem ausstehenden Gesamtnennbetrag*. Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) jederzeit durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen, wenn 80% oder mehr des *Gesamtnennbetrags* der ursprünglich begebenen Schuldverschreibungen zurückgezahlt oder zurückgekauft und entwertet wurden. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin zum Nennbetrag zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

(e) *Vorzeitige Rückzahlung durch die Emittentin aus steuerlichen Gründen*. Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) jederzeit durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen, wenn ein Gross-up-Ereignis eingetreten ist. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin zum Nennbetrag zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

Eine solche Rückzahlung darf nicht früher als 90 Tage vor dem Tag erfolgen, an dem die Emittentin oder die Garantin erstmals verpflichtet wäre, Zusätzliche Beträge (wie in § 6 definiert) zu zahlen bzw. wenn eine ordnungsgemäße Zahlungsaufforderung unter der Garantie erfolgen würde.

(d) *Clean-up Call*. The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) at any time if 80 per cent. or more of the aggregate principal amount of the Notes initially issued have been redeemed or repurchased and cancelled. In the case such notice is given, the Issuer will redeem the remaining Notes at the Principal Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice.

(e) *Early Redemption by the Issuer for Reasons of Taxation*. The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) at any time if a Gross-up Event has occurred. In the case such notice is given, the Issuer will redeem the remaining Notes at the Principal Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice.

No such redemption may be made earlier than 90 days prior to the earliest date on which the Issuer or the Guarantor would be obliged to pay the Additional Amounts (as defined in § 6) or (as the case may be) in respect of a demand for payment duly made under the Guarantee, for the first time.

Ein „**Gross-up-Ereignis**" tritt ein, wenn, der Emittentin oder der Garantin ein Gutachten einer anerkannten Anwaltskanzlei vorliegt (und die Emittentin oder die Garantin der Hauptzahlstelle eine Kopie davon gibt) aus dem hervorgeht, dass die Emittentin oder die Garantin aufgrund einer an oder nach dem Begebungstag der Schuldverschreibungen in Kraft tretenden Gesetzesänderung (oder einer Änderung von darunter erlassenen Bestimmungen und Vorschriften) der Niederlande oder der Bundesrepublik Deutschland oder einer zur Erhebung von Steuern berechtigten Gebietskörperschaft oder Behörde der Niederlande oder der Bundesrepublik Deutschland, oder als Folge einer Änderung der offiziellen Auslegung oder Anwendung dieser Gesetze, Bestimmungen oder Vorschriften durch eine gesetzgebende Körperschaft, ein Gericht, eine Regierungsstelle oder eine Aufsichtsbehörde (einschließlich des Erlasses von Gesetzen sowie der Bekanntmachung gerichtlicher oder aufsichtsrechtlicher Entscheidungen), verpflichtet ist oder verpflichtet sein wird, Zusätzliche Beträge gemäß § 6 auf die Schuldverschreibungen zu zahlen, oder die Garantin verpflichtet ist oder verpflichtet sein wird, Zusätzliche Beträge auf fällige Beträge aus der Garantie zu zahlen, und die Emittentin bzw. die Garantin diese Verpflichtung nicht abwenden kann, indem sie Maßnahmen ergreift, die sie nach Treu und Glauben für zumutbar und angemessen hält.

(f) *Erklärung der vorzeitigen Rückzahlung*. Die Emittentin kann die Erklärung der vorzeitigen Rückzahlung der Schuldverschreibungen gemäß § 4(c), § 4(d) oder § 4(e) durch Veröffentlichung einer Mitteilung an die Anleihegläubiger gemäß § 11 unter Einhaltung einer Frist von nicht weniger als 30 und nicht mehr als 60 Tagen vor dem Rückzahlungstag erklären.

Diese Mitteilung hat den Rückzahlungstermin festzulegen sowie die Tatsachen anzugeben, die das Kündigungsrecht der Emittentin begründen.

Die Emittentin wird jeder Börse, an der die Schuldverschreibungen notiert sind und deren Regeln eine Mitteilung an die Börse verlangen, umgehend Mitteilung über die Kündigung machen.

A "**Gross up Event**" will occur if an opinion of a recognised law firm has been delivered to the Issuer or the Guarantor (and the Issuer or the Guarantor has provided the Principal Paying Agent with a copy thereof) stating that, the Issuer or the Guarantor, as a result of any change in, or amendment to, the laws (or any rules or regulations thereunder) of the Netherlands or the Federal Republic of Germany or any political subdivision or any authority of or in the Netherlands or the Federal Republic of Germany having power to tax, or as a result of any change in, or amendment to, the official interpretation or application of any such laws, rules or regulations by any legislative body, court, governmental agency or regulatory authority (including the enactment of any legislation and the publication of any judicial decision or regulatory determination), which change or amendment becomes effective on or after the Issue Date has or will become obliged to pay Additional Amounts pursuant to § 6 on the Notes or the Guarantor has or will become obliged to pay Additional Amounts in respect of payments due under the Guarantee, and that obligation cannot be avoided by the Issuer and the Guarantor, respectively, taking such measures it (acting in good faith) deems reasonable and appropriate.

(f) *Notice of early redemption*. The Issuer may call the Notes for early redemption pursuant to § 4(c), § 4(d) or § 4(e) by publishing a notice to the Noteholders in accordance with § 11 subject to observing a notice period of not less than 30 nor more than 60 days prior to the specified redemption date.

This notice must specify the redemption date and state the facts which establish the right of the Issuer to redeem the Notes.

The Issuer will inform, if required by such stock exchange on which the Notes are listed, such stock exchange as soon as possible of such redemption.

(g) *Kontrollwechsel*.

(i) Wenn ein Rückzahlungsereignis (wie nachstehend definiert) eintritt, wird die Emittentin innerhalb von 30 Tagen nach Ablauf des jeweiligen Kontrollwechselzeitraums (wie nachstehend definiert) das Rückzahlungsereignis und den Rückzahlungsstichtag unter Angabe der Umstände des Rückzahlungsereignisses gemäß § 11 bekannt machen.

„**Rückzahlungsstichtag**" bezeichnet den von der Emittentin gemäß § 4(g)(i) festgelegten Geschäftstag, der nicht weniger als 15 und nicht mehr als 30 Tage nach dem Tag der Bekanntmachung des Rückzahlungsereignisses gemäß § 11 liegen darf.

(ii) Falls die Emittentin gemäß § 4(g)(i) ein Rückzahlungsereignis bekannt gemacht hat, ist jeder Anleihegläubiger nach seiner Wahl berechtigt, mit einer Frist von mindestens 10 Tagen mit Wirkung zum Rückzahlungsstichtag alle oder einzelne seiner Schuldverschreibungen, die noch nicht zurückgezahlt wurden, vorzeitig fällig zu stellen. In einem solchen Fall hat die Emittentin die betreffenden Schuldverschreibungen am Rückzahlungsstichtag zu 101% des Nennbetrags zuzüglich etwaiger bis zu dem Rückzahlungsstichtag (ausschließlich) aufgelaufener Zinsen zurückzuzahlen.

Eine Fälligstellung gemäß diesem § 4(g)(ii) hat durch Übergabe einer Erklärung in Textform gegenüber der Hauptzahlstelle zu erfolgen und ist unwiderruflich. Der betreffende Anleihegläubiger hat dabei durch eine Bescheinigung seiner Depotbank nachzuweisen, dass er zu dem Zeitpunkt der Erklärung Inhaber der betreffenden Schuldverschreibung(en) ist, und seine Schuldverschreibung(en), für die das Recht ausgeübt werden soll, an die Hauptzahlstelle zu liefern.

(iii) Ein „**Rückzahlungsereignis**" tritt ein, wenn

(A) die Emittentin einen Kontrollwechsel (wie nachstehend definiert) bekannt macht; und

(g) *Change of Control*.

(i) If a Put Event (as defined below) occurs, the Issuer will give notice in accordance with § 11 of the Put Event and the Put Record Date specifying the nature of the Put Event within 30 days of the end of the respective Change of Control Period (as defined below).

"**Put Record Date**" means the Business Day fixed by the Issuer pursuant to § 4(g)(i) which will be not less than 15 nor more than 30 days after the notice of the Put Event and which is published in accordance with § 11.

(ii) If the Issuer gives notice in accordance with § 4(g)(i) of a Put Event, each Noteholder may at his option on giving not less than 10 days' notice declare all or some only of his Notes not previously redeemed due which notice shall take effect on the Put Record Date. In such case the Issuer will redeem such Notes on the Put Record Date at 101 per cent. of the Principal Amount plus interest accrued to but excluding the Put Record Date.

A notice pursuant to this § 4(g)(ii) has to be effected by delivering a notice in text form to the Principal Paying Agent and is irrevocable. The respective Noteholder must demonstrate with a certificate from his Custodian that he is the holder of the respective Note(s) at the time of the declaration and deliver to the Principal Paying Agent the Note(s) for which the right shall be exercised.

(iii) A "**Put Event**" will occur if

(A) the Issuer announces a Change of Control (as defined below); and

(B) nach Eintritt des Kontrollwechsels und, in den Fällen gemäß § (4)(g)(v)(A)(y) und § (4)(g)(v)(A)(z) unten, aufgrund dessen ein Negatives Ratingereignis (wie nachstehend definiert) eintritt.

(iv) Ein „**Kontrollwechsel**" gilt jedes Mal als eingetreten, wenn ein Kontrollwechselereignis (wie nachstehend definiert) eingetreten ist.

(A) „**Kontrollwechselereignis**" bedeutet, dass

(x) an oder nach dem Begebungstag, aber vor dem Zeitpunkt eines Qualifizierten IPO die BASF SE, Ludwigshafen am Rhein, Deutschland („**BASF**") und die Letterone Holdings S.A., Luxemburg („**Letterone Holdings**") (ob unmittelbar oder mittelbar über irgendeine Person) zusammen nicht mehr wirtschaftliche Eigentümer von mindestens 51% der Stammgeschäftsanteile der Garantin sind; dies gilt mit der Maßgabe, dass kein Kontrollwechsel eintritt, wenn BASF alleine mindestens 51% der Stammgeschäftsanteile der Garantin hält; oder

(y) zum oder nach dem Zeitpunkt eines Qualifizierten IPO ein Ereignis eintritt, durch das eine oder mehrere Person(en) (außer einer börsennotierten Holdinggesellschaft der Garantin und außer BASF (oder eines ihrer Tochterunternehmen)), die entweder alleine oder gemeinsam im Sinne von § 2 Abs. 5 des Wertpapiererwerbs- und Übernahmegesetzes handeln, unmittelbar oder mittelbar einen Stimmrechtsanteil von mehr als 50% an der Garantin erwerben, wobei der Stimmrechtsanteil nach § 34 Abs. 1 und 2 WpHG berechnet wird.

(B) a Negative Rating Event (as defined below) occurs after the occurrence and, in the cases of § 4(g)(v)(A)(y) and § 4(g)(v)(A)(z) below, as a result of the Change of Control.

(iv) A "**Change of Control**" shall be deemed to have occurred at each time that a Change of Control Event (as defined below) has occurred.

(A) "**Change of Control Event**" means

(x) on or after the Issue Date but prior to the date of a Qualified IPO, BASF SE, Ludwigshafen am Rhein, Germany ("**BASF**") and Letterone Holdings S.A., Luxembourg ("**Letterone Holdings**") (whether directly or indirectly through any person) together cease to hold beneficially a minimum of 51 per cent. of the ordinary shares of the Guarantor, provided that no change of control shall occur if BASF individually holds a minimum of 51 per cent. of the ordinary shares in the Guarantor; or

(y) on or after the date of a Qualified IPO, the occurrence of any event pursuant to which one or more person(s) (other than any listed Holding Company of the Guarantor and other than BASF (or any of its subsidiaries)) acting either individually or acting in concert within the meaning of §2(5) of the German Securities Acquisition and Take Over Act (*Wertpapiererwerbs- und Übernahmegesetz*) acquire(s) directly or indirectly more than 50 per cent. of the voting rights of the Guarantor, provided that the share of voting rights shall be calculated pursuant to section 34 paras. (l) and (2) WpHG.

„**Holdinggesellschaft**" bedeutet in Bezug auf eine Gesellschaft oder ein Unternehmen, jede andere Gesellschaft oder jedes andere Unternehmen, dessen Tochtergesellschaft es ist.

"**Holding Company**" means in relation to a company or corporation, any other company or corporation in respect of which it is a subsidiary.

„**WpHG**" bezeichnet das Wertpapierhandels-gesetz in seiner jeweils gültigen Fassung.

"**WpHG**" means the German Securities Trading Act (*Wertpapierhandels-gesetz*) as amended from time to time.

„**Qualifizierter IPO**" bezeichnet eine erstmalige Börsenzulassung der Gesamtheit oder eines Teils der Aktien der Garantin oder einer Holdinggesellschaft der Garantin (deren einziger wesentliche Vermögensgegenstand die unmittelbare oder mittelbare Beteiligung an der Garantin ist) an einer international anerkannten Wertpapierbörse oder eine andere Emission im Wege eines Börsengangs oder eines öffentlichen Angebots oder unter entsprechenden Umständen in Bezug auf die Garantin oder eine Holdinggesellschaft der Garantin.

"**Qualified IPO**" means an initial listing of all or part of the share capital of the Guarantor or any Holding Company of the Guarantor (whose only principal asset is the direct or indirect ownership in the Guarantor) on any internationally recognized stock exchange or any other issue by way of flotation or public offering or any equivalent circumstances in relation to the Guarantor or any Holding Company of the Guarantor.

(B) Wenn ein Kontrollwechsel eintritt, wird die Emittentin sobald wie möglich, nachdem sie Kenntnis davon erhalten hat, den Kontrollwechsel und den Tag, an dem die Transaktion, die den Kontrollwechsel bewirkt, vollzogen worden ist (der „**Stichtag**"), gemäß § 11 bekannt machen.

(B) If a Change of Control occurs, the Issuer will give notice in accordance with § 11 of the Change of Control and the date on which the transaction that constitutes the Change of Control has taken effect (the "**Record Date**") as soon as practicable after becoming aware thereof.

(v) Ein „**Negatives Ratingereignis**" gilt im Hinblick auf einen zuvor eingetretenen Kontrollwechsel als eingetreten, wenn innerhalb des Kontrollwechselzeitraums (wie nachstehend definiert):

(v) A "**Negative Rating Event**" shall be deemed to have occurred in respect of a Change of Control if within the Change of Control Period (as defined below):

(A)

(A)

(x) für den Fall, dass die Schuldverschreibungen am Stichtag über kein Rating von einer Ratingagentur (wie nachstehend definiert) verfügen, keine einzige Ratingagentur ein Investment Grade Rating (d.h. mindestens „**BBB−**" durch S&P oder Fitch oder „**Baa3**" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur) für die Schuldverschreibungen vergibt; oder

(x) in case, on the Record Date, no credit rating from any Rating Agency (as defined below) is assigned to the Notes and no single Rating Agency assigns an investment grade credit rating (i.e. at least "**BBB−**" by S&P or Fitch or "**Baa3**" by Moody's or such other equivalent rating as may be assigned by any other rating agency) to the Notes; or

(y) für den Fall, dass die Schuldverschreibungen am Stichtag zwar über kein Investment Grade Rating aber über ein oder mehrere (mit Zustimmung der Emittentin erteilte) Non-Investment Grade Ratings („**BB+**" durch S&P oder Fitch oder "**Ba1**" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur oder gleichwertig oder schlechter) verfügen, eine der Ratingagenturen ihr jeweiliges Rating um einen oder mehrere Punkte (zur Erläuterung: „**BB+**" nach „**BB**" bzw. „**Ba1**" nach „**Ba2**" entspricht einem Punkt) absenkt, wobei kein Negatives Ratingereignis eintritt, wenn dieses Rating anschließend durch diese Ratingagentur auf das ursprüngliche oder ein besseres Rating angehoben wird; oder

(y) in case, on the Record Date, no investment grade credit rating is assigned to the Notes but one or more non-investment grade credit ratings ("**BB+**" by S&P or Fitch or "**Ba1**" by Moody's or such other equivalent rating as may be assigned by any other rating agency, or equivalent, or worse) are assigned to the Notes (with the consent of the Issuer), any of the Rating Agencies downgrades its respective credit rating by one or more notches (for illustration, "**BB+**" to "**BB**" or "**Ba1**" to "**Ba2**" being one notch), provided that no Negative Rating Event occurs if such credit rating is subsequently reinstated to its earlier or a better credit rating by such Rating Agency; or

(z) für den Fall, dass die Schuldverschreibungen am Stichtag über ein oder mehrere Investment Grade Ratings verfügen, eine der Ratingagenturen ihr Investment Grade Rating (d.h. mindestens „**BBB−**" durch S&P oder Fitch oder „**Baa3**" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur) (i) zurückzieht oder (ii) von einem Investment Grade Rating auf ein non-Investment Grade Rating („**BB+**" durch S&P oder Fitch oder „**Ba1**" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur oder gleichwertig oder schlechter) herabstuft, wobei kein Negatives Ratingereignis eintritt, wenn dieses Rating anschließend durch die jeweilige Ratingagentur auf das ursprüngliche oder ein besseres Investment Grade Rating angehoben wird oder (im Falle einer Zurückziehung) das betreffende Rating durch das Investment Grade Rating einer anderen Ratingagentur ersetzt wird; und

(B) die jeweilige Ratingagentur bei ihrer Entscheidung zur Herabstufung oder Zurücknahme eines Kreditratings gemäß den obigen Ziffern (v)(A)(y) und (v)(A)(z) öffentlich bekannt gibt oder schriftlich bestätigt, dass diese Entscheidung(en) ganz oder teilweise aufgrund des Eintritts des Kontrollwechsels erfolgte(n).

Falls die Schuldverschreibungen zum Stichtag über ein Rating von mehr als einer Rating Agentur verfügen, von denen mindestens eines ein Investment Grade Rating ist, findet § 4(g)(v)(A)(z) Anwendung.

„**Ratingagentur**" bezeichnet jeweils Moody's Investors Services Limited („**Moody's**") oder S&P Global Ratings Europe Limited („**S&P**"), oder Fitch Ratings Ltd („**Fitch**") oder eine jeweilige Nachfolgegesellschaft.

(z) in case, on the Record Date, one or more investment grade credit ratings are assigned to the Notes, any of the Rating Agencies (i) withdraws or (ii) downgrades such its investment grade credit rating (i.e. at least "**BBB−**" by S&P or Fitch or "**Baa3**" by Moody's or such other equivalent rating as may be assigned by any other rating agency) to a non-investment grade credit rating ("**BB+**" by S&P or Fitch or "**Ba1**" by Moody's or such other equivalent rating as may be assigned by any other rating agency, or equivalent, or worse), provided that no Negative Rating Event occurs if such credit rating is subsequently reinstated to its earlier or a better investment grade credit rating by such Rating Agency or (in the case of a withdrawal) replaced by an investment grade credit rating from any other Rating Agency; and

(B) in making any decision to downgrade or withdraw a credit rating pursuant to paragraphs (v)(A)(y) and (v)(A)(z) above, the relevant Rating Agency announces publicly or confirms in writing that such decision(s) resulted, in whole or in part, from the occurrence of the Change of Control.

If on the Record Date the Notes carry a rating from more than one Rating Agency, at least one of which is investment grade, then § 4(g)(v)(A)(z) will apply.

"**Rating Agency**" means each of Moody's Investors Services Limited ("**Moody's**") or S&P Global Ratings Europe Limited ("**S&P**") or Fitch Ratings Ltd ("**Fitch**"), or any of their respective successors.

„**Kontrollwechselzeitraum**" bezeichnet den Zeitraum von 120 Tagen ab dem Stichtag (ausschließlich).

Falls sich die von Moody's, S&P oder Fitch verwendeten Rating Kategorien gegenüber denen, die in § 4(g)(v) angegeben wurde, ändern sollten, wird die Emittentin diejenigen Rating Kategorien von Moody's, S&P bzw. Fitch bestimmen, die den früheren Rating Kategorien von Moody's, S&P bzw. Fitch möglichst nahekommen. § 4(g)(v) ist dann entsprechend auszulegen.

§ 5 Zahlungen

(a) *Zahlungen*.

(i) Die Zahlung von Kapital und Zinsen auf die Schuldverschreibungen erfolgt an das Clearingsystem oder an dessen Order zur Gutschrift auf den Konten der jeweiligen Kontoinhaber des Clearingsystems außerhalb der Vereinigten Staaten von Amerika. Die Zahlung von Zinsen auf Schuldverschreibungen, die durch eine Vorläufige Globalurkunde verbrieft sind, erfolgt nach ordnungsgemäßem Nachweis gemäß § 1(c).

(ii) Sämtliche Zahlungen stehen in allen Fällen unter dem Vorbehalt geltender steuerlicher und sonstiger gesetzlicher Vorschriften, Richtlinien und/oder Verordnungen. Die Emittentin, die Garantin, die Hauptzahlstelle bzw. Zahlstelle sind nicht für irgendwelche Steuern oder Abgaben gleich welcher Art verantwortlich, die aufgrund solcher gesetzlichen Vorschriften, Richtlinien oder Verordnungen oder Verträgen auferlegt oder erhoben werden. Dies berührt jedoch nicht die Bestimmungen von § 6. Den Anleihegläubigern werden keine Kosten oder Gebühren in Bezug auf diese Zahlungen auferlegt.

(iii) Eine Bezugnahme in diesen Anleihebedingungen auf Kapital oder Zinsen der Schuldverschreibungen schließt jegliche Zusätzlichen Beträge gemäß § 6 ein.

(b) *Zahlungsweise*. Zu leistende Zahlungen auf die Schuldverschreibungen erfolgen in der Festgelegten Währung.

"**Change of Control Period**" means the period ending 120 days from but excluding the Record Date.

If the rating designations employed by any of Moody's, S&P or Fitch are changed from those which are described in § 4(g)(v) above, the Issuer shall determine the rating designations of Moody's or S&P or Fitch (as appropriate) as are most equivalent to the prior rating designations of Moody's or S&P or Fitch and § 4(g)(v) shall be read accordingly.

§ 5 Payments

(a) *Payments*.

(i) Payment of principal and interest on the Notes shall be made to the Clearing System or to its order for credit to the relevant account holders of the Clearing System outside the United States of America. Payment of interest on Notes represented by a Temporary Global Note shall be made, upon due certification as provided in § 1(c).

(ii) All payments will be subject in all cases to any applicable fiscal and other laws, directives and/or regulations. The Issuer, the Guarantor or, as the case may be, the Principal Paying Agent or Paying Agent, as the case may be, will not be liable for any taxes or duties of whatever nature imposed or levied by such laws, regulations, directives or agreements, but without prejudice to the provisions of § 6. No commission or expenses shall be charged to the Noteholders in respect of such payments.

(iii) Any reference in these Terms and Conditions of the Notes to principal or interest will be deemed to include any Additional Amounts as set forth in § 6.

(b) *Manner of payment*. Payments of amounts due in respect of the Notes shall be made in the Specified Currency.

(c) *Erfüllung*. Die Emittentin bzw. die Garantin wird durch Leistung der Zahlung an das Clearingsystem oder an dessen Order von ihrer Zahlungspflicht befreit.

(d) *Zahltag*. Fällt der Fälligkeitstag einer Zahlung in Bezug auf eine Schuldverschreibung auf einen Tag, der kein Geschäftstag ist, dann hat der Anleihegläubiger keinen Anspruch auf Zahlung vor dem nächstfolgenden Geschäftstag. Der Anleihegläubiger ist nicht berechtigt, weitere Zinsen oder sonstige Zahlungen aufgrund dieser Verspätung zu verlangen.

„**Geschäftstag**" bezeichnet einen Tag (außer einem Samstag oder Sonntag), an dem Banken in Frankfurt am Main für den allgemeinen Geschäftsverkehr geöffnet sind und an dem das Clearingsystem sowie alle maßgeblichen Bereiche des Trans-European Automated Real-time Gross Settlement Express Transfer System (TARGET2) betriebsbereit sind, um Zahlungen vorzunehmen.

§ 6 Besteuerung

Sämtliche auf die Schuldverschreibungen zu zahlenden Beträge (einschließlich sämtlicher von der Garantin auf die Garantie zu zahlender Beträge) werden ohne Einbehalt oder Abzug von Steuern, Abgaben, Festsetzungen oder behördlicher Gebühren jedweder Art geleistet („**Steuern**"), die von den Niederlanden bzw. der Bundesrepublik Deutschland oder einer ihrer Gebietskörperschaften oder Behörden oder sonstigen Stellen in den Niederlanden bzw. der Bundesrepublik Deutschland mit der Befugnis zur Erhebung von Steuern auferlegt, erhoben, eingezogen, einbehalten oder festgesetzt werden, sofern nicht kraft Gesetzes oder einer sonstigen Rechtsvorschrift einem solcher Einbehalt oder Abzug vorgeschrieben ist. Sofern die Emittentin oder die Garantin zu einem solchen Einbehalt oder Abzug verpflichtet ist, wird die Emittentin bzw. die Garantin zusätzliche Beträge (die „**Zusätzlichen Beträge**") an die Anleihegläubiger zahlen, so dass die Anleihegläubiger die Beträge erhalten, die sie ohne den betreffenden Einbehalt oder Abzug erhalten hätten. Solche Zusätzlichen Beträge sind jedoch nicht zahlbar wegen solcher Steuern in Bezug auf Schuldverschreibungen,

(a) die auf andere Weise als durch Einbehalt oder Abzug von zahlbaren Beträgen zu entrichten sind; oder

(c) *Discharge*. The Issuer or, as the case may be, the Guarantor shall be discharged by payment to, or to the order of, the Clearing System.

(d) *Payment Business Day*. If the due date for payment of any amount in respect of any Note is not a Business Day then the Noteholder shall not be entitled to payment until the next Business Day and shall not be entitled to further interest or other payment in respect of such delay.

"**Business Day**" means a day (other than a Saturday or a Sunday) on which banks are open for general business in Frankfurt am Main and on which the Clearing System as well as all relevant parts of the Trans-European Automated Real-time Gross Settlement Express Transfer system (TARGET2) are operational to effect payments.

§ 6 Taxation

All amounts to be paid in respect of the Notes (including all amounts to be paid by the Guarantor under the Guarantee) will be paid free and clear of, and without withholding or deduction for, any taxes, duties, assessments or governmental charges of whatever nature ("**Taxes**") imposed, levied, collected, withheld or assessed by the Netherlands or the Federal Republic of Germany (as the case may be) or any political subdivision or any authority or any other agency of or in the Netherlands or the Federal Republic of Germany (as the case may be) that has power to tax, unless such withholding or deduction is required to be made by law. If the Issuer or the Guarantor is required to make such withholding or deduction, the Issuer or the Guarantor (as the case may be) will pay such additional amounts (the "**Additional Amounts**") to the Noteholders as the Noteholders would have received if no such withholding or deduction had been required, except that no such Additional Amounts will be payable for any such Taxes in respect of any Note,

(a) which are payable otherwise than by withholding or deduction from amounts payable; or

(b) die wegen einer Verbindung des betreffenden Anleihegläubigers zu den Niederlanden bzw. der Bundesrepublik Deutschland, die nicht nur aus der bloßen Inhaberschaft der Schuldverschreibungen besteht, einzubehalten oder abzuziehen sind; oder

(c) die aufgrund (i) einer Richtlinie oder Verordnung der Europäischen Union betreffend die Besteuerung von Zinserträgen oder (ii) einer zwischenstaatlichen Vereinbarung, eines zwischenstaatlichen Abkommens oder einer zwischenstaatlichen Verständigung über deren Besteuerung, an der die Niederlande, die Bundesrepublik Deutschland oder die Europäische Union beteiligt ist, oder (iii) einer gesetzlichen Vorschrift, die diese Richtlinie, Verordnung, Vereinbarung, Abkommen oder Verständigung umsetzt oder befolgt, abzuziehen oder einzubehalten sind.

Die Emittentin und die Garantin sind keinesfalls verpflichtet, zusätzliche Beträge in Bezug auf einen Einbehalt oder Abzug von Beträgen zu zahlen, die gemäß Sections 1471 bis 1474 des U.S. Internal Revenue Code (in der jeweils geltenden Fassung oder gemäß Nachfolgebestimmungen), gemäß zwischenstaatlicher Abkommen, gemäß den in einer anderen Rechtsordnung in Zusammenhang mit diesen Bestimmungen erlassenen Durchführungsvorschriften oder gemäß mit dem Internal Revenue Service geschlossenen Verträgen von der Emittentin, der jeweiligen Zahlstelle oder einem anderen Beteiligten abgezogen oder einbehalten wurden („**FATCA-Steuerabzug**") oder Anleger in Bezug auf einen FATCA-Steuerabzug schadlos zu halten.

§ 7 Vorlegung, Verjährung

(a) *Vorlegungsfrist*. Die Vorlegungsfrist gemäß § 801 Absatz 1 Satz 1 BGB für fällige Schuldverschreibungen wird auf zehn Jahre verkürzt.

(b) *Verjährungsfrist*. Die Verjährungsfrist für innerhalb der Vorlegungsfrist zur Zahlung vorgelegte Schuldverschreibungen beträgt zwei Jahre von dem Ende der betreffenden Vorlegungsfrist an.

(b) which are to be withheld or deducted by reason of the relevant Noteholder having some connection with the Netherlands or the Federal Republic of Germany other than the mere holding of that Note; or

(c) which are to be withheld or deducted pursuant to (i) any European Union Directive or Regulation concerning the taxation of interest income, or (ii) any international treaty, agreement or understanding relating to such taxation and to which the Netherlands or the Federal Republic of Germany or the European Union is a party, or (iii) any provision of law implementing, or complying with, or introduced to conform with, such Directive, Regulation, treaty, agreement or understanding.

In any event, the Issuer and the Guarantor will have no obligation to pay additional amounts deducted or withheld by the Issuer, the relevant Paying Agent or any other party ("**FATCA Withholding**") in relation to any withholding or deduction of any amounts required by the rules of U.S. Internal Revenue Code Sections 1471 through 1474 (or any amended or successor provisions), pursuant to any inter-governmental agreement, or implementing legislation adopted by another jurisdiction in connection with these provisions, or pursuant to any agreement with the U.S. Internal Revenue Service or indemnify any investor in relation to any FATCA Withholding.

§ 7 Presentation, Prescription

(a) *Presentation*. The period for presentation of Notes due, as established in § 801 paragraph 1 sentence 1 of the German Civil Code (*Bürgerliches Gesetzbuch*), is reduced to ten years.

(b) *Prescription*. The period for prescription for Notes presented for payment during the presentation period shall be two years beginning at the end of the relevant presentation period.

§ 8 Kündigungsgründe für die Anleihegläubiger

(a) *Kündigungsgründe*. Jeder Anleihegläubiger ist berechtigt, alle oder einzelne seiner Schuldverschreibungen zu kündigen und deren sofortige Rückzahlung zu ihrem Nennbetrag zuzüglich etwaiger bis zu dem Tag der Rückzahlung (ausschließlich) aufgelaufener Zinsen zu verlangen, falls eines der folgenden Ereignisse (jeweils ein „**Kündigungsgrund**") eintritt und fortbesteht:

(i) die Emittentin Kapital oder Zinsen oder eine andere Zahlung auf die Schuldverschreibungen oder die Garantin eine Zahlung auf die Garantie nicht innerhalb von 15 Tagen nach dem betreffenden Fälligkeitstag zahlt;

(ii) die Emittentin oder die Garantin irgendeine andere Verpflichtung aus den Schuldverschreibungen oder der Garantie nicht ordnungsgemäß erfüllt und die Unterlassung, sofern sie nicht unheilbar ist, länger als 45 Tage fortdauert, nachdem die Emittentin oder die Garantin (über die Hauptzahlstelle) hierüber eine Benachrichtigung von einem Anleihegläubiger erhalten hat;

(iii) eine andere Finanzverbindlichkeit (wie nachstehend definiert) der Emittentin, der Garantin oder einer Tochtergesellschaft bei Fälligkeit oder innerhalb der zutreffenden Nachfrist nicht erfüllt wird, wobei kein Anleihegläubiger berechtigt ist, seine Schuldverschreibungen gemäß diesem § 8(a)(iii) zu kündigen, falls der Gesamtbetrag aller solcher Finanzverbindlichkeiten nicht EUR 75.000.000 (oder den entsprechenden Gegenwert in einer oder mehreren anderen Währung(en)) übersteigt;

(iv) die Emittentin, die Garantin oder eine Wesentliche Tochtergesellschaft zahlungsunfähig ist oder ihre Zahlungsunfähigkeit einräumt;

(v) ein zuständiges Gericht gegen die Emittentin, die Garantin oder eine Wesentliche Tochtergesellschaft ein Insolvenzverfahren eröffnet, das nicht innerhalb von 60 Tagen nach dessen Eröffnung aufgehoben oder ausgesetzt worden ist;

§ 8 Events of Default

(a) *Events of Default*. Each Noteholder will be entitled to declare all or some only of its Notes due and demand immediate redemption of such Notes at the Principal Amount plus accrued interest to but excluding the date of redemption as provided hereinafter, if any of the following events (each an "**Event of Default**") occurs and is continuing:

(i) the Issuer fails to pay principal or interest or any other amount in respect of the Notes or the Guarantor fails to pay any amount in respect of the Guarantee within 15 days from the relevant due date;

(ii) the Issuer or the Guarantor fails to duly perform any other obligation arising from the Notes or the Guarantee and such default, except where such default is incapable of remedy, continues unremedied for more than 45 days after the Issuer or the Guarantor (through the Principal Paying Agent) has received notice thereof from a Noteholder;

(iii) any other Financial Indebtedness (as defined below) of the Issuer, the Guarantor or any Subsidiary is not paid when due or within any applicable grace period, as the case may be, provided that no Noteholder will be entitled to declare its Notes due in accordance with this § 8(a)(iii) if the aggregate amount of such Financial Indebtedness does not exceed EUR 75,000,000 (or its equivalent in any other currency or currencies);

(iv) the Issuer, the Guarantor or any Material Subsidiary is unable or admits its inability to pay its debts as they fall due;

(v) a competent court opens insolvency proceedings against the Issuer, the Guarantor or any Material Subsidiary which has not been dismissed or stayed within 60 days after the commencement thereof;

(vi) die Emittentin oder die Garantin in Liquidation tritt, es sei denn, dies geschieht im Zusammenhang mit einer Verschmelzung oder einer anderen Form des Zusammenschlusses mit einer anderen Gesellschaft oder im Zusammenhang mit einer Umwandlung und die andere oder neue Gesellschaft übernimmt alle Verpflichtungen, die die Emittentin aus den Schuldverschreibungen bzw. die Garantin aus der Garantie eingegangen ist;

(vi) the Issuer or the Guarantor is liquidated, unless this is effected in connection with a merger or another form of amalgamation with another company or in connection with a restructuring, and the other or the new company assumes all obligations of the Issuer arising under the Notes or the Guarantor arising under the Guarantee, as the case may be;

(vii) in den Niederlanden oder in der Bundesrepublik Deutschland ein Gesetz, eine Verordnung oder behördliche Anordnung Geltung erlangt, durch welche die Emittentin oder die Garantin rechtlich gehindert ist, Verpflichtungen aus den Schuldverschreibungen bzw. der Garantie zu erfüllen, und diese Lage nicht binnen 60 Tagen behoben ist; oder

(vii) any law, governmental order, decree or enactment will gain recognition in The Netherlands or in the Federal Republic of Germany whereby the Issuer or the Guarantor is legally prevented from performing its obligations under the Notes or under the Guarantee and this situation is not cured within 60 days; or

(viii) die Garantie mit rechtskräftiger Entscheidung eines zuständigen Gerichts für nicht vollumfänglich wirksam erklärt wird oder die Garantin einen Mangel der Wirksamkeit behauptet.

(viii) the Guarantee is determined by the final decision of a competent court or is claimed by the Guarantor not to be in full force.

Das Kündigungsrecht erlischt, falls der Kündigungsgrund vor Ausübung des Kündigungsrechts geheilt wurde. Vorbehaltlich anwendbaren zwingenden Rechts berechtigen andere Ereignisse oder Umstände als die in § 8(a) genannten die Anleihegläubiger nicht dazu, ihre Schuldverschreibungen vorzeitig zur Rückzahlung fällig zu stellen, es sei denn, dies ist ausdrücklich in diesen Anleihebedingungen bestimmt.

The right to declare Notes due will terminate if the situation giving rise to it has been resolved before such right is exercised. No event or circumstance other than an event specified in § 8(a) shall entitle Noteholders to declare their Notes due and payable prior to their stated maturity, save as expressly provided for in these Terms and Conditions and subject to applicable mandatory law.

(b) *Quorum*. In den Fällen gemäß § 8(a)(ii) und/oder § 8(a)(iii) wird eine Kündigungserklärung, sofern nicht bei deren Eingang zugleich einer der in Absatz § 8(a)(i) oder § 8(a)(iv) bis (viii) bezeichneten Kündigungsgründe vorliegt, erst wirksam, wenn bei der Hauptzahlstelle Kündigungserklärungen von Anleihegläubigern im Nennbetrag von mindestens 15% des Gesamtnennbetrages der zu diesem Zeitpunkt noch insgesamt ausstehenden Schuldverschreibungen eingegangen sind.

(b) *Quorum*. In the events specified in § 8(a)(ii) and/or § 8(a)(iii), any notice declaring any Note due shall, unless at the time such notice is received any of the events specified in § 8(a)(i) or § 8(a)(iv) through (viii) entitling Noteholders to declare their Notes due has occurred, become effective only when the Principal Paying Agent has received such default notices from the Noteholders representing at least 15 per cent. of the aggregate principal amount of Notes then outstanding.

(c) *Kündigungserklärung*. Eine Kündigung der Schuldverschreibungen gemäß § 8(a) ist schriftlich in deutscher oder englischer Sprache gegenüber der Hauptzahlstelle zu erklären und persönlich oder per Einschreiben an deren bezeichnete Geschäftsstelle zu übermitteln. Der Benachrichtigung ist ein Nachweis beizufügen, aus dem sich ergibt, dass der betreffende Anleihegläubiger zum Zeitpunkt der Abgabe der Benachrichtigung Inhaber der betreffenden Schuldverschreibung ist. Der Nachweis kann durch eine Bescheinigung der Depotbank oder auf andere geeignete Weise erbracht werden.

„**Depotbank**" bezeichnet ein Bank- oder sonstiges Finanzinstitut, bei dem der Anleihegläubiger Schuldverschreibungen in seinem Wertpapierdepotkonto verwahren lässt und das ein Konto bei dem Clearingsystem hat, und schließt das Clearingsystem ein.

„**Finanzverbindlichkeit**" bezeichnet jede gegenwärtige oder zukünftige Zahlungsverpflichtung im Zusammenhang mit einer Kredit- oder sonstigen Kapitalaufnahme.

„**Gruppe**" bezeichnet die Garantin und ihre Tochtergesellschaften.

„**Wesentliche Tochtergesellschaft**" bezeichnet jede Tochtergesellschaft, deren Nettoumsatz, wie anhand der Gewinn- und Verlustrechnung für das letzte Geschäftsjahr dieser Tochtergesellschaft ermittelt (auf nicht konsolidierter Basis und ohne konzerninterne Umsätze), mindestens 7,5% des Konzern-Nettoumsatzes der Gruppe, wie anhand der geprüften Konzern-Gewinn- und Verlustrechnung der Gruppe für dasselbe Geschäftsjahr ermittelt, ausmacht. Wurde eine Tochtergesellschaft nach Ablauf des Berichtszeitraums erworben, auf den sich der zu diesem Zeitpunkt aktuellste geprüfte Konzernabschluss der Gruppe bezieht, so gilt (für die Anwendung der vorstehend beschriebenen Überprüfung) die Bezugnahme auf den aktuellsten geprüften Konzernabschluss der Gruppe als Bezugnahme auf diesen Konzernabschluss so, als wäre die entsprechende Tochtergesellschaft unter Zugrundelegung ihres zu diesem Zeitpunkt aktuellsten Abschlusses darin ausgewiesen (nach Anpassung durch den jeweils aktuellen Abschlussprüfer der Gruppe nach dessen Ermessen in Absprache mit der Garantin).

(c) *Notice*. Any notice declaring Notes due in accordance with § 8(a) will be made by means of a written declaration in German or English delivered by hand or registered mail to the specified office of the Principal Paying Agent together with proof that such Noteholder at the time of such notice is a holder of the relevant Notes by means of a certificate of its Custodian or in any other appropriate manner.

"**Custodian**" means any bank or other financial institution with which the Noteholder maintains a securities account in respect of any Notes and having an account maintained with the Clearing System and includes the Clearing System.

"**Financial Indebtedness**" means any present or future indebtedness for or in respect of monies borrowed or raised.

"**Group**" means the Guarantor and its Subsidiaries.

"**Material Subsidiary**" means any Subsidiary that has, as determined on the basis of the profit and loss statement for such Subsidiary's latest financial year, net revenues (sales) (on an unconsolidated basis and excluding intercompany sales) representing 7.5 per cent. or more of the consolidated net revenues (sales) of the Group, as determined by the audited annual consolidated profit and loss statement of the Group for the same financial year, provided that in the case of a Subsidiary acquired after the end of the financial period to which the then latest audited annual consolidated financial statements of the Group relate, for the purposes of applying the foregoing test, the reference to the Group's most recent audited consolidated financial statements shall be deemed to be a reference to such consolidated financial statements as if such Subsidiary had been shown in such consolidated financial statements by reference to its then latest relevant financial statements, adjusted as deemed appropriate by the auditors for the time being of the Group after consultation with the Guarantor.

§ 9 Zahlstellen, Berechnungsstelle

(a) *Bestellung*. Die Emittentin hat Deutsche Bank Aktiengesellschaft als Hauptzahlstelle in Bezug auf die Schuldverschreibungen (die „**Hauptzahlstelle**" und gemeinsam mit jeder etwaigen von der Emittentin nach § 9(2) bestellten zusätzlichen Zahlstelle, die „**Zahlstellen**") bestellt.

Die Emittentin hat Conv-Ex Advisors Limited als Berechnungsstelle in Bezug auf die Schuldverschreibungen (die „**Berechnungsstelle**" und, gemeinsam mit den Zahlstellen, die „**Verwaltungsstellen**") bestellt.

Die Geschäftsräume der Verwaltungsstellen befinden sich unter den folgenden Adressen:

Hauptzahlstelle:
Deutsche Bank Aktiengesellschaft
Taunusanlage 12
60325 Frankfurt am Main
Deutschland

Berechnungsstelle:
Conv-Ex Advisors Limited
30 Crown Place
London, EC2A 4EB
Vereinigtes Königreich

(b) *Änderung oder Beendigung der Bestellung*. Die Emittentin behält sich das Recht vor, jederzeit die Benennung einer Zahlstelle oder Berechnungsstelle zu verändern oder zu beenden und Nachfolger bzw. zusätzliche Zahlstellen bzw. Berechnungsstellen zu ernennen. Den Anleihegläubigern werden Änderungen in Bezug auf die Zahlstellen bzw. Berechnungsstelle oder deren angegebenen Geschäftsstellen umgehend gemäß § 11 bekannt gemacht.

Auf keinen Fall dürfen sich die Geschäftsräume einer Zahlstelle innerhalb der Vereinigten Staaten von Amerika befinden.

(c) *Erfüllungsgehilfen der Emittentin*. Die Hauptzahlstelle, die Zahlstellen und die Berechnungsstelle handeln ausschließlich als Beauftragte der Emittentin und übernehmen keinerlei Verpflichtungen gegenüber dem Anleihegläubiger; es wird kein Auftrags- oder Treuhandverhältnis zwischen ihnen und dem Anleihegläubiger begründet.

§ 9 Paying Agents, Calculation Agent

(a) *Appointment*. The Issuer has appointed Deutsche Bank Aktiengesellschaft as principal paying agent with respect to the Notes (the "**Principal Paying Agent**" and, together with any additional paying agent appointed by the Issuer in accordance with § 9(2), the "**Paying Agents**").

The Issuer has appointed Conv-Ex Advisors Limited as calculation agent with respect to the Notes (the "**Calculation Agent**" and, together with the Paying Agents, the "**Agents**").

The addresses of the specified offices of the Agents are:

Principal Paying Agent:
Deutsche Bank Aktiengesellschaft
Taunusanlage 12
60325 Frankfurt am Main
Federal Republic of Germany

Calculation Agent:
Conv-Ex Advisors Limited
30 Crown Place
London, EC2A 4EB
United Kingdom

(b) *Variation or Termination of Appointment*. The Issuer reserves the right at any time to vary or terminate the appointment of any Paying Agent or Calculation Agent and to appoint successor or additional Paying Agents or Calculation Agent, as the case may be. Notice of any change in the Paying Agents or Calculation Agent, as the case may be, or in the specified office of any Paying Agent or Calculation Agent, as the case may be, will promptly be given to the Noteholders pursuant to § 11.

In no event will the specified office of any Paying Agent be within the United States of America.

(c) *Agents of the Issuer*. The Principal Paying Agent, the Paying Agents and the Calculation Agent act solely as agents of the Issuer and do not assume any obligations towards or relationship of agency or trust for the Noteholder.

§ 10 Schuldnerersetzung

(a) *Ersetzung*.

Die Emittentin ist jederzeit berechtigt, ohne Zustimmung der Anleihegläubiger, die Garantin oder eine andere Gesellschaft, die direkt oder indirekt von der Garantin kontrolliert wird, als neue Emittentin für alle sich aus oder im Zusammenhang mit den Schuldverschreibungen ergebenden Verpflichtungen mit schuldbefreiender Wirkung für die Emittentin an die Stelle der Emittentin zu setzen (die „**Neue Emittentin**"), sofern

(i) die Neue Emittentin sämtliche Verpflichtungen der Emittentin aus oder im Zusammenhang mit den Schuldverschreibungen rechtswirksam übernimmt und, sofern eine Zustellung an die Neue Emittentin außerhalb der Bundesrepublik Deutschland erfolgen müsste, einen Zustellungsbevollmächtigten in der Bundesrepublik Deutschland bestellt;

(ii) die Neue Emittentin in der Lage ist, sämtliche zur Erfüllung der aufgrund der Schuldverschreibungen bestehenden Zahlungsverpflichtungen erforderlichen Beträge in Euro an das Clearingsystem oder die Hauptzahlstelle zu zahlen, und zwar ohne Abzug oder Einbehalt von Steuern oder sonstigen Abgaben jedweder Art, die von dem Land (oder den Ländern), in dem (in denen) die Neue Emittentin ihren Sitz oder Steuersitz hat, auferlegt, erhoben oder eingezogen werden;

(iii) die Garantin (außer in dem Fall, dass sie selbst die Neue Emittentin ist) unbedingt und unwiderruflich die Verpflichtungen der Neuen Emittentin aus den Schuldverschreibungen zu Bedingungen garantiert, die sicherstellen, dass jeder Anleihegläubiger wirtschaftlich mindestens so gestellt wird, wie er ohne die Ersetzung stehen würde (jede solche Erklärung eine „**Ersetzungsgarantie**");

§ 10 Substitution

(a) *Substitution*.

The Issuer may at any time, without the consent of the Noteholders, substitute for the Issuer either the Guarantor or any other company which is directly or indirectly controlled by the Guarantor as new issuer (the "**New Issuer**") in respect of all obligations arising under or in connection with the Notes with the effect of releasing the Issuer of all such obligations, if:

(i) the New Issuer validly assumes any and all obligations of the Issuer arising under or in connection with the Notes and, if service of process *vis-à-vis* the New Issuer would have to be effected outside the Federal Republic of Germany, appoints a process agent within the Federal Republic of Germany;

(ii) the New Issuer is in the position to pay to the Clearing System or to the Principal Paying Agent in Euro and without deducting or withholding any taxes or other duties of whatever nature imposed, levied or deducted by the country (or countries) in which the New Issuer has its domicile or tax residence all amounts required for the performance of the payment obligations arising from or in connection with the Notes;

(iii) the Guarantor (except in the case that the Guarantor itself is the New Issuer) irrevocably and unconditionally guarantees such obligations of the New Issuer under the Notes on terms which ensure that each Noteholder will be put in an economic position that is at least as favourable as that which would have existed if the substitution had not taken place (each such declaration a "**Substitution Guarantee**");

(iv) die Neue Emittentin und die Emittentin alle für die Ersetzung notwendigen Genehmigungen und Einverständniserklärungen von Regierungsstellen und Aufsichtsbehörden erhalten haben, und die Garantin (falls sie nicht selbst Neue Emittentin ist) alle für die Abgabe der Ersetzungsgarantie notwendigen Genehmigungen und Einverständniserklärungen von Regierungsstellen und Aufsichtsbehörden erhalten hat, die Neue Emittentin alle für die Erfüllung ihrer Verpflichtungen aus den Schuldverschreibungen notwendigen Genehmigungen und Einverständniserklärungen von Regierungsstellen und Aufsichtsbehörden erhalten hat und weiterhin sämtliche dieser Genehmigungen und Einverständniserklärungen in vollem Umfang gültig und wirksam sind und zudem die Verpflichtungen der Neuen Emittentin und die von der Garantin, (falls sie nicht selbst Neue Emittentin ist) begebene Ersetzungsgarantie jeweils gemäß ihren Bestimmungen wirksam und rechtsverbindlich und durch jeden Anleihegläubiger durchsetzbar sind;

(v) die Neue Emittentin sich verpflichtet, jedem Anleihegläubiger alle Steuern, Gebühren oder Abgaben zu erstatten, die ihm im Zusammenhang mit Zahlungen auf die Schuldverschreibungen (einschließlich Steuern und Abgaben, die von der Neuen Emittentin an der Quelle abgeführt oder einbehalten wurden) infolge der Schuldübernahme durch die Neue Emittentin auferlegt werden, vorausgesetzt, dass sich die Verpflichtung auf Beträge beschränkt, die der Anleihegläubiger ohne die Ersetzung der Emittentin nicht hätte tragen müssen;

(vi) unmittelbar nach Wirksamwerden dieser Ersetzung kein Kündigungsgrund und kein Ereignis, das nach Mitteilung oder Fristablauf oder beidem einen Kündigungsgrund darstellen würde, eingetreten ist und fortbesteht; und

(vii) der Hauptzahlstelle bezüglich der betroffenen Rechtsordnungen jeweils ein Rechtsgutachten von anerkannten Rechtsanwälten vorgelegt wurde, das bestätigt, dass die Bestimmungen in § 10(a)(i) bis (vi) erfüllt wurden

(iv) the New Issuer and the Issuer have obtained all necessary governmental and regulatory approvals and consents for such substitution and the Guarantor (if it is not itself the New Issuer) has obtained all such approvals and consents for the giving of the Substitution Guarantee, that the New Issuer has obtained all necessary governmental and regulatory approvals and consents for the performance of its obligations under the Notes, and that all such approvals and consents are in full force and effect and that the obligations assumed by the New Issuer and the Substitution Guarantee given by the Guarantor (if it is not itself the New Issuer) are each valid and binding in accordance with their respective terms and enforceable by each Noteholder;

(v) the New Issuer undertakes to reimburse any Noteholder for such taxes, fees or duties which may be imposed upon such Noteholder in connection with any payments on the Notes (including taxes or duties being deducted or withheld at source by the New Issuer) as a consequence of the assumption of the Issuer's obligations by the New Issuer, provided that such undertaking shall be limited to amounts that would not have been imposed upon the Noteholder had such substitution not occurred;

(vi) immediately after giving effect to such substitution, no Event of Default, and no event which, after notice or lapse of time or both, would become an Event of Default, shall have occurred and be continuing; and

(vii) there shall have been delivered to the Principal Paying Agent for each jurisdiction affected one opinion of lawyers of recognized standing to the effect that § 10(a)(i) through (vi) above have been satisfied.

(b) *Bezugnahmen*.

Im Fall einer Schuldnerersetzung gemäß § 10(a) gilt jede Bezugnahme in diesen Anleihebedingungen auf die Emittentin als eine solche auf die Neue Emittentin.

Im Fall einer Schuldnerersetzung gilt jede Bezugnahme auf die Niederlande als eine solche auf den Staat, in welchem die Neue Emittentin steuerlich ansässig ist.

(c) *Bekanntmachung und Wirksamwerden der Ersetzung.* Die Ersetzung der Emittentin ist gemäß § 11 bekanntzumachen. Mit der Bekanntmachung der Ersetzung wird die Ersetzung wirksam und die Emittentin und im Fall einer wiederholten Anwendung dieses § 10 jede frühere Neue Emittentin von ihren sämtlichen Verpflichtungen aus den Schuldverschreibungen frei. Im Fall einer solchen Schuldnerersetzung wird (werden) die Wertpapierbörse(n) informiert, an der (denen) die Schuldverschreibungen dann notiert sind.

§ 11 Bekanntmachungen

(a) *Veröffentlichungen*. Alle Bekanntmachungen, die die Schuldverschreibungen betreffen, werden (solange die Schuldverschreibungen an der Luxemburger Wertpapierbörse notiert sind) auf der Internet-Seite der Luxemburger Börse unter www.bourse.lu veröffentlicht. Jede Mitteilung gilt am Tag der ersten Veröffentlichung als wirksam erfolgt.

(b) *Mitteilungen an das Clearingsystem*. Solange Schuldverschreibungen an der Luxemburger Börse notiert sind, findet § 11(a) Anwendung. Soweit die Regeln der Luxemburger Börse dies zulassen, kann die Emittentin eine Veröffentlichung nach § 11(a) durch eine Mitteilung an das Clearingsystem zur Weiterleitung an die Anleihegläubiger ersetzen; jede derartige Mitteilung gilt am fünften Tag nach dem Tag der Mitteilung an das Clearingsystem als den Anleihegläubigern mitgeteilt.

(c) *Mitteilungen des Anleihegläubigers.* Mitteilungen, die von einem Anleihegläubiger gemacht werden, müssen schriftlich erfolgen und zusammen mit dem Nachweis seiner Inhaberschaft gemäß § 14(c)(i) an die Hauptzahlstelle geleitet werden. Eine solche Mitteilung kann über das Clearingsystem in der von der Hauptzahlstelle und dem Clearingsystem dafür vorgesehenen Weise erfolgen.

(b) *References*.

In the event of a substitution pursuant to § 10(a), any reference in these Terms and Conditions to the Issuer shall be a reference to the New Issuer.

In the event of a substitution any reference to the Netherlands shall be a reference to the New Issuer's country of domicile for tax purposes.

(c) *Notice and effectiveness of substitution.* Notice of any substitution of the Issuer shall be given by notice in accordance with § 11. Upon such publication, the substitution shall become effective, and the Issuer and in the event of a repeated application of this § 10, any previous New Issuer shall be discharged from any and all obligations under the Notes. In the case of such substitution, the stock exchange(s), if any, on which the Notes are then listed will be notified.

§ 11 Notices

(a) *Publications*. All notices regarding the Notes will be published (so long as the Notes are listed on the Luxembourg Stock Exchange) on the website of the Luxembourg Stock Exchange on www.bourse.lu. Any notice will become effective for all purposes on the date of the first such publication.

(b) *Notification to Clearing System*. So long as any Notes are listed on the Luxembourg Stock Exchange, § 11(a) shall apply. If the Rules of the Luxembourg Stock Exchange so permit, the Issuer may deliver the relevant notice to the Clearing System for communication by the Clearing System to the Noteholders, in lieu of publication as set forth in § 11(a) above; any such notice shall be deemed to have been validly given on the fifth day after the day on which the said notice was given to the Clearing System.

(c) *Notices by a Noteholder*. Notices to be given by any Noteholder shall be made in written form together with an evidence of the Noteholder's entitlement in accordance with § 14 (c)(i) to the Principal Paying Agent. Such notice may be given through the Clearing System in such manner as the Principal Paying Agent and the Clearing System may approve for such purpose.

§ 12 Begebung weiterer Schuldverschreibungen

Die Emittentin behält sich das Recht vor, ohne Zustimmung der Anleihegläubiger weitere Schuldverschreibungen mit gleicher Ausstattung (gegebenenfalls mit Ausnahme des Begebungstags, des Verzinsungsbeginns und/oder des Ausgabepreises) wie die vorliegenden Schuldverschreibungen zu begeben, so dass sie mit diesen eine einheitliche Gesamtemission bilden. Der Begriff „**Schuldverschreibungen**" umfasst im Fall einer solchen weiteren Begebung auch solche zusätzlich begebenen Schuldverschreibungen.

§13 Änderung der Anleihebedingungen; Gemeinsamer Vertreter, Änderung der Garantie

(a) *Änderung der Anleihebedingungen*. Die Emittentin kann die Anleihebedingungen mit Zustimmung aufgrund Mehrheitsbeschlusses der Anleihegläubiger nach Maßgabe der §§ 5 ff. des Gesetzes über Schuldverschreibungen aus Gesamtemissionen („**SchVG**") ändern. Eine Änderung der Anleihebedingungen ohne Zustimmung der Emittentin scheidet aus.

Die Anleihegläubiger können insbesondere einer Änderung wesentlicher Inhalte der Anleihebedingungen, einschließlich der in § 5 Absatz 3 SchVG vorgesehenen Maßnahmen mit Ausnahme der Ersetzung der Emittentin, die in § 10 abschließend geregelt ist, mit den in dem nachstehenden § 13(b) genannten Mehrheiten zustimmen. Ein ordnungsgemäß gefasster Mehrheitsbeschluss ist für alle Anleihegläubiger verbindlich.

§ 12 Further Issues

The Issuer reserves the right from time to time, without the consent of the Noteholders to issue additional notes with identical terms and conditions as the Notes in all respects (or in all respects except for the Issue Date, the interest commencement date and/or the issue price) so as to be consolidated and form a single series with such Notes. The term "**Notes**" shall, in the event of such further issue, also comprise such further notes.

§13 Amendments to the Terms and Conditions; Joint Representative, Amendments to the Guarantee

(a) *Amendment of the Terms and Conditions*. The Issuer may amend the Terms and Conditions with the consent of a majority resolution of the Noteholders pursuant to §§ 5 et seq. of the German Act on Issues of Debt Securities (*Gesetz über Schuldverschreibungen aus Gesamtemissionen*—"**SchVG**"). There will be no amendment of the Terms and Conditions without the Issuer's consent.

In particular, the Noteholders may consent to amendments which materially change the substance of the Terms and Conditions, including such measures as provided for under § 5(3) of the SchVG, but excluding a substitution of the Issuer, which is exclusively subject to the provisions in § 10, by resolutions passed by such majority of the votes of the Noteholders as stated under § 13(b) below. A duly passed majority resolution will be binding upon all Noteholders.

(b) *Mehrheitserfordernisse*. Vorbehaltlich des nachstehenden Satzes und der Erreichung der erforderlichen Beschlussfähigkeit, beschließen die Anleihegläubiger mit der einfachen Mehrheit der an der Abstimmung teilnehmenden Stimmrechte. Beschlüsse, durch welche der wesentliche Inhalt der Anleihebedingungen, insbesondere in den Fällen des § 5 Absatz 3 Nummer 1 bis 9 SchVG, geändert wird, bedürfen zu ihrer Wirksamkeit einer Mehrheit von mindestens 75% der an der Abstimmung teilnehmenden Stimmrechte (eine „**Qualifizierte Mehrheit**"). Das Stimmrecht ruht, solange die Schuldverschreibungen der Emittentin oder einem mit ihr verbundenen Unternehmen (§ 271 Absatz 2 HGB) zustehen oder für Rechnung der Emittentin oder eines mit ihr verbundenen Unternehmens gehalten werden.

(c) *Beschlüsse.* Beschlüsse der Anleihegläubiger werden entweder in einer Gläubigerversammlung nach § 13(c)(i) oder im Wege der Abstimmung ohne Versammlung nach § 13(c)(ii) getroffen, die von der Emittentin oder einem gemeinsamen Vertreter einberufen wird. Anleihegläubiger, deren Schuldverschreibungen zusammen 5% des jeweils ausstehenden Gesamtnennbetrags der Schuldverschreibungen erreichen, können gemäß § 9 Absatz 1 S. 2 SchVG schriftlich die Einberufung einer Anleihegläubigerversammlung oder Abstimmung ohne Versammlung mit einer gemäß § 9 Absatz 1 S. 2 SchVG zulässigen Begründung verlangen.

(i) Beschlüsse der Anleihegläubiger im Rahmen einer Gläubigerversammlung werden nach §§ 9 ff. SchVG getroffen. Die Einberufung der Gläubigerversammlung regelt die weiteren Einzelheiten der Beschlussfassung und der Abstimmung. Mit der Einberufung der Gläubigerversammlung werden in der Tagesordnung die Beschlussgegenstände sowie die Vorschläge zur Beschlussfassung den Anleihegläubigern bekannt gegeben.

(b) *Majority requirements.* Except as provided by the following sentence and provided that the quorum requirements are being met, the Noteholders may pass resolutions by simple majority of the voting rights participating in the vote. Resolutions which materially change the substance of the Terms and Conditions, in particular in the cases of § 5(3) numbers 1 through 9 of the SchVG, may only be passed by a majority of at least 75 per cent. of the voting rights participating in the vote (a "**Qualified Majority**"). The voting right is suspended as long as any Notes are attributable to the Issuer or any of its affiliates (within the meaning of § 271(2) of the German Commercial Code (*Handelsgesetzbuch*)) or are being held for the account of the Issuer or any of its affiliates.

(c) *Resolutions*. Resolutions of the Noteholders will be made either in a Noteholders' meeting in accordance with § 13(c)(i) or by means of a vote without a meeting (*Abstimmung ohne Versammlung*) in accordance with § 13(c)(ii), in either case convened by the Issuer or a joint representative, if any. Pursuant to § 9(1) sentence 2 of the SchVG, Noteholders holding Notes in the total amount of 5 per cent. of the outstanding principal amount of the Notes may in writing request to convene a Noteholders' meeting or vote without a meeting for any of the reasons permitted pursuant to § 9(1) sentence 2 of the SchVG.

(i) Resolutions of the Noteholders in a Noteholders' meeting will be made in accordance with § 9 et seq. of the SchVG. The convening notice of a Noteholders' meeting will provide the further details relating to the resolutions and the voting procedure. The subject matter of the vote as well as the proposed resolutions will be notified to Noteholders in the agenda of the meeting.

(ii) Beschlüsse der Anleihegläubiger im Wege der Abstimmung ohne Versammlung werden nach § 18 SchVG getroffen. Die Aufforderung zur Stimmabgabe durch den Abstimmungsleiter regelt die weiteren Einzelheiten der Beschlussfassung und der Abstimmung. Mit der Aufforderung zur Stimmabgabe werden die Beschlussgegenstände sowie die Vorschläge zur Beschlussfassung den Anleihegläubigern bekannt gegeben.

(d) *Zweite Gläubigerversammlung.* Wird die Beschlussfähigkeit bei der Abstimmung ohne Versammlung nach § 13(c)(ii) nicht festgestellt, kann der Abstimmungsleiter eine Gläubigerversammlung einberufen, welche als zweite Gläubigerversammlung im Sinne des § 15 Absatz 3 Satz 3 SchVG gilt.

(e) *Anmeldung*. Die Stimmrechtsausübung ist von einer vorherigen Anmeldung der Anleihegläubiger abhängig. Die Anmeldung muss bis zum dritten Tag vor der Gläubigerversammlung im Falle einer Gläubigerversammlung (wie in § 13(c)(i) oder § 13(d) beschrieben) bzw. vor dem Beginn des Abstimmungszeitraums im Falle einer Abstimmung ohne Versammlung (wie in § 13(c)(ii) beschrieben) unter der in der Aufforderung zur Stimmabgabe angegebenen Anschrift zugehen. Zusammen mit der Anmeldung müssen Anleihegläubiger den Nachweis ihrer Berechtigung zur Teilnahme an der Abstimmung durch eine besondere Bescheinigung ihrer Depotbank in Textform und die Vorlage eines Sperrvermerks der Depotbank erbringen, aus dem hervorgeht, dass die relevanten Schuldverschreibungen für den Zeitraum vom Tag der Absendung der Anmeldung (einschließlich) bis zu dem angegebenen Ende der Versammlung (einschließlich) bzw. dem Ende des Abstimmungszeitraums (einschließlich) nicht übertragen werden können.

(ii) Resolutions of the Noteholders by means of a voting not requiring a physical meeting (*Abstimmung ohne Versammlung*) will be made in accordance § 18 of the SchVG. The request for voting as submitted by the chairman (*Abstimmungsleiter*) will provide the further details relating to the resolutions and the voting procedure. The subject matter of the vote as well as the proposed resolutions will be notified to Noteholders together with the request for voting.

(d) *Second noteholders' meeting*. If it is ascertained that no quorum exists for the vote without meeting pursuant to § 13(c)(ii), the chairman (*Abstimmungsleiter*) may convene a meeting, which shall be deemed to be a second meeting within the meaning of § 15(3) sentence 3 of the SchVG.

(e) *Registration*. The exercise of voting rights is subject to the registration of the Noteholders. The registration must be received at the address stated in the request for voting no later than the third day prior to the meeting in the case of a Noteholders' meeting (as described in § 13(c)(i) or § 13(d)) or the beginning of the voting period in the case of voting not requiring a physical meeting (as described in § 13(c)(ii)), as the case may be. As part of the registration, Noteholders must demonstrate their eligibility to participate in the vote by means of a special confirmation of their respective custodian bank hereof in text form and by submission of a blocking instruction by the custodian bank stating that the relevant Notes are not transferable from and including the day such registration has been sent until and including the stated end of the meeting or day the voting period ends, as the case may be.

(f) *Gemeinsamer Vertreter*. Die Anleihegläubiger können durch Mehrheitsbeschluss die Bestellung und Abberufung eines gemeinsamen Vertreters, die Aufgaben und Befugnisse des gemeinsamen Vertreters, die Übertragung von Rechten der Anleihegläubiger auf den gemeinsamen Vertreter und eine Beschränkung der Haftung des gemeinsamen Vertreters bestimmen. Die Bestellung eines gemeinsamen Vertreters bedarf einer Qualifizierten Mehrheit, wenn er ermächtigt wird, wesentlichen Änderungen der Anleihebedingungen gemäß § 13(a) zuzustimmen.

(g) *Bekanntmachungen*. Bekanntmachungen betreffend diesen § 13 erfolgen gemäß den §§ 5ff. SchVG sowie nach § 11.

(h) *Änderung der Garantie*. Die oben aufgeführten auf die Änderung der Anleihebedingungen anwendbaren Bestimmungen finden sinngemäß auf die Bestimmungen der Garantie und einer etwaigen Ersetzungsgarantie.

§14 Anwendbares Recht, Erfüllungsort und Gerichtsstand

(a) *Geltendes Recht; Erfüllungsort*. Form und Inhalt der Schuldverschreibungen sowie alle sich daraus ergebenden Rechte und Pflichten bestimmen sich ausschließlich nach dem Recht der Bundesrepublik Deutschland. Erfüllungsort ist Frankfurt am Main.

(b) *Gerichtsstand*. Vorbehaltlich eines zwingend vorgeschriebenen Gerichtsstands für bestimmte Verfahren nach dem SchVG ist nicht-ausschließlicher Gerichtsstand für alle sich aus den in diesen Anleihebedingungen geregelten Rechtsverhältnissen ergebenden Rechtsstreitigkeiten mit der Emittentin Frankfurt am Main.

(f) *Joint representative*. The Noteholders may by majority resolution provide for the appointment or dismissal of a joint representative, the duties and responsibilities and the powers of such joint representative, the transfer of the rights of the Noteholders to the joint representative and a limitation of liability of the joint representative. Appointment of a joint representative may only be passed by a Qualified Majority if such joint representative is to be authorised to consent to a material change in the substance of the Terms and Conditions in accordance with § 13(a) hereof.

(g) *Notices*. Any notices concerning this § 13 will be made in accordance with § 5 et seq. of the SchVG and § 11.

(h) *Amendments to the Guarantee*. The provisions set out above applicable to the amendment of the Terms and Conditions shall apply *mutatis mutandis* to the Guarantee and to any Substitution Guarantee.

§14 Applicable Law, Place of Performance and Jurisdiction

(a) *Applicable law; place of performance*. The form and content of the Notes as well as all the rights and duties arising therefrom are governed exclusively by the laws of the Federal Republic of Germany. Place of performance is Frankfurt am Main.

(b) *Jurisdiction*. Subject to any mandatory jurisdiction for specific proceedings under the SchVG, the non-exclusive court of venue for all litigation with the Issuer arising from the legal relations established in these Terms and Conditions is Frankfurt am Main.

(c) *Gerichtliche Geltendmachung*. Jeder Anleihegläubiger kann in Rechtsstreitigkeiten gegen die Emittentin im eigenen Namen seine Rechte aus den ihm zustehenden Schuldverschreibungen geltend machen unter Vorlage der folgenden Dokumente: (i) einer Bescheinigung seiner Depotbank, die (A) den vollen Namen und die volle Anschrift des Anleihegläubigers bezeichnet, (B) den Gesamtnennbetrag der Schuldverschreibungen angibt, die am Ausstellungstag dieser Bescheinigung dem bei dieser Depotbank bestehenden Depot dieses Anleihegläubigers gutgeschrieben sind, und (C) bestätigt, dass die Depotbank dem Clearingsystem und der Hauptzahlstelle eine schriftliche Mitteilung zugeleitet hat, die die Angaben gemäß (A) und (B) enthält und Bestätigungsvermerke des Clearingsystems sowie des jeweiligen Clearingsystem-Kontoinhabers trägt, sowie (ii) einer von einem Vertretungsberechtigten des Clearingsystems oder der Hauptzahlstelle bestätigten Ablichtung der Globalurkunde.

§ 15 Sprache

Diese Anleihebedingungen sind in deutscher Sprache abgefasst. Eine Übersetzung in die englische Sprache ist beigefügt. Der deutsche Text ist bindend und maßgeblich. Die Übersetzung in die englische Sprache ist unverbindlich.

(c) *Enforcement*. Any Noteholder may in any proceedings against the Issuer protect and enforce in its own name its rights arising under its Notes by submitting the following documents: (i) a certificate issued by its Custodian (A) stating the full name and address of the Noteholder, (B) specifying an aggregate principal amount of Notes credited on the date of such certificate to such Noteholder's securities account maintained with such Custodian and (C) confirming that the Custodian has given a written notice to the Clearing System as well as to the Principal Paying Agent containing the information pursuant to (A) and (B) and bearing acknowledgements of the Clearing System and the relevant Clearing System accountholder as well as (ii) a copy of the Global Note certified by a duly authorised officer of the Clearing System or the Principal Paying Agent as being a true copy.

§ 15 Language

These Terms and Conditions are written in the German language and provided with an English language translation. The German text shall be controlling and binding. The English language translation is non-binding.

ANLEIHEBEDINGUNGEN
(„Anleihebedingungen")

Diese Anleihebedingungen sind in deutscher Sprache abgefasst. Eine Übersetzung in die englische Sprache ist beigefügt. Der deutsche Text ist bindend und maßgeblich. Die Übersetzung in die englische Sprache ist unverbindlich.

§ 1 Währung, Stückelung, Form

(a) *Währung; Stückelung*. Die Wintershall Dea Finance B.V. (die „**Emittentin**") begibt am 25. September 2019 (der „**Begebungstag**") Schuldverschreibungen (die „**Schuldverschreibungen**") in Euro (die „**Festgelegte Währung**") im Gesamtnennbetrag von EUR 1.000.000.000 eingeteilt in Schuldverschreibungen im festgelegten Nennbetrag von je EUR 100.000 (der „**Nennbetrag**").

Die Schuldverschreibungen werden von der Wintershall Dea GmbH (die „**Garantin**") garantiert.

(b) *Form*. Die Schuldverschreibungen lauten auf den Inhaber.

(c) *Vorläufige Globalurkunde*, Austausch. Die Schuldverschreibungen sind zunächst in einer vorläufigen Globalurkunde (die „**Vorläufige Globalurkunde**") ohne Zinsscheine verbrieft.

Die Vorläufige Globalurkunde wird insgesamt oder teilweise und unentgeltlich am oder nach dem Tag, der 40 Tage nach dem Beginn des Angebots bzw. dem Begebungstag liegt, je nachdem, welcher Tage später ist, gegen Nachweis über das Nichtbestehen wirtschaftlichen U.S.-Eigentums im Sinne des U.S.-Rechts (non-U.S. beneficial ownership) in der in der Vorläufigen Globalurkunde vorgesehenen Form, für den Inhaber von Schuldverschreibungen gegen eine dauerhafte Globalurkunde (die „**Dauer-Globalurkunde**") (die Vorläufige Globalurkunde und die Dauer-Globalurkunde jeweils auch eine „**Globalurkunde**") ohne Zinsscheine eingetauscht. Ein Recht der Anleihegläubiger auf Ausgabe und Lieferung von Einzelurkunden oder Zinsscheinen besteht nicht.

(d) *Clearingsystem*. Die Vorläufige Globalurkunde und die Dauer-Globalurkunde werden solange von einem Clearingsystem oder im Auftrag eines Clearingsystems verwahrt, bis sämtliche Verpflichtungen der Emittentin aus den Schuldverschreibungen erfüllt sind.

TERMS AND CONDITIONS
("Terms and Conditions")

These Terms and Conditions are written in the German language and provided with an English language translation. The German text shall be controlling and binding. The English language translation is non-binding.

§ 1 Currency, Denomination, Form

(a) *Currency; Denomination*. The Notes are issued on 25 September 2019 (the "**Issue Date**") by Wintershall Dea Finance B.V. (the "**Issuer**") in Euro (the "**Specified Currency**"), in the aggregate principal amount of EUR 1,000,000,000 divided into notes in the specified denomination of EUR 100,000 (the "**Principal Amount**") each (the "**Notes**").

The Notes are guaranteed by Wintershall Dea GmbH (the "**Guarantor**").

(b) *Form*. The Notes are issued in bearer form.

(c) *Temporary Global Note, Exchange*. The Notes are initially represented by a temporary global Note (the "**Temporary Global Note**") without interest coupons.

The Temporary Global Note shall be exchanged, in whole or in part and free of charge to the holder of Notes, on or after the day that is 40 days after the later of the commencement of the offering and the Issue Date for a permanent global Note (the "**Permanent Global Note**") (the Temporary Global Note and the Permanent Global Note, each a "**Global Note**") without interest coupons upon certification as to non-U.S. beneficial ownership in the form set out in the Temporary Global Note. The right of the Noteholders to require the issue and delivery of definitive notes or interest coupons is excluded.

(d) *Clearing System*. Each of the Temporary Global Note and the Permanent Global Note will be held in custody by or on behalf of a Clearing System until all obligations of the Issuer under the Notes have been satisfied.

„**Clearingsystem**" bedeutet jeweils Folgendes: Clearstream Banking S.A., Luxemburg („**CBL**") und Euroclear Bank SA/NV, Brüssel („**Euroclear**") (CBL und Euroclear jeweils ein internationaler Zentralverwahrer von Wertpapieren (international central securities depositary) („**ICSD**" und zusammen die „**ICSDs**")) sowie jeden Funktionsnachfolger eines ICSD.

Die Schuldverschreibungen werden in Form einer New Global Note („**NGN**") ausgegeben und von einem gemeinsamen Wertpapierverwahrer (common safekeeper) im Namen beider ICSDs verwahrt.

Der Gesamtnennbetrag der durch die Globalurkunde verbrieften Schuldverschreibungen entspricht dem jeweils in den Registern beider ICSDs eingetragenen Gesamtbetrag. Die Register der ICSDs (unter denen man die Register versteht, die jeder ICSD für seine Kunden über den Betrag ihres Anteils an den Schuldverschreibungen führt) sind schlüssiger Nachweis über den Gesamtnennbetrag der durch die Globalurkunde verbrieften Schuldverschreibungen, und eine zu diesen Zwecken von einem ICSD jeweils ausgestellte Bestätigung mit dem Nennbetrag der so verbrieften Schuldverschreibungen ist ein schlüssiger Nachweis über den Inhalt des Registers des jeweiligen ICSD zu diesem Zeitpunkt.

Bei Rückzahlung oder einer Zinszahlung bezüglich der durch die Globalurkunde verbrieften Schuldverschreibungen bzw. bei Kauf und Entwertung der durch die Globalurkunde verbrieften Schuldverschreibungen stellt die Emittentin sicher, dass die Einzelheiten über Rückzahlung, Zahlung bzw. Kauf und Entwertung bezüglich der Globalurkunde *pro rata* in die Register der ICSDs eingetragen werden und dass nach dieser Eintragung vom Gesamtnennbetrag der in die Register der ICSDs aufgenommenen und durch die Globalurkunde verbrieften Schuldverschreibungen der Gesamtnennbetrag der zurückgezahlten bzw. gekauften und entwerteten Schuldverschreibungen abgezogen wird.

"**Clearing System**" means Clearstream Banking S.A., Luxembourg ("**CBL**") and Euroclear Bank SA/NV, Brussels ("**Euroclear**") (CBL and Euroclear each an international central securities depositary ("**ICSD**" and together the "**ICSDs**")) as well as any successor in respect of the functions performed by each ICSD.

The Notes are issued in new global note ("**NGN**") form and are kept in custody by a common safekeeper on behalf of both ICSDs.

The aggregate principal amount of Notes represented by the Global Note shall be the aggregate amount from time to time entered in the records of both ICSDs. The records of the ICSDs (which expression means the records that each ICSD holds for its customers which reflect the amount of such customers' interest in the Notes) shall be conclusive evidence of the aggregate principal amount of Notes represented by the Global Note and, for these purposes, a statement issued by an ICSD stating the principal amount of Notes so represented at any time shall be conclusive evidence of the records of the relevant ICSD at that time.

On any redemption or interest being made in respect of, or purchase and cancellation of, any of the Notes represented by the Global Note the Issuer shall procure that details of such redemption, payment or purchase and cancellation (as the case may be) in respect of the Global Note shall be entered *pro rata* in the records of the ICSDs and, upon any such entry being made, the aggregate principal amount of the Notes recorded in the records of the ICSDs and represented by the Global Note shall be reduced by the aggregate principal amount of the Notes so redeemed or purchased and cancelled.

Bei Austausch eines Anteils von ausschließlich durch eine vorläufige Globalurkunde verbrieften Schuldverschreibungen wird die Emittentin sicherstellen, dass die Einzelheiten dieses Austauschs *pro rata* in die Aufzeichnungen der ICSDs aufgenommen werden.

Die Vorläufige Globalurkunde und die Dauer-Globalurkunde tragen jeweils die eigenhändige Unterschrift von einem Vertretungsberechtigten der Emittentin sowie die eigenhändige Unterschrift eines Kontrollbeauftragten der Hauptzahlstelle.

(e) *Anleihegläubiger*. Den Inhabern von Schuldverschreibungen („**Anleihegläubiger**") stehen Miteigentumsanteile oder vergleichbare andere Rechte an der Globalurkunde zu, die gemäß anwendbarem Recht und den Bestimmungen und Regeln des Clearingsystems übertragen werden können.

§ 2 **Status, Negativerklärung und Garantie**

(a) *Status*. Die Schuldverschreibungen begründen nicht nachrangige und, vorbehaltlich der Garantie, nicht besicherte Verbindlichkeiten der Emittentin, die im gleichen Rang untereinander und, im Falle der Insolvenz, der Auflösung oder der Liquidation der Emittentin oder eines der Abwendung der Insolvenz der Emittentin dienenden Verfahrens, im gleichen Rang mit allen anderen gegenwärtigen und zukünftigen nicht besicherten und nicht nachrangigen Verbindlichkeiten der Emittentin stehen, mit Ausnahme von Verbindlichkeiten, die nach geltenden Rechtsvorschriften vorrangig sind.

On an exchange of a portion only of the Notes represented by a Temporary Global Note, the Issuer shall procure that details of such exchange shall be entered *pro rata* in the records of the ICSDs.

The Temporary Global Note and the Permanent Global Note shall each bear the manual signature of one duly authorised officer of the Issuer as well as the manual signature of an authentication officer of the Principal Paying Agent.

(e) *Noteholders*. The holders of Notes ("**Noteholders**") are entitled to co-ownership participations or other comparable rights in the Global Note, which are transferable in accordance with applicable laws and the rules and regulations of the Clearing System.

§ 2 **Status, Negative Pledge and Guarantee**

(a) *Status*. The Notes constitute *unsubordinated* and, subject to the Guarantee, unsecured obligations of the Issuer ranking *pari passu* among themselves and, in the event of the insolvency, dissolution or liquidation of the Issuer or any proceeding to avoid insolvency of the Issuer, *pari passu* with all other present and future unsubordinated and unsecured obligations of the Issuer, save for such obligations which may be preferred by applicable law.

(b) *Negativerklärung der Emittentin*. Solange noch Kapital- oder Zinsbeträge aus den Schuldverschreibungen ausstehen, jedoch nur bis zu dem Zeitpunkt, an dem alle auf die Schuldverschreibungen gemäß diesen Anleihebedingungen zu zahlenden Beträge an Kapital und Zinsen dem Clearingsystem zur Verfügung gestellt worden sind, verpflichtet sich die Emittentin, kein Grundpfandrecht, Mobiliarpfandrecht, Pfandrecht oder sonstiges dingliches Sicherungsrecht (jedes ein „**Sicherungsrecht**") an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder Teilen davon zur Besicherung einer Maßgeblichen Fremdkapitalverbindlichkeit zu gewähren oder bestehen zu lassen, ohne zuvor oder gleichzeitig entweder die Anleihegläubiger gleichrangig und anteilig an einem solchen Sicherungsrecht zu beteiligen oder zu Gunsten der Anleihegläubiger ein anderes, gleichwertiges Sicherungsrecht zu bestellen, welches von einem unabhängigen Sachverständigen als gleichwertige Sicherheit beurteilt wird.

Die Verpflichtung nach Satz 1 dieses § 2(b) findet keine Anwendung auf ein Sicherungsrecht, das

(i) von der Emittentin an gegenwärtigen oder zukünftigen, tatsächlichen oder bedingten Forderungen bestellt wird, die der Emittentin gegen die Garantin oder eine andere Tochtergesellschaft der Garantin aufgrund der darlehensweisen Weiterleitung des Emissionserlöses aus der Begebung von Wertpapieren zustehen, sofern ein solches Sicherungsrecht der Besicherung der Verpflichtungen der Emittentin aus den jeweiligen Wertpapieren dient;

(ii) gesetzlich vorgeschrieben ist oder kraft Gesetzes entsteht;

(iii) eine Maßgebliche Fremdkapitalverbindlichkeit besichert, die infolge einer zukünftigen Akquisition zu einer Verbindlichkeit der Emittentin wird; oder

(iv) der vollständigen oder teilweisen Verlängerung, Erneuerung oder Ersetzung (oder wiederholte Verlängerungen, Erneuerungen oder Ersetzungen) eines der vorstehend in den Klauseln (i) bis (iii) aufgeführten Sicherungsrechte dient.

(b) *Negative pledge of the Issuer.* So long as any amounts of interest or principal remain outstanding under the Notes, but only up to the time all amounts payable to Noteholders under the Notes in accordance with these Terms and Conditions have been placed at the disposal of the Clearing System, the Issuer undertakes not to create or permit to subsist any mortgage, charge, pledge or other form of encumbrance *in rem* (each a "**Security Interest**") over the whole or any part of its present or future assets or revenues to secure any Relevant Indebtedness, without prior thereto or at the same time letting the Noteholders either share equally and rateably in such Security Interest or benefit from an equivalent other Security Interest which will be approved by an independent expert as being equivalent security.

The undertaking pursuant to sentence 1 of this § 2(b) will not apply to any Security Interest which

(i) is provided by the Issuer over any present or future, actual or contingent claims of the Issuer against the Guarantor or another Subsidiary of the Guarantor arising from the on-lending of the proceeds from the issuance by the Issuer of any securities, provided that any such Security Interest secures the obligations of the Issuer under any such securities;

(ii) is mandatory according to, or created by operation of, applicable laws;

(iii) secures a Relevant Indebtedness that becomes an obligation of the Issuer as a consequence of a future acquisition; or

(iv) is provided for any extension, renewal or replacement (or successive extensions, renewals or replacements) in whole or in part of any Security Interest referred to in clauses (i) through (iii) above.

Ein nach § 2(b) zu leistendes Sicherungsrecht kann auch zu Gunsten eines für die Anleihegläubiger handelnden Treuhänders bestellt werden.

„**Maßgebliche Fremdkapitalverbindlichkeiten**" bezeichnet jegliche Fremdkapitalverbindlichkeiten in Form von (oder verbrieft durch) Anleihen, Schuldverschreibungen, Schuldtitel oder sonstige Wertpapiere, soweit sie an einer Börse oder im Freiverkehr oder in einem anderen Wertpapiermarkt notiert, zugelassen oder gehandelt werden oder notiert, zugelassen oder gehandelt werden können sowie Schuldscheine.

(c) *Garantie*. Die Garantin hat die unbedingte und unwiderrufliche Garantie für die fristgerechte Zahlung von Kapital, Zinsen und sonstigen aus den Schuldverschreibungen zu zahlenden Beträgen gemäß einer Garantie datiert September 2019 (die „**Garantie**") übernommen. Die Garantie ist ein Vertrag zugunsten jedes Anleihegläubigers als begünstigtem Dritten gem. § 328 Absatz 1 BGB, der das Recht begründet, die Garantin unmittelbar aus der Garantie auf Erfüllung in Anspruch zu nehmen und Ansprüche aus der Garantie gegen die Garantin unmittelbar durchzusetzen.

(d) *Negativerklärung der Garantin*. In der Garantie hat sich die Garantin verpflichtet, solange noch Kapital- oder Zinsbeträge aus den Schuldverschreibungen ausstehen, jedoch nur bis zu dem Zeitpunkt, an dem alle auf die Schuldverschreibungen gemäß diesen Anleihebedingungen zu zahlenden Beträgen an Kapital und Zinsen dem Clearingsystem zur Verfügung gestellt worden sind,

(i) kein Sicherungsrecht an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder Teilen davon zur Besicherung einer Maßgeblichen Fremdkapitalverbindlichkeit zu gewähren oder bestehen zu lassen; und

Any Security Interest which is to be provided pursuant to § 2(b) may also be provided to a person acting as trustee for the Noteholders.

"**Relevant Indebtedness**" means any indebtedness which is in the form of, or represented or evidenced by, bonds, notes, debentures, loan stock or other securities which for the time being are capable of being, quoted, listed or dealt in or traded on any stock exchange or over-the-counter or other securities market, as well as loan notes (*Schuldscheine*).

(c) *Guarantee.* The Guarantor has given an unconditional and irrevocable guarantee pursuant to a guarantee dated September 2019 (the "**Guarantee**") for the due payment of principal of, and interest on, and any other amounts expressed to be payable under the Notes. The Guarantee constitutes a contract for the benefit of the Noteholders from time to time as third-party beneficiaries in accordance with § 328 paragraph 1 of the German Civil Code (*Bürgerliches Gesetzbuch*), giving rise to the right of each Noteholder to require performance under the Guarantee directly from the Guarantor and to enforce the Guarantee directly against the Guarantor.

(d) *Negative Pledge of the Guarantor*. In the Guarantee the Guarantor has undertaken, so long as any amounts of interest or principal remain outstanding under the Notes, but only up to the time all amounts payable to Noteholders under the Notes in accordance with these Terms and Conditions have been placed at the disposal of the Clearing System,

(i) not to create or permit to subsist any Security Interest over the whole or any part of its present or future assets or revenues to secure any Relevant Indebtedness; and

(ii) zu veranlassen (soweit rechtlich möglich und zulässig), dass keine Tochtergesellschaft ein Sicherungsrecht an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder jeweiligen Teilen davon zur Besicherung einer Maßgeblichen Fremdkapitalverbindlichkeit gewährt oder bestehen lässt,

ohne zuvor oder gleichzeitig entweder die Anleihegläubiger gleichrangig und anteilig an einem solchen Sicherungsrecht zu beteiligen oder zu Gunsten der Anleihegläubiger ein anderes, gleichwertiges Sicherungsrecht zu bestellen, welches von einem unabhängigen Sachverständigen als gleichwertige Sicherheit beurteilt wird.

Die in Satz 1 dieses § 2(d) beschriebene Verpflichtung findet keine Anwendung auf ein Sicherungsrecht, das

(i) von einer Tochtergesellschaft an gegenwärtigen oder zukünftigen, tatsächlichen oder bedingten Forderungen bestellt wird, die der Tochtergesellschaft gegen die Garantin oder eine andere Tochtergesellschaft der Garantin aufgrund der darlehensweisen Weiterleitung des Emissionserlöses aus der Begebung von Wertpapieren zustehen, sofern ein solches Sicherungsrecht der Besicherung der Verpflichtungen der Tochtergesellschaft aus den jeweiligen Wertpapieren dient;

(ii) gesetzlich vorgeschrieben ist oder kraft Gesetzes entsteht;

(iii) eine Maßgebliche Fremdkapitalverbindlichkeit besichert, die infolge einer zukünftigen Akquisition zu einer Verbindlichkeit der Garantin oder einer Tochtergesellschaft wird;

(iv) der vollständigen oder teilweisen Verlängerung, Erneuerung oder Ersetzung (oder wiederholte Verlängerungen, Erneuerungen oder Ersetzungen) eines der vorstehend in den Klauseln (i) bis (iii) aufgeführten Sicherungsrechte dient.

Ein nach § 2(d) zu leistendes Sicherungsrecht kann auch zu Gunsten eines für die Anleihegläubiger handelnden Treuhänders bestellt werden.

(ii) to procure (to the extent legally possible and permissible) that no Subsidiary will create or permit to subsist any present or future Security Interest over the whole or any part of its assets or revenues to secure any Relevant Indebtedness,

without prior thereto or at the same time letting the Noteholders either share equally and rateably in such Security Interest or benefit from an equivalent other Security Interest which will be approved by an independent expert as being equivalent security.

The undertaking described in sentence 1 of this § 2(d) will not apply to any Security Interest which

(i) is provided by any Subsidiary over any present or future, actual or contingent claims of the Subsidiary against the Guarantor or another Subsidiary of the Guarantor arising from the on-lending of the proceeds from the issuance by the Subsidiary of any securities, provided that any such Security Interest secures the obligations of the Subsidiary under any such securities;

(ii) is mandatory according to, or created by operation of, applicable laws;

(iii) secures a Relevant Indebtedness that becomes an obligation of the Guarantor or any Subsidiary as a consequence of a future acquisition;

(iv) is provided for any extension, renewal or replacement (or successive extensions, renewals or replacements) in whole or in part of any Security Interest referred to in clauses (i) through (iii) above.

Any Security Interest which is to be provided pursuant to § 2(d) may also be provided to a person acting as trustee for the Noteholders.

„**Tochtergesellschaft**" bezeichnet eine Rechtsträger, dessen Abschluss aufgrund gesetzlicher Vorgaben oder nach Maßgabe allgemein anerkannter Rechnungslegungsgrundsätze zu einem beliebigen Zeitpunkt mit dem der Garantin zu konsolidieren ist (Vollkonsolidierung).

§ 3 Zinsen

(a) *Zinssatz und Zinszahlungstage*. Die Schuldverschreibungen werden bezogen auf ihren ausstehenden Nennbetrag ab dem 25. September 2019 (der „**Verzinsungsbeginn**") (einschließlich) bis zum Endfälligkeitstag (ausschließlich) verzinst.

Die Schuldverschreibungen werden mit jährlich 0,840% verzinst. Die Zinsen sind nachträglich an jedem Zinszahlungstag zahlbar.

„**Zinszahlungstag**" bezeichnet den 25. September eines jeden Jahres, erstmals den 25. September 2020.

(b) *Zinstagequotient*. Zinsen für einen beliebigen Zeitraum (ausgenommen ist ein etwaiger Zeitraum, für den ein Bruchteilzinsbetrag festgelegt ist) werden auf der Grundlage des Zinstagequotienten berechnet.

„**Zinstagequotient**" bezeichnet bei der Berechnung des Zinsbetrages für einen beliebigen Zeitraum (ab dem ersten Tag dieses Zeitraums (einschließlich) bis zum letzten Tag dieses Zeitraums (ausschließlich)) (der „**Zinsberechnungszeitraum**"):

(i) wenn der Zinsberechnungszeitraum der Feststellungsperiode entspricht, in die er fällt, oder kürzer als diese ist, die Anzahl von Tagen in dem Zinsberechnungszeitraum dividiert durch die Anzahl von Tagen in der betreffenden Feststellungsperiode; und

(ii) wenn der Zinsberechnungszeitraum länger als eine Feststellungsperiode ist, die Summe aus:

(A) der Anzahl der Tage in dem betreffenden Zinsberechnungszeitraum, die in die Feststellungsperiode fallen, in der der Zinsberechnungszeitraum beginnt, dividiert durch die Anzahl der Tage in der betreffenden Feststellungsperiode; und

"**Subsidiary**" means any entity whose financial statements at any time are required by law or in accordance with generally accepted accounting principles to be fully consolidated with those of the Guarantor.

§ 3 Interest

(a) *Rate of interest and Interest Payment Dates*. The Notes bear interest on their outstanding principal amount from and including 25 September 2019 (the "**Interest Commencement Date**") to but excluding the Maturity Date.

The Notes bear interest at the rate of 0.840 per cent. per annum, such interest being payable in arrear on each Interest Payment Date.

"**Interest Payment Date**" means 25 September in each year, commencing on 25 September 2020.

(b) *Day Count Fraction*. If interest is required to be calculated for any period of time (other than any period of time for which a broken interest amount has been fixed), such interest shall be calculated on the basis of the Day Count Fraction.

"**Day Count Fraction**" means, in respect of the calculation of an amount of interest on any Note for any period of time (from and including the first day of such period to but excluding the last day of such period) (the "**Calculation Period**"):

(i) if the Calculation Period is equal to or shorter than the Determination Period during which it falls, the number of days in the Calculation Period divided by the number of days in such Determination Period; and

(ii) if the Calculation Period is longer than one Determination Period, the sum of:

(A) the number of days in such Calculation Period falling in the Determination Period in which the Calculation Period begins divided by the number of days in such Determination Period; and

(B) die Anzahl der Tage in dem betreffenden Zinsberechnungszeitraum, die in die nachfolgende Feststellungsperiode fallen, dividiert durch die Anzahl der Tage in der betreffenden Feststellungsperiode.

Dabei gilt Folgendes:

„**Feststellungstermin**" bezeichnet den 25. September eines jeden Jahres;

„**Feststellungsperiode**" bezeichnet jeden Zeitraum ab einem Feststellungstermin (einschließlich), der in ein beliebiges Jahr fällt, bis zum nächsten Feststellungstermin (ausschließlich).

(c) *Ende des Zinslaufs*. Der Zinslauf der Schuldverschreibungen endet an dem Ende des Tages, der dem Tag vorausgeht, an dem sie zur Rückzahlung fällig werden. Falls die Emittentin die *Schuldverschreibungen* bei Fälligkeit nicht einlöst, wird der ausstehende Betrag ab dem Tag der Fälligkeit (einschließlich) bis zum Tag der vollständigen Zahlung an die Anleihegläubiger (ausschließlich) mit dem gesetzlich bestimmten Verzugszins verzinst.[3].

§ 4 Rückzahlung

(a) *Rückzahlung bei Endfälligkeit*. Soweit nicht zuvor bereits insgesamt oder teilweise zurückgezahlt oder angekauft und eingezogen, werden die Schuldverschreibungen zu ihrem Nennbetrag am 25. September 2025 (der „**Endfälligkeitstag**") zurückgezahlt.

(b) *Rückkauf.* Die Emittentin kann jederzeit im Markt oder auf andere Weise Schuldverschreibungen ankaufen und verkaufen. Sofern solche Käufe durch öffentliches Angebot erfolgen, muss dieses Angebot allen Anleihegläubigern gemacht werden.

(B) the number of days in such Calculation Period falling in the next Determination Period divided by the number of days in such Determination Period.

Where:

"**Determination Date**" means 25 September in each year;

"**Determination Period**" means each period from and including a Determination Date in any year to but excluding the next Determination Date.

(c) *Cessation of Interest Accrual*. The Notes shall cease to bear interest from the end of the day preceding their due date for redemption. If the Issuer fails to redeem the Notes when due, interest shall continue to accrue on the outstanding amount from (and including) the due date to (but excluding) the day on which such payment is received by or on behalf of the Noteholders at the default rate of interest established by statutory law.[4]

§ 4 Redemption

(a) *Redemption at maturity*. To the extent not previously redeemed in whole or in part or purchased and cancelled the Notes shall be redeemed at their Principal Amount on 25 September 2025 (the "**Maturity Date**").

(b) *Purchases*. The Issuer is entitled to purchase and resell Notes at any time in the market or otherwise. If such purchases are made by tender, tenders for such Notes must be made available to all Noteholders of such Notes alike.

---

[3] Der gesetzliche Verzugszinssatz entspricht dem von der Deutschen Bundesbank von Zeit zu Zeit veröffentlichten Basiszinssatz zuzüglich fünf Prozentpunkten, §§ 288 Abs. 1, 247 Abs. 1 BGB.

[4] The default rate of interest established by statutory law is five percentage points above the basis rate of interest published by Deutsche Bundesbank from time to time, §§ 288 paragraph 1, 247 paragraph 1 of the German Civil Code (*Bürgerliches Gesetzbuch*).

(c) *Vorzeitige Rückzahlung nach Wahl der Emittentin*.

(i) Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) mit Wirkung zu jedem Tag während des Zeitraums ab dem Begebungstag der Schuldverschreibungen (einschließlich) bis zum 25. Juni 2025 (ausschließlich) durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen zum Wahl-Rückzahlungsbetrag (wie nachstehend definiert) zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin (der „**Wahl-Rückzahlungstag**") in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

Definitionen:

Der „**Wahl-Rückzahlungsbetrag**" je Schuldverschreibung entspricht dem höheren von:

(i) dem Nennbetrag; oder

(ii) dem Abgezinsten Marktwert.

Der Wahl-Rückzahlungsbetrag wird von der Berechnungsstelle berechnet.

Der „**Abgezinste Marktwert**" ist die Summe aus

(a) dem auf den Wahl-Rückzahlungstag abgezinsten Wert des Nennbetrags der zurückzuzahlenden Schuldverschreibung, der ansonsten am Endfälligkeitstag fällig werden würde; und

(b) den jeweils auf den Wahl-Rückzahlungstag abgezinsten Werten der verbleibenden Zinszahlungen, die ansonsten an jedem *Zinszahlungstag* nach dem Wahl-Rückzahlungstag bis zum Endfälligkeitstag (einschließlich) fällig werden würden (ausschließlich etwaiger, bis zum Wahl-Rückzahlungstag (ausschließlich) aufgelaufener Zinsen).

Die Berechnungsstelle errechnet den Abgezinsten Marktwert gemäß der Marktkonvention auf einer Grundlage, die der Berechnung von Zinsen gemäß § 3 entspricht, wobei sie die Benchmark-Rendite zuzüglich 0,25% zugrunde legt.

(c) *Early redemption at the option of the Issuer*.

(i) The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) with effect as of any date during the period from and including the Issue Date to but excluding 25 June 2025. In the case such notice is given, the Issuer will redeem the remaining Notes at the Call Redemption Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice (the "**Call Redemption Date**").

Definitions:

The "**Call Redemption Amount**" per Note shall be the higher of:

(i) the Principal Amount; or

(ii) the Present Value.

The Call Redemption Amount shall be calculated by the Calculation Agent.

The "**Present Value**" will be the sum of

(a) the principal amount of the Note to be redeemed which would otherwise become due on the Maturity Date, discounted to the Call Redemption Date; and

(b) the remaining interest payments which would otherwise become due on each Interest Payment Date falling after the Call Redemption Date to and including the Maturity Date (excluding any interest accrued to but excluding the Call Redemption Date), each discounted to the Call Redemption Date.

The Calculation Agent will calculate the Present Value in accordance with market convention on a basis which is consistent with the calculation of interest as set out in § 4, using the Benchmark Yield plus 0.25%.

Die „**Benchmark-Rendite**" bezeichnet die am Rückzahlungs-Berechnungstag bestehende Rendite der 1,00% Bundesanleihe 2015 (2025), basierend auf dem Referenzpreis für diese Referenz-Anleihe an diesem Tag, wie um oder gegen 12:00 Uhr mittags (Frankfurter Zeit) an diesem Tag auf der Bloomberg Seite DE0001102382 Govt HP (unter Nutzung der Einstellung „**Fixing Price**" und der Preisquelle „**FRNK**") abgelesen, oder wie von einer anderen, durch die Berechnungsstelle festgelegten, Quelle hergeleitet oder veröffentlicht oder sollte die Rendite zu diesem Zeitpunkt nicht verfügbar sein, bezeichnet die Benchmark-Rendite eine ersetzende Referenzanleihe, die von der Berechnungsstelle festgesetzt wird, die jeweils mit einer Laufzeit, die mit der verbleibenden Restlaufzeit der Schuldverschreibung bis zum Endfälligkeitstag vergleichbar ist, und die im Zeitpunkt der Auswahlentscheidung und entsprechend der üblichen Finanzmarktpraxis zur Preisbestimmung bei Neuemissionen von Unternehmensanleihen mit einer bis zum Endfälligkeitstag der Schuldverschreibung vergleichbaren Laufzeit verwendet werden würde.

The "**Benchmark Yield**" means the yield at the Redemption Calculation Date of the 1.00% Bundesanleihe 2015 (2025), based on the reference price for such benchmark security on such day, as observed at or about noon (Frankfurt time) on such date on Bloomberg page DE0001102382 Govt HP (using the setting "**Fixing Price**" and the pricing source "**FRNK**"), or as derived or published by such other source as determined by the Calculation Agent, and if such yield is not available at that time the Benchmark Yield shall be the yield of a substitute benchmark security chosen by the Calculation Agent, in each case as having a maturity comparable to the remaining term of the Note to the Maturity Date, that would be used at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the Maturity Date.

„**Rückzahlungs-Berechnungstag**" ist der sechste Geschäftstag vor dem Tag, an dem die Schuldverschreibungen gemäß § 5(c)(i) zurückgezahlt werden.

"**Redemption Calculation Date**" means the sixth Business Day prior to the date on which the Notes are redeemed in accordance with this § 5(c)(i).

(ii) Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) mit Wirkung zu jedem Tag während des Zeitraums ab dem 25. Juni 2025 (einschließlich) bis zum Endfälligkeitstag (ausschließlich) durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin zum Nennbetrag zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

(ii) The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) with effect as of any date during the period from and including 25 June 2025 to but excluding the Maturity Date. In the case such notice is given, the Issuer will redeem the remaining Notes at the Principal Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice.

(d) *Vorzeitige Rückzahlung durch die Emittentin bei geringem ausstehenden Gesamtnennbetrag*. Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) jederzeit durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen, wenn 80% oder mehr des *Gesamtnennbetrags* der ursprünglich begebenen Schuldverschreibungen zurückgezahlt oder zurückgekauft und entwertet wurden. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin zum Nennbetrag zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

(e) *Vorzeitige Rückzahlung durch die Emittentin aus steuerlichen Gründen*. Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) jederzeit durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen, wenn ein Gross-up-Ereignis eingetreten ist. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin zum Nennbetrag zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

Eine solche Rückzahlung darf nicht früher als 90 Tage vor dem Tag erfolgen, an dem die Emittentin oder die Garantin erstmals verpflichtet wäre, Zusätzliche Beträge (wie in § 6 definiert) zu zahlen bzw. wenn eine ordnungsgemäße Zahlungsaufforderung unter der Garantie erfolgen würde.

(d) *Clean-up Call*. The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) at any time if 80 per cent. or more of the aggregate principal amount of the Notes initially issued have been redeemed or repurchased and cancelled. In the case such notice is given, the Issuer will redeem the remaining Notes at the Principal Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice.

(e) *Early Redemption by the Issuer for Reasons of Taxation*. The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) at any time if a Gross-up Event has occurred. In the case such notice is given, the Issuer will redeem the remaining Notes at the Principal Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice.

No such redemption may be made earlier than 90 days prior to the earliest date on which the Issuer or the Guarantor would be obliged to pay the Additional Amounts (as defined in § 6) or (as the case may be) in respect of a demand for payment duly made under the Guarantee, for the first time.

Ein „**Gross-up-Ereignis**" tritt ein, wenn, der Emittentin oder der Garantin ein Gutachten einer anerkannten Anwaltskanzlei vorliegt (und die Emittentin oder die Garantin der Hauptzahlstelle eine Kopie davon gibt) aus dem hervorgeht, dass die Emittentin oder die Garantin aufgrund einer an oder nach dem Begebungstag der Schuldverschreibungen in Kraft tretenden Gesetzesänderung (oder einer Änderung von darunter erlassenen Bestimmungen und Vorschriften) der Niederlande oder der Bundesrepublik Deutschland oder einer zur Erhebung von Steuern berechtigten Gebietskörperschaft oder Behörde der Niederlande oder der Bundesrepublik Deutschland, oder als Folge einer Änderung der offiziellen Auslegung oder Anwendung dieser Gesetze, Bestimmungen oder Vorschriften durch eine gesetzgebende Körperschaft, ein Gericht, eine Regierungsstelle oder eine Aufsichtsbehörde (einschließlich des Erlasses von Gesetzen sowie der Bekanntmachung gerichtlicher oder aufsichtsrechtlicher Entscheidungen), verpflichtet ist oder verpflichtet sein wird, Zusätzliche Beträge gemäß § 6 auf die Schuldverschreibungen zu zahlen, oder die Garantin verpflichtet ist oder verpflichtet sein wird, Zusätzliche Beträge auf fällige Beträge aus der Garantie zu zahlen, und die Emittentin bzw. die Garantin diese Verpflichtung nicht abwenden kann, indem sie Maßnahmen ergreift, die sie nach Treu und Glauben für zumutbar und angemessen hält.

(f) *Erklärung der vorzeitigen Rückzahlung*. Die Emittentin kann die Erklärung der vorzeitigen Rückzahlung der Schuldverschreibungen gemäß § 4(c), § 4(d) oder § 4(e) durch Veröffentlichung einer Mitteilung an die Anleihegläubiger gemäß § 11 unter Einhaltung einer Frist von nicht weniger als 30 und nicht mehr als 60 Tagen vor dem Rückzahlungstag erklären.

Diese Mitteilung hat den Rückzahlungstermin festzulegen sowie die Tatsachen anzugeben, die das Kündigungsrecht der Emittentin begründen.

Die Emittentin wird jeder Börse, an der die Schuldverschreibungen notiert sind und deren Regeln eine Mitteilung an die Börse verlangen, umgehend Mitteilung über die Kündigung machen.

A "**Gross up Event**" will occur if an opinion of a recognised law firm has been delivered to the Issuer or the Guarantor (and the Issuer or the Guarantor has provided the Principal Paying Agent with a copy thereof) stating that, the Issuer or the Guarantor, as a result of any change in, or amendment to, the laws (or any rules or regulations thereunder) of the Netherlands or the Federal Republic of Germany or any political subdivision or any authority of or in the Netherlands or the Federal Republic of Germany having power to tax, or as a result of any change in, or amendment to, the official interpretation or application of any such laws, rules or regulations by any legislative body, court, governmental agency or regulatory authority (including the enactment of any legislation and the publication of any judicial decision or regulatory determination), which change or amendment becomes effective on or after the Issue Date has or will become obliged to pay Additional Amounts pursuant to § 6 on the Notes or the Guarantor has or will become obliged to pay Additional Amounts in respect of payments due under the Guarantee, and that obligation cannot be avoided by the Issuer and the Guarantor, respectively, taking such measures it (acting in good faith) deems reasonable and appropriate.

(f) *Notice of early redemption*. The Issuer may call the Notes for early redemption pursuant to § 4(c), § 4(d) or § 4(e) by publishing a notice to the Noteholders in accordance with § 11 subject to observing a notice period of not less than 30 nor more than 60 days prior to the specified redemption date.

This notice must specify the redemption date and state the facts which establish the right of the Issuer to redeem the Notes.

The Issuer will inform, if required by such stock exchange on which the Notes are listed, such stock exchange as soon as possible of such redemption.

(g) *Kontrollwechsel*.

(i) Wenn ein Rückzahlungsereignis (wie nachstehend definiert) eintritt, wird die Emittentin innerhalb von 30 Tagen nach Ablauf des jeweiligen Kontrollwechselzeitraums (wie nachstehend definiert) das Rückzahlungsereignis und den Rückzahlungsstichtag unter Angabe der Umstände des Rückzahlungsereignisses gemäß § 11 bekannt machen.

„**Rückzahlungsstichtag**" bezeichnet den von der Emittentin gemäß § 4(g)(i) festgelegten Geschäftstag, der nicht weniger als 15 und nicht mehr als 30 Tage nach dem Tag der Bekanntmachung des Rückzahlungsereignisses gemäß § 11 liegen darf.

(ii) Falls die Emittentin gemäß § 4(g)(i) ein Rückzahlungsereignis bekannt gemacht hat, ist jeder Anleihegläubiger nach seiner Wahl berechtigt, mit einer Frist von mindestens 10 Tagen mit Wirkung zum Rückzahlungsstichtag alle oder einzelne seiner Schuldverschreibungen, die noch nicht zurückgezahlt wurden, vorzeitig fällig zu stellen. In einem solchen Fall hat die Emittentin die betreffenden Schuldverschreibungen am Rückzahlungsstichtag zu 101% des Nennbetrags zuzüglich etwaiger bis zu dem Rückzahlungsstichtag (ausschließlich) aufgelaufener Zinsen zurückzuzahlen.

Eine Fälligstellung gemäß diesem § 4(g)(ii) hat durch Übergabe einer Erklärung in Textform gegenüber der Hauptzahlstelle zu erfolgen und ist unwiderruflich. Der betreffende Anleihegläubiger hat dabei durch eine Bescheinigung seiner Depotbank nachzuweisen, dass er zu dem Zeitpunkt der Erklärung Inhaber der betreffenden Schuldverschreibung(en) ist, und seine Schuldverschreibung(en), für die das Recht ausgeübt werden soll, an die Hauptzahlstelle zu liefern.

(iii) Ein „**Rückzahlungsereignis**" tritt ein, wenn

(A) die Emittentin einen Kontrollwechsel (wie nachstehend definiert) bekannt macht; und

(g) *Change of Control*.

(i) If a Put Event (as defined below) occurs, the Issuer will give notice in accordance with § 11 of the Put Event and the Put Record Date specifying the nature of the Put Event within 30 days of the end of the respective Change of Control Period (as defined below).

"**Put Record Date**" means the Business Day fixed by the Issuer pursuant to § 4(g)(i) which will be not less than 15 nor more than 30 days after the notice of the Put Event and which is published in accordance with § 11.

(ii) If the Issuer gives notice in accordance with § 4(g)(i) of a Put Event, each Noteholder may at his option on giving not less than 10 days' notice declare all or some only of his Notes not previously redeemed due which notice shall take effect on the Put Record Date. In such case the Issuer will redeem such Notes on the Put Record Date at 101 per cent. of the Principal Amount plus interest accrued to but excluding the Put Record Date.

A notice pursuant to this § 4(g)(ii) has to be effected by delivering a notice in text form to the Principal Paying Agent and is irrevocable. The respective Noteholder must demonstrate with a certificate from his Custodian that he is the holder of the respective Note(s) at the time of the declaration and deliver to the Principal Paying Agent the Note(s) for which the right shall be exercised.

(iii) A "**Put Event**" will occur if

(A) the Issuer announces a Change of Control (as defined below); and

(B) nach Eintritt des Kontrollwechsels und, in den Fällen gemäß § (4)(g)(v)(A)(y) und § (4)(g)(v)(A)(z) unten, aufgrund dessen ein Negatives Ratingereignis (wie nachstehend definiert) eintritt.

(iv) Ein „**Kontrollwechsel**" gilt jedes Mal als eingetreten, wenn ein Kontrollwechselereignis (wie nachstehend definiert) eingetreten ist.

(A) „**Kontrollwechselereignis**" bedeutet, dass

(x) an oder nach dem Begebungstag, aber vor dem Zeitpunkt eines Qualifizierten IPO die BASF SE, Ludwigshafen am Rhein, Deutschland („**BASF**") und die Letterone Holdings S.A., Luxemburg („**Letterone Holdings**") (ob unmittelbar oder mittelbar über irgendeine Person) zusammen nicht mehr wirtschaftliche Eigentümer von mindestens 51% der Stammgeschäftsanteile der Garantin sind; dies gilt mit der Maßgabe, dass kein Kontrollwechsel eintritt, wenn BASF alleine mindestens 51% der Stammgeschäftsanteile der Garantin hält; oder

(y) zum oder nach dem Zeitpunkt eines Qualifizierten IPO ein Ereignis eintritt, durch das eine oder mehrere Person(en) (außer einer börsennotierten Holdinggesellschaft der Garantin und außer BASF (oder eines ihrer Tochterunternehmen)), die entweder alleine oder gemeinsam im Sinne von § 2 Abs. 5 des Wertpapiererwerbs- und Übernahmegesetzes handeln, unmittelbar oder mittelbar einen Stimmrechtsanteil von mehr als 50% an der Garantin erwerben, wobei der Stimmrechtsanteil nach § 34 Abs. 1 und 2 WpHG berechnet wird.

(B) a Negative Rating Event (as defined below) occurs after the occurrence and, in the cases of § 4(g)(v)(A)(y) and § 4(g)(v)(A)(z) below, as a result of the Change of Control.

(iv) A "**Change of Control**" shall be deemed to have occurred at each time that a Change of Control Event (as defined below) has occurred.

(A) "**Change of Control Event**" means

(x) on or after the Issue Date but prior to the date of a Qualified IPO, BASF SE, Ludwigshafen am Rhein, Germany ("**BASF**") and Letterone Holdings S.A., Luxembourg ("**Letterone Holdings**") (whether directly or indirectly through any person) together cease to hold beneficially a minimum of 51 per cent. of the ordinary shares of the Guarantor, provided that no change of control shall occur if BASF individually holds a minimum of 51 per cent. of the ordinary shares in the Guarantor; or

(y) on or after the date of a Qualified IPO, the occurrence of any event pursuant to which one or more person(s) (other than any listed Holding Company of the Guarantor and other than BASF (or any of its subsidiaries)) acting either individually or acting in concert within the meaning of §2(5) of the German Securities Acquisition and Take Over Act (*Wertpapiererwerbs- und Übernahmegesetz*) acquire(s) directly or indirectly more than 50 per cent. of the voting rights of the Guarantor, provided that the share of voting rights shall be calculated pursuant to section 34 paras. (l) and (2) WpHG.

„**Holdinggesellschaft**" bedeutet in Bezug auf eine Gesellschaft oder ein Unternehmen, jede andere Gesellschaft oder jedes andere Unternehmen, dessen Tochtergesellschaft es ist.

„**WpHG**" bezeichnet das Wertpapierhandelsgesetz in seiner jeweils gültigen Fassung.

„**Qualifizierter IPO**" bezeichnet eine erstmalige Börsenzulassung der Gesamtheit oder eines Teils der Aktien der Garantin oder einer Holdinggesellschaft der Garantin (deren einziger wesentliche Vermögensgegenstand die unmittelbare oder mittelbare Beteiligung an der Garantin ist) an einer international anerkannten Wertpapierbörse oder eine andere Emission im Wege eines Börsengangs oder eines öffentlichen Angebots oder unter entsprechenden Umständen in Bezug auf die Garantin oder eine Holdinggesellschaft der Garantin.

(B) Wenn ein Kontrollwechsel eintritt, wird die Emittentin sobald wie möglich, nachdem sie Kenntnis davon erhalten hat, den Kontrollwechsel und den Tag, an dem die Transaktion, die den Kontrollwechsel bewirkt, vollzogen worden ist (der „**Stichtag**"), gemäß § 11 bekannt machen.

(v) Ein „**Negatives Ratingereignis**" gilt im Hinblick auf einen zuvor eingetretenen Kontrollwechsel als eingetreten, wenn innerhalb des Kontrollwechselzeitraums (wie nachstehend definiert):

(A)

(x) für den Fall, dass die Schuldverschreibungen am Stichtag über kein Rating von einer Ratingagentur (wie nachstehend definiert) verfügen, keine einzige Ratingagentur ein Investment Grade Rating (d.h. mindestens „**BBB−**" durch S&P oder Fitch oder „**Baa3**" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur) für die Schuldverschreibungen vergibt; oder

"**Holding Company**" means in relation to a company or corporation, any other company or corporation in respect of which it is a subsidiary.

"**WpHG**" means the German Securities Trading Act (*Wertpapierhandelsgesetz*) as amended from time to time.

"**Qualified IPO**" means an initial listing of all or part of the share capital of the Guarantor or any Holding Company of the Guarantor (whose only principal asset is the direct or indirect ownership in the Guarantor) on any internationally recognized stock exchange or any other issue by way of flotation or public offering or any equivalent circumstances in relation to the Guarantor or any Holding Company of the Guarantor.

(B) If a Change of Control occurs, the Issuer will give notice in accordance with § 11 of the Change of Control and the date on which the transaction that constitutes the Change of Control has taken effect (the "**Record Date**") as soon as practicable after becoming aware thereof.

(v) A "**Negative Rating Event**" shall be deemed to have occurred in respect of a Change of Control if within the Change of Control Period (as defined below):

(A)

(x) in case, on the Record Date, no credit rating from any Rating Agency (as defined below) is assigned to the Notes and no single Rating Agency assigns an investment grade credit rating (i.e. at least "**BBB−**" by S&P or Fitch or "**Baa3**" by Moody's or such other equivalent rating as may be assigned by any other rating agency) to the Notes; or

(y) für den Fall, dass die Schuldverschreibungen am Stichtag zwar über kein Investment Grade Rating aber über ein oder mehrere (mit Zustimmung der Emittentin erteilte) Non-Investment Grade Ratings („**BB+**" durch S&P oder Fitch oder „**Ba1**" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur oder gleichwertig oder schlechter) verfügen, eine der Ratingagenturen ihr jeweiliges Rating um einen oder mehrere Punkte (zur Erläuterung: „**BB+**" nach „**BB**" bzw. „**Ba1**" nach „**Ba2**" entspricht einem Punkt) absenkt, wobei kein Negatives Ratingereignis eintritt, wenn dieses Rating anschließend durch diese Ratingagentur auf das ursprüngliche oder ein besseres Rating angehoben wird; oder

(y) in case, on the Record Date, no investment grade credit rating is assigned to the Notes but one or more non-investment grade credit ratings ("**BB+**" by S&P or Fitch or "**Ba1**" by Moody's or such other equivalent rating as may be assigned by any other rating agency, or equivalent, or worse) are assigned to the Notes (with the consent of the Issuer), any of the Rating Agencies downgrades its respective credit rating by one or more notches (for illustration, "**BB+**" to "**BB**" or "**Ba1**" to "**Ba2**" being one notch), provided that no Negative Rating Event occurs if such credit rating is subsequently reinstated to its earlier or a better credit rating by such Rating Agency; or

(z) für den Fall, dass die Schuldverschreibungen am Stichtag über ein oder mehrere Investment Grade Ratings verfügen, eine der Ratingagenturen ihr Investment Grade Rating (d.h. mindestens „**BBB−**" durch S&P oder Fitch oder „**Baa3**" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur) (i) zurückzieht oder (ii) von einem Investment Grade Rating auf ein non-Investment Grade Rating („**BB+**" durch S&P oder Fitch oder „**Ba1**" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur oder gleichwertig oder schlechter) herabstuft, wobei kein Negatives Ratingereignis eintritt, wenn dieses Rating anschließend durch die jeweilige Ratingagentur auf das ursprüngliche oder ein besseres Investment Grade Rating angehoben wird oder (im Falle einer Zurückziehung) das betreffende Rating durch das Investment Grade Rating einer anderen Ratingagentur ersetzt wird; und

(B) die jeweilige Ratingagentur bei ihrer Entscheidung zur Herabstufung oder Zurücknahme eines Kreditratings gemäß den obigen Ziffern (v)(A)(y) und (v)(A)(z) öffentlich bekannt gibt oder schriftlich bestätigt, dass diese Entscheidung(en) ganz oder teilweise aufgrund des Eintritts des Kontrollwechsels erfolgte(n).

Falls die Schuldverschreibungen zum Stichtag über ein Rating von mehr als einer Rating Agentur verfügen, von denen mindestens eines ein Investment Grade Rating ist, findet § 4(g)(v)(A)(z) Anwendung.

„**Ratingagentur**" bezeichnet jeweils Moody's Investors Services Limited („**Moody's**") oder S&P Global Ratings Europe Limited („**S&P**"), oder Fitch Ratings Ltd („**Fitch**") oder eine jeweilige Nachfolgegesellschaft.

(z) in case, on the Record Date, one or more investment grade credit ratings are assigned to the Notes, any of the Rating Agencies (i) withdraws or (ii) downgrades such its investment grade credit rating (i.e. at least "**BBB−**" by S&P or Fitch or "**Baa3**" by Moody's or such other equivalent rating as may be assigned by any other rating agency) to a non-investment grade credit rating ("**BB+**" by S&P or Fitch or "**Ba1**" by Moody's or such other equivalent rating as may be assigned by any other rating agency, or equivalent, or worse), provided that no Negative Rating Event occurs if such credit rating is subsequently reinstated to its earlier or a better investment grade credit rating by such Rating Agency or (in the case of a withdrawal) replaced by an investment grade credit rating from any other Rating Agency; and

(B) in making any decision to downgrade or withdraw a credit rating pursuant to paragraphs (v)(A)(y) and (v)(A)(z) above, the relevant Rating Agency announces publicly or confirms in writing that such decision(s) resulted, in whole or in part, from the occurrence of the Change of Control.

If on the Record Date the Notes carry a rating from more than one Rating Agency, at least one of which is investment grade, then § 4(g)(v)(A)(z) will apply.

"**Rating Agency**" means each of Moody's Investors Services Limited ("**Moody's**") or S&P Global Ratings Europe Limited ("**S&P**") or Fitch Ratings Ltd ("**Fitch**"), or any of their respective successors.

„**Kontrollwechselzeitraum**" bezeichnet den Zeitraum von 120 Tagen ab dem Stichtag (ausschließlich).

Falls sich die von Moody's, S&P oder Fitch verwendeten Rating Kategorien gegenüber denen, die in § 4(g)(v) angegeben wurde, ändern sollten, wird die Emittentin diejenigen Rating Kategorien von Moody's, S&P bzw. Fitch bestimmen, die den früheren Rating Kategorien von Moody's, S&P bzw. Fitch möglichst nahekommen. § 4(g)(v) ist dann entsprechend auszulegen.

§ 5 Zahlungen

(a) *Zahlungen*.

(i) Die Zahlung von Kapital und Zinsen auf die Schuldverschreibungen erfolgt an das Clearingsystem oder an dessen Order zur Gutschrift auf den Konten der jeweiligen Kontoinhaber des Clearingsystems außerhalb der Vereinigten Staaten von Amerika. Die Zahlung von Zinsen auf Schuldverschreibungen, die durch eine Vorläufige Globalurkunde verbrieft sind, erfolgt nach ordnungsgemäßem Nachweis gemäß § 1(c).

(ii) Sämtliche Zahlungen stehen in allen Fällen unter dem Vorbehalt geltender steuerlicher und sonstiger gesetzlicher Vorschriften, Richtlinien und/oder Verordnungen. Die Emittentin, die Garantin, die Hauptzahlstelle bzw. Zahlstelle sind nicht für irgendwelche Steuern oder Abgaben gleich welcher Art verantwortlich, die aufgrund solcher gesetzlichen Vorschriften, Richtlinien oder Verordnungen oder Verträgen auferlegt oder erhoben werden. Dies berührt jedoch nicht die Bestimmungen von § 6. Den Anleihegläubigern werden keine Kosten oder Gebühren in Bezug auf diese Zahlungen auferlegt.

(iii) Eine Bezugnahme in diesen Anleihebedingungen auf Kapital oder Zinsen der Schuldverschreibungen schließt jegliche Zusätzlichen Beträge gemäß § 6 ein.

(b) *Zahlungsweise*. Zu leistende Zahlungen auf die Schuldverschreibungen erfolgen in der Festgelegten Währung.

"**Change of Control Period**" means the period ending 120 days from but excluding the Record Date.

If the rating designations employed by any of Moody's, S&P or Fitch are changed from those which are described in § 4(g)(v) above, the Issuer shall determine the rating designations of Moody's or S&P or Fitch (as appropriate) as are most equivalent to the prior rating designations of Moody's or S&P or Fitch and § 4(g)(v) shall be read accordingly.

§ 5 Payments

(a) *Payments*.

(i) Payment of principal and interest on the Notes shall be made to the Clearing System or to its order for credit to the relevant account holders of the Clearing System outside the United States of America. Payment of interest on Notes represented by a Temporary Global Note shall be made, upon due certification as provided in § 1(c).

(ii) All payments will be subject in all cases to any applicable fiscal and other laws, directives and/or regulations. The Issuer, the Guarantor or, as the case may be, the Principal Paying Agent or Paying Agent, as the case may be, will not be liable for any taxes or duties of whatever nature imposed or levied by such laws, regulations, directives or agreements, but without prejudice to the provisions of § 6. No commission or expenses shall be charged to the Noteholders in respect of such payments.

(iii) Any reference in these Terms and Conditions of the Notes to principal or interest will be deemed to include any Additional Amounts as set forth in § 6.

(b) *Manner of payment*. Payments of amounts due in respect of the Notes shall be made in the Specified Currency.

(c) *Erfüllung*. Die Emittentin bzw. die Garantin wird durch Leistung der Zahlung an das Clearingsystem oder an dessen Order von ihrer Zahlungspflicht befreit.

(c) *Discharge*. The Issuer or, as the case may be, the Guarantor shall be discharged by payment to, or to the order of, the Clearing System.

(d) *Zahltag*. Fällt der Fälligkeitstag einer Zahlung in Bezug auf eine Schuldverschreibung auf einen Tag, der kein Geschäftstag ist, dann hat der Anleihegläubiger keinen Anspruch auf Zahlung vor dem nächstfolgenden Geschäftstag. Der Anleihegläubiger ist nicht berechtigt, weitere Zinsen oder sonstige Zahlungen aufgrund dieser Verspätung zu verlangen.

(d) *Payment Business Day*. If the due date for payment of any amount in respect of any Note is not a Business Day then the Noteholder shall not be entitled to payment until the next Business Day and shall not be entitled to further interest or other payment in respect of such delay.

„**Geschäftstag**" bezeichnet einen Tag (außer einem Samstag oder Sonntag), an dem Banken in Frankfurt am Main für den allgemeinen Geschäftsverkehr geöffnet sind und an dem das Clearingsystem sowie alle maßgeblichen Bereiche des Trans-European Automated Real-time Gross Settlement Express Transfer System (TARGET2) betriebsbereit sind, um Zahlungen vorzunehmen.

"**Business Day**" means a day (other than a Saturday or a Sunday) on which banks are open for general business in Frankfurt am Main and on which the Clearing System as well as all relevant parts of the Trans-European Automated Real-time Gross Settlement Express Transfer system (TARGET2) are operational to effect payments.

§ 6 Besteuerung

Sämtliche auf die Schuldverschreibungen zu zahlenden Beträge (einschließlich sämtlicher von der Garantin auf die Garantie zu zahlender Beträge) werden ohne Einbehalt oder Abzug von Steuern, Abgaben, Festsetzungen oder behördlicher Gebühren jedweder Art geleistet („**Steuern**"), die von den Niederlanden bzw. der Bundesrepublik Deutschland oder einer ihrer Gebietskörperschaften oder Behörden oder sonstigen Stellen in den Niederlanden bzw. der Bundesrepublik Deutschland mit der Befugnis zur Erhebung von Steuern auferlegt, erhoben, eingezogen, einbehalten oder festgesetzt werden, sofern nicht kraft Gesetzes oder einer sonstigen Rechtsvorschrift einem solcher Einbehalt oder Abzug vorgeschrieben ist. Sofern die Emittentin oder die Garantin zu einem solchen Einbehalt oder Abzug verpflichtet ist, wird die Emittentin bzw. die Garantin zusätzliche Beträge (die „**Zusätzlichen Beträge**") an die Anleihegläubiger zahlen, so dass die Anleihegläubiger die Beträge erhalten, die sie ohne den betreffenden Einbehalt oder Abzug erhalten hätten. Solche Zusätzlichen Beträge sind jedoch nicht zahlbar wegen solcher Steuern in Bezug auf Schuldverschreibungen,

§ 6 Taxation

All amounts to be paid in respect of the Notes (including all amounts to be paid by the Guarantor under the Guarantee) will be paid free and clear of, and without withholding or deduction for, any taxes, duties, assessments or governmental charges of whatever nature ("**Taxes**") imposed, levied, collected, withheld or assessed by the Netherlands or the Federal Republic of Germany (as the case may be) or any political subdivision or any authority or any other agency of or in the Netherlands or the Federal Republic of Germany (as the case may be) that has power to tax, unless such withholding or deduction is required to be made by law. If the Issuer or the Guarantor is required to make such withholding or deduction, the Issuer or the Guarantor (as the case may be) will pay such additional amounts (the "**Additional Amounts**") to the Noteholders as the Noteholders would have received if no such withholding or deduction had been required, except that no such Additional Amounts will be payable for any such Taxes in respect of any Note,

(a) die auf andere Weise als durch Einbehalt oder Abzug von zahlbaren Beträgen zu entrichten sind; oder

(a) which are payable otherwise than by withholding or deduction from amounts payable; or

(b) die wegen einer Verbindung des betreffenden Anleihegläubigers zu den Niederlanden bzw. der Bundesrepublik Deutschland, die nicht nur aus der bloßen Inhaberschaft der Schuldverschreibungen besteht, einzubehalten oder abzuziehen sind; oder

(b) which are to be withheld or deducted by reason of the relevant Noteholder having some connection with the Netherlands or the Federal Republic of Germany other than the mere holding of that Note; or

(c) die aufgrund (i) einer Richtlinie oder Verordnung der Europäischen Union betreffend die Besteuerung von Zinserträgen oder (ii) einer zwischenstaatlichen Vereinbarung, eines zwischenstaatlichen Abkommens oder einer zwischenstaatlichen Verständigung über deren Besteuerung, an der die Niederlande, die Bundesrepublik Deutschland oder die Europäische Union beteiligt ist, oder (iii) einer gesetzlichen Vorschrift, die diese Richtlinie, Verordnung, Vereinbarung, Abkommen oder Verständigung umsetzt oder befolgt, abzuziehen oder einzubehalten sind.

(c) which are to be withheld or deducted pursuant to (i) any European Union Directive or Regulation concerning the taxation of interest income, or (ii) any international treaty, agreement or understanding relating to such taxation and to which the Netherlands or the Federal Republic of Germany or the European Union is a party, or (iii) any provision of law implementing, or complying with, or introduced to conform with, such Directive, Regulation, treaty, agreement or understanding.

Die Emittentin und die Garantin sind keinesfalls verpflichtet, zusätzliche Beträge in Bezug auf einen Einbehalt oder Abzug von Beträgen zu zahlen, die gemäß Sections 1471 bis 1474 des U.S. Internal Revenue Code (in der jeweils geltenden Fassung oder gemäß Nachfolgebestimmungen), gemäß zwischenstaatlicher Abkommen, gemäß den in einer anderen Rechtsordnung in Zusammenhang mit diesen Bestimmungen erlassenen Durchführungsvorschriften oder gemäß mit dem Internal Revenue Service geschlossenen Verträgen von der Emittentin, der jeweiligen Zahlstelle oder einem anderen Beteiligten abgezogen oder einbehalten wurden („**FATCA-Steuerabzug**") oder Anleger in Bezug auf einen FATCA-Steuerabzug schadlos zu halten.

In any event, the Issuer and the Guarantor will have no obligation to pay additional amounts deducted or withheld by the Issuer, the relevant Paying Agent or any other party ("**FATCA Withholding**") in relation to any withholding or deduction of any amounts required by the rules of U.S. Internal Revenue Code Sections 1471 through 1474 (or any amended or successor provisions), pursuant to any inter-governmental agreement, or implementing legislation adopted by another jurisdiction in connection with these provisions, or pursuant to any agreement with the U.S. Internal Revenue Service or indemnify any investor in relation to any FATCA Withholding.

§ 7 Vorlegung, Verjährung

(a) *Vorlegungsfrist*. Die Vorlegungsfrist gemäß § 801 Absatz 1 Satz 1 BGB für fällige Schuldverschreibungen wird auf zehn Jahre verkürzt.

(b) *Verjährungsfrist*. Die Verjährungsfrist für innerhalb der Vorlegungsfrist zur Zahlung vorgelegte Schuldverschreibungen beträgt zwei Jahre von dem Ende der betreffenden Vorlegungsfrist an.

§ 7 Presentation, Prescription

(a) *Presentation*. The period for presentation of Notes due, as established in § 801 paragraph 1 sentence 1 of the German Civil Code (*Bürgerliches Gesetzbuch*), is reduced to ten years.

(b) *Prescription*. The period for prescription for Notes presented for payment during the presentation period shall be two years beginning at the end of the relevant presentation period.

§ 8 Kündigungsgründe für die Anleihegläubiger

(a) *Kündigungsgründe*. Jeder Anleihegläubiger ist berechtigt, alle oder einzelne seiner Schuldverschreibungen zu kündigen und deren sofortige Rückzahlung zu ihrem Nennbetrag zuzüglich etwaiger bis zu dem Tag der Rückzahlung (ausschließlich) aufgelaufener Zinsen zu verlangen, falls eines der folgenden Ereignisse (jeweils ein „**Kündigungsgrund**") eintritt und fortbesteht:

(i) die Emittentin Kapital oder Zinsen oder eine andere Zahlung auf die Schuldverschreibungen oder die Garantin eine Zahlung auf die Garantie nicht innerhalb von 15 Tagen nach dem betreffenden Fälligkeitstag zahlt;

(ii) die Emittentin oder die Garantin irgendeine andere Verpflichtung aus den Schuldverschreibungen oder der Garantie nicht ordnungsgemäß erfüllt und die Unterlassung, sofern sie nicht unheilbar ist, länger als 45 Tage fortdauert, nachdem die Emittentin oder die Garantin (über die Hauptzahlstelle) hierüber eine Benachrichtigung von einem Anleihegläubiger erhalten hat;

(iii) eine andere Finanzverbindlichkeit (wie nachstehend definiert) der Emittentin, der Garantin oder einer Tochtergesellschaft bei Fälligkeit oder innerhalb der zutreffenden Nachfrist nicht erfüllt wird, wobei kein Anleihegläubiger berechtigt ist, seine Schuldverschreibungen gemäß diesem § 8(a)(iii) zu kündigen, falls der Gesamtbetrag aller solcher Finanzverbindlichkeiten nicht EUR 75.000.000 (oder den entsprechenden Gegenwert in einer oder mehreren anderen Währung(en)) übersteigt;

(iv) die Emittentin, die Garantin oder eine Wesentliche Tochtergesellschaft zahlungsunfähig ist oder ihre Zahlungsunfähigkeit einräumt;

(v) ein zuständiges Gericht gegen die Emittentin, die Garantin oder eine Wesentliche Tochtergesellschaft ein Insolvenzverfahren eröffnet, das nicht innerhalb von 60 Tagen nach dessen Eröffnung aufgehoben oder ausgesetzt worden ist;

§ 8 Events of Default

(a) *Events of Default*. Each Noteholder will be entitled to declare all or some only of its Notes due and demand immediate redemption of such Notes at the Principal Amount plus accrued interest to but excluding the date of redemption as provided hereinafter, if any of the following events (each an "**Event of Default**") occurs and is continuing:

(i) the Issuer fails to pay principal or interest or any other amount in respect of the Notes or the Guarantor fails to pay any amount in respect of the Guarantee within 15 days from the relevant due date;

(ii) the Issuer or the Guarantor fails to duly perform any other obligation arising from the Notes or the Guarantee and such default, except where such default is incapable of remedy, continues unremedied for more than 45 days after the Issuer or the Guarantor (through the Principal Paying Agent) has received notice thereof from a Noteholder;

(iii) any other Financial Indebtedness (as defined below) of the Issuer, the Guarantor or any Subsidiary is not paid when due or within any applicable grace period, as the case may be, provided that no Noteholder will be entitled to declare its Notes due in accordance with this § 8(a)(iii) if the aggregate amount of such Financial Indebtedness does not exceed EUR 75,000,000 (or its equivalent in any other currency or currencies);

(iv) the Issuer, the Guarantor or any Material Subsidiary is unable or admits its inability to pay its debts as they fall due;

(v) a competent court opens insolvency proceedings against the Issuer, the Guarantor or any Material Subsidiary which has not been dismissed or stayed within 60 days after the commencement thereof;

(vi) die Emittentin oder die Garantin in Liquidation tritt, es sei denn, dies geschieht im Zusammenhang mit einer Verschmelzung oder einer anderen Form des Zusammenschlusses mit einer anderen Gesellschaft oder im Zusammenhang mit einer Umwandlung und die andere oder neue Gesellschaft übernimmt alle Verpflichtungen, die die Emittentin aus den Schuldverschreibungen bzw. die Garantin aus der Garantie eingegangen ist;

(vi) the Issuer or the Guarantor is liquidated, unless this is effected in connection with a merger or another form of amalgamation with another company or in connection with a restructuring, and the other or the new company assumes all obligations of the Issuer arising under the Notes or the Guarantor arising under the Guarantee, as the case may be;

(vii) in den Niederlanden oder in der Bundesrepublik Deutschland ein Gesetz, eine Verordnung oder behördliche Anordnung Geltung erlangt, durch welche die Emittentin oder die Garantin rechtlich gehindert ist, Verpflichtungen aus den Schuldverschreibungen bzw. der Garantie zu erfüllen, und diese Lage nicht binnen 60 Tagen behoben ist; oder

(vii) any law, governmental order, decree or enactment will gain recognition in The Netherlands or in the Federal Republic of Germany whereby the Issuer or the Guarantor is legally prevented from performing its obligations under the Notes or under the Guarantee and this situation is not cured within 60 days; or

(viii) die Garantie mit rechtskräftiger Entscheidung eines zuständigen Gerichts für nicht vollumfänglich wirksam erklärt wird oder die Garantin einen Mangel der Wirksamkeit behauptet.

(viii) the Guarantee is determined by the final decision of a competent court or is claimed by the Guarantor not to be in full force.

Das Kündigungsrecht erlischt, falls der Kündigungsgrund vor Ausübung des Kündigungsrechts geheilt wurde. Vorbehaltlich anwendbaren zwingenden Rechts berechtigen andere Ereignisse oder Umstände als die in § 8(a) genannten die Anleihegläubiger nicht dazu, ihre Schuldverschreibungen vorzeitig zur Rückzahlung fällig zu stellen, es sei denn, dies ist ausdrücklich in diesen Anleihebedingungen bestimmt.

The right to declare Notes due will terminate if the situation giving rise to it has been resolved before such right is exercised. No event or circumstance other than an event specified in § 8(a) shall entitle Noteholders to declare their Notes due and payable prior to their stated maturity, save as expressly provided for in these Terms and Conditions and subject to applicable mandatory law.

(b) *Quorum*. In den Fällen gemäß § 8(a)(ii) und/oder § 8(a)(iii) wird eine Kündigungserklärung, sofern nicht bei deren Eingang zugleich einer der in Absatz § 8(a)(i) oder § 8(a)(iv) bis (viii) bezeichneten Kündigungsgründe vorliegt, erst wirksam, wenn bei der Hauptzahlstelle Kündigungserklärungen von Anleihegläubigern im Nennbetrag von mindestens 15% des Gesamtnennbetrages der zu diesem Zeitpunkt noch insgesamt ausstehenden Schuldverschreibungen eingegangen sind.

(b) *Quorum*. In the events specified in § 8(a)(ii) and/or § 8(a)(iii), any notice declaring any Note due shall, unless at the time such notice is received any of the events specified in § 8(a)(i) or § 8(a)(iv) through (viii) entitling Noteholders to declare their Notes due has occurred, become effective only when the Principal Paying Agent has received such default notices from the Noteholders representing at least 15 per cent. of the aggregate principal amount of Notes then outstanding.

(c) *Kündigungserklärung*. Eine Kündigung der Schuldverschreibungen gemäß § 8(a) ist schriftlich in deutscher oder englischer Sprache gegenüber der Hauptzahlstelle zu erklären und persönlich oder per Einschreiben an deren bezeichnete Geschäftsstelle zu übermitteln. Der Benachrichtigung ist ein Nachweis beizufügen, aus dem sich ergibt, dass der betreffende Anleihegläubiger zum Zeitpunkt der Abgabe der Benachrichtigung Inhaber der betreffenden Schuldverschreibung ist. Der Nachweis kann durch eine Bescheinigung der Depotbank oder auf andere geeignete Weise erbracht werden.

„**Depotbank**" bezeichnet ein Bank- oder sonstiges Finanzinstitut, bei dem der Anleihegläubiger Schuldverschreibungen in seinem Wertpapierdepotkonto verwahren lässt und das ein Konto bei dem Clearingsystem hat, und schließt das Clearingsystem ein.

„**Finanzverbindlichkeit**" bezeichnet jede gegenwärtige oder zukünftige Zahlungsverpflichtung im Zusammenhang mit einer Kredit- oder sonstigen Kapitalaufnahme.

„**Gruppe**" bezeichnet die Garantin und ihre Tochtergesellschaften.

„**Wesentliche Tochtergesellschaft**" bezeichnet jede Tochtergesellschaft, deren Nettoumsatz, wie anhand der Gewinn- und Verlustrechnung für das letzte Geschäftsjahr dieser Tochtergesellschaft ermittelt (auf nicht konsolidierter Basis und ohne konzerninterne Umsätze), mindestens 7,5% des Konzern-Nettoumsatzes der Gruppe, wie anhand der geprüften Konzern-Gewinn- und Verlustrechnung der Gruppe für dasselbe Geschäftsjahr ermittelt, ausmacht. Wurde eine Tochtergesellschaft nach Ablauf des Berichtszeitraums erworben, auf den sich der zu diesem Zeitpunkt aktuellste geprüfte Konzernabschluss der Gruppe bezieht, so gilt (für die Anwendung der vorstehend beschriebenen Überprüfung) die Bezugnahme auf den aktuellsten geprüften Konzernabschluss der Gruppe als Bezugnahme auf diesen Konzernabschluss so, als wäre die entsprechende Tochtergesellschaft unter Zugrundelegung ihres zu diesem Zeitpunkt aktuellsten Abschlusses darin ausgewiesen (nach Anpassung durch den jeweils aktuellen Abschlussprüfer der Gruppe nach dessen Ermessen in Absprache mit der Garantin).

(c) *Notice*. Any notice declaring Notes due in accordance with § 8(a) will be made by means of a written declaration in German or English delivered by hand or registered mail to the specified office of the Principal Paying Agent together with proof that such Noteholder at the time of such notice is a holder of the relevant Notes by means of a certificate of its Custodian or in any other appropriate manner.

"**Custodian**" means any bank or other financial institution with which the Noteholder maintains a securities account in respect of any Notes and having an account maintained with the Clearing System and includes the Clearing System.

"**Financial Indebtedness**" means any present or future indebtedness for or in respect of monies borrowed or raised.

"**Group**" means the Guarantor and its Subsidiaries.

"**Material Subsidiary**" means any Subsidiary that has, as determined on the basis of the profit and loss statement for such Subsidiary's latest financial year, net revenues (sales) (on an unconsolidated basis and excluding intercompany sales) representing 7.5 per cent. or more of the consolidated net revenues (sales) of the Group, as determined by the audited annual consolidated profit and loss statement of the Group for the same financial year, provided that in the case of a Subsidiary acquired after the end of the financial period to which the then latest audited annual consolidated financial statements of the Group relate, for the purposes of applying the foregoing test, the reference to the Group's most recent audited consolidated financial statements shall be deemed to be a reference to such consolidated financial statements as if such Subsidiary had been shown in such consolidated financial statements by reference to its then latest relevant financial statements, adjusted as deemed appropriate by the auditors for the time being of the Group after consultation with the Guarantor.

§ 9 Zahlstellen, Berechnungsstelle

(a) *Bestellung*. Die Emittentin hat Deutsche Bank Aktiengesellschaft als Hauptzahlstelle in Bezug auf die Schuldverschreibungen (die „**Hauptzahlstelle**" und gemeinsam mit jeder etwaigen von der Emittentin nach § 9(2) bestellten zusätzlichen Zahlstelle, die „**Zahlstellen**") bestellt.

Die Emittentin hat Conv-Ex Advisors Limited als Berechnungsstelle in Bezug auf die Schuldverschreibungen (die „**Berechnungsstelle**" und, gemeinsam mit den Zahlstellen, die „**Verwaltungsstellen**") bestellt.

Die Geschäftsräume der Verwaltungsstellen befinden sich unter den folgenden Adressen:

Hauptzahlstelle:
Deutsche Bank Aktiengesellschaft
Taunusanlage 12
60325 Frankfurt am Main
Deutschland

Berechnungsstelle:
Conv-Ex Advisors Limited
30 Crown Place
London, EC2A 4EB
Vereinigtes Königreich

(b) *Änderung oder Beendigung der Bestellung*. Die Emittentin behält sich das Recht vor, jederzeit die Benennung einer Zahlstelle oder Berechnungsstelle zu verändern oder zu beenden und Nachfolger bzw. zusätzliche Zahlstellen bzw. Berechnungsstellen zu ernennen. Den Anleihegläubigern werden Änderungen in Bezug auf die Zahlstellen bzw. Berechnungsstelle oder deren angegebenen Geschäftsstellen umgehend gemäß § 11 bekannt gemacht.

Auf keinen Fall dürfen sich die Geschäftsräume einer Zahlstelle innerhalb der Vereinigten Staaten von Amerika befinden.

(c) *Erfüllungsgehilfen der Emittentin*. Die Hauptzahlstelle, die Zahlstellen und die Berechnungsstelle handeln ausschließlich als Beauftragte der Emittentin und übernehmen keinerlei Verpflichtungen gegenüber dem Anleihegläubiger; es wird kein Auftrags- oder Treuhandverhältnis zwischen ihnen und dem Anleihegläubiger begründet.

§ 9 Paying Agents, Calculation Agent

(a) *Appointment*. The Issuer has appointed Deutsche Bank Aktiengesellschaft as principal paying agent with respect to the Notes (the "**Principal Paying Agent**" and, together with any additional paying agent appointed by the Issuer in accordance with § 9(2), the "**Paying Agents**").

The Issuer has appointed Conv-Ex Advisors Limited as calculation agent with respect to the Notes (the "**Calculation Agent**" and, together with the Paying Agents, the "**Agents**").

The addresses of the specified offices of the Agents are:

Principal Paying Agent:
Deutsche Bank Aktiengesellschaft
Taunusanlage 12
60325 Frankfurt am Main
Federal Republic of Germany

Calculation Agent:
Conv-Ex Advisors Limited
30 Crown Place
London, EC2A 4EB
United Kingdom

(b) *Variation or Termination of Appointment*. The Issuer reserves the right at any time to vary or terminate the appointment of any Paying Agent or Calculation Agent and to appoint successor or additional Paying Agents or Calculation Agent, as the case may be. Notice of any change in the Paying Agents or Calculation Agent, as the case may be, or in the specified office of any Paying Agent or Calculation Agent, as the case may be, will promptly be given to the Noteholders pursuant to § 11.

In no event will the specified office of any Paying Agent be within the United States of America.

(c) *Agents of the Issuer*. The Principal Paying Agent, the Paying Agents and the Calculation Agent act solely as agents of the Issuer and do not assume any obligations towards or relationship of agency or trust for the Noteholder.

§ 10 Schuldnerersetzung

(a) *Ersetzung*.

Die Emittentin ist jederzeit berechtigt, ohne Zustimmung der Anleihegläubiger, die Garantin oder eine andere Gesellschaft, die direkt oder indirekt von der Garantin kontrolliert wird, als neue Emittentin für alle sich aus oder im Zusammenhang mit den Schuldverschreibungen ergebenden Verpflichtungen mit schuldbefreiender Wirkung für die Emittentin an die Stelle der Emittentin zu setzen (die „**Neue Emittentin**"), sofern

(i) die Neue Emittentin sämtliche Verpflichtungen der Emittentin aus oder im Zusammenhang mit den Schuldverschreibungen rechtswirksam übernimmt und, sofern eine Zustellung an die Neue Emittentin außerhalb der Bundesrepublik Deutschland erfolgen müsste, einen Zustellungsbevollmächtigten in der Bundesrepublik Deutschland bestellt;

(ii) die Neue Emittentin in der Lage ist, sämtliche zur Erfüllung der aufgrund der Schuldverschreibungen bestehenden Zahlungsverpflichtungen erforderlichen Beträge in Euro an das Clearingsystem oder die Hauptzahlstelle zu zahlen, und zwar ohne Abzug oder Einbehalt von Steuern oder sonstigen Abgaben jedweder Art, die von dem Land (oder den Ländern), in dem (in denen) die Neue Emittentin ihren Sitz oder Steuersitz hat, auferlegt, erhoben oder eingezogen werden;

(iii) die Garantin (außer in dem Fall, dass sie selbst die Neue Emittentin ist) unbedingt und unwiderruflich die Verpflichtungen der Neuen Emittentin aus den Schuldverschreibungen zu Bedingungen garantiert, die sicherstellen, dass jeder Anleihegläubiger wirtschaftlich mindestens so gestellt wird, wie er ohne die Ersetzung stehen würde (jede solche Erklärung eine „**Ersetzungsgarantie**");

§ 10 Substitution

(a) *Substitution*.

The Issuer may at any time, without the consent of the Noteholders, substitute for the Issuer either the Guarantor or any other company which is directly or indirectly controlled by the Guarantor as new issuer (the "**New Issuer**") in respect of all obligations arising under or in connection with the Notes with the effect of releasing the Issuer of all such obligations, if:

(i) the New Issuer validly assumes any and all obligations of the Issuer arising under or in connection with the Notes and, if service of process *vis-à-vis* the New Issuer would have to be effected outside the Federal Republic of Germany, appoints a process agent within the Federal Republic of Germany;

(ii) the New Issuer is in the position to pay to the Clearing System or to the Principal Paying Agent in Euro and without deducting or withholding any taxes or other duties of whatever nature imposed, levied or deducted by the country (or countries) in which the New Issuer has its domicile or tax residence all amounts required for the performance of the payment obligations arising from or in connection with the Notes;

(iii) the Guarantor (except in the case that the Guarantor itself is the New Issuer) irrevocably and unconditionally guarantees such obligations of the New Issuer under the Notes on terms which ensure that each Noteholder will be put in an economic position that is at least as favourable as that which would have existed if the substitution had not taken place (each such declaration a "**Substitution Guarantee**");

(iv) die Neue Emittentin und die Emittentin alle für die Ersetzung notwendigen Genehmigungen und Einverständniserklärungen von Regierungsstellen und Aufsichtsbehörden erhalten haben, und die Garantin (falls sie nicht selbst Neue Emittentin ist) alle für die Abgabe der Ersetzungsgarantie notwendigen Genehmigungen und Einverständniserklärungen von Regierungsstellen und Aufsichtsbehörden erhalten hat, die Neue Emittentin alle für die Erfüllung ihrer Verpflichtungen aus den Schuldverschreibungen notwendigen Genehmigungen und Einverständniserklärungen von Regierungsstellen und Aufsichtsbehörden erhalten hat und weiterhin sämtliche dieser Genehmigungen und Einverständniserklärungen in vollem Umfang gültig und wirksam sind und zudem die Verpflichtungen der Neuen Emittentin und die von der Garantin, (falls sie nicht selbst Neue Emittentin ist) begebene Ersetzungsgarantie jeweils gemäß ihren Bestimmungen wirksam und rechtsverbindlich und durch jeden Anleihegläubiger durchsetzbar sind;

(v) die Neue Emittentin sich verpflichtet, jedem Anleihegläubiger alle Steuern, Gebühren oder Abgaben zu erstatten, die ihm im Zusammenhang mit Zahlungen auf die Schuldverschreibungen (einschließlich Steuern und Abgaben, die von der Neuen Emittentin an der Quelle abgeführt oder einbehalten wurden) infolge der Schuldübernahme durch die Neue Emittentin auferlegt werden, vorausgesetzt, dass sich die Verpflichtung auf Beträge beschränkt, die der Anleihegläubiger ohne die Ersetzung der Emittentin nicht hätte tragen müssen;

(vi) unmittelbar nach Wirksamwerden dieser Ersetzung kein Kündigungsgrund und kein Ereignis, das nach Mitteilung oder Fristablauf oder beidem einen Kündigungsgrund darstellen würde, eingetreten ist und fortbesteht; und

(vii) der Hauptzahlstelle bezüglich der betroffenen Rechtsordnungen jeweils ein Rechtsgutachten von anerkannten Rechtsanwälten vorgelegt wurde, das bestätigt, dass die Bestimmungen in § 10(a)(i) bis (vi) erfüllt wurden

(iv) the New Issuer and the Issuer have obtained all necessary governmental and regulatory approvals and consents for such substitution and the Guarantor (if it is not itself the New Issuer) has obtained all such approvals and consents for the giving of the Substitution Guarantee, that the New Issuer has obtained all necessary governmental and regulatory approvals and consents for the performance of its obligations under the Notes, and that all such approvals and consents are in full force and effect and that the obligations assumed by the New Issuer and the Substitution Guarantee given by the Guarantor (if it is not itself the New Issuer) are each valid and binding in accordance with their respective terms and enforceable by each Noteholder;

(v) the New Issuer undertakes to reimburse any Noteholder for such taxes, fees or duties which may be imposed upon such Noteholder in connection with any payments on the Notes (including taxes or duties being deducted or withheld at source by the New Issuer) as a consequence of the assumption of the Issuer's obligations by the New Issuer, provided that such undertaking shall be limited to amounts that would not have been imposed upon the Noteholder had such substitution not occurred;

(vi) immediately after giving effect to such substitution, no Event of Default, and no event which, after notice or lapse of time or both, would become an Event of Default, shall have occurred and be continuing; and

(vii) there shall have been delivered to the Principal Paying Agent for each jurisdiction affected one opinion of lawyers of recognized standing to the effect that § 10(a)(i) through (vi) above have been satisfied.

(b) *Bezugnahmen*.

Im Fall einer Schuldnerersetzung gemäß § 10(a) gilt jede Bezugnahme in diesen Anleihebedingungen auf die Emittentin als eine solche auf die Neue Emittentin.

Im Fall einer Schuldnerersetzung gilt jede Bezugnahme auf die Niederlande als eine solche auf den Staat, in welchem die Neue Emittentin steuerlich ansässig ist.

(c) *Bekanntmachung und Wirksamwerden der Ersetzung.* Die Ersetzung der Emittentin ist gemäß § 11 bekanntzumachen. Mit der Bekanntmachung der Ersetzung wird die Ersetzung wirksam und die Emittentin und im Fall einer wiederholten Anwendung dieses § 10 jede frühere Neue Emittentin von ihren sämtlichen Verpflichtungen aus den Schuldverschreibungen frei. Im Fall einer solchen Schuldnerersetzung wird (werden) die Wertpapierbörse(n) informiert, an der (denen) die Schuldverschreibungen dann notiert sind.

§ 11 Bekanntmachungen

(a) *Veröffentlichungen*. Alle Bekanntmachungen, die die Schuldverschreibungen betreffen, werden (solange die Schuldverschreibungen an der Luxemburger Wertpapierbörse notiert sind) auf der Internet-Seite der Luxemburger Börse unter www.bourse.lu veröffentlicht. Jede Mitteilung gilt am Tag der ersten Veröffentlichung als wirksam erfolgt.

(b) *Mitteilungen an das Clearingsystem*. Solange Schuldverschreibungen an der Luxemburger Börse notiert sind, findet § 11(a) Anwendung. Soweit die Regeln der Luxemburger Börse dies zulassen, kann die Emittentin eine Veröffentlichung nach § 11(a) durch eine Mitteilung an das Clearingsystem zur Weiterleitung an die Anleihegläubiger ersetzen; jede derartige Mitteilung gilt am fünften Tag nach dem Tag der Mitteilung an das Clearingsystem als den Anleihegläubigern mitgeteilt.

(c) *Mitteilungen des Anleihegläubigers.* Mitteilungen, die von einem Anleihegläubiger gemacht werden, müssen schriftlich erfolgen und zusammen mit dem Nachweis seiner Inhaberschaft gemäß § 14(c)(i) an die Hauptzahlstelle geleitet werden. Eine solche Mitteilung kann über das Clearingsystem in der von der Hauptzahlstelle und dem Clearingsystem dafür vorgesehenen Weise erfolgen.

(b) *References*.

In the event of a substitution pursuant to § 10(a), any reference in these Terms and Conditions to the Issuer shall be a reference to the New Issuer.

In the event of a substitution any reference to the Netherlands shall be a reference to the New Issuer's country of domicile for tax purposes.

(c) *Notice and effectiveness of substitution.* Notice of any substitution of the Issuer shall be given by notice in accordance with § 11. Upon such publication, the substitution shall become effective, and the Issuer and in the event of a repeated application of this § 10, any previous New Issuer shall be discharged from any and all obligations under the Notes. In the case of such substitution, the stock exchange(s), if any, on which the Notes are then listed will be notified.

§ 11 Notices

(a) *Publications*. All notices regarding the Notes will be published (so long as the Notes are listed on the Luxembourg Stock Exchange) on the website of the Luxembourg Stock Exchange on www.bourse.lu. Any notice will become effective for all purposes on the date of the first such publication.

(b) *Notification to Clearing System*. So long as any Notes are listed on the Luxembourg Stock Exchange, § 11(a) shall apply. If the Rules of the Luxembourg Stock Exchange so permit, the Issuer may deliver the relevant notice to the Clearing System for communication by the Clearing System to the Noteholders, in lieu of publication as set forth in § 11(a) above; any such notice shall be deemed to have been validly given on the fifth day after the day on which the said notice was given to the Clearing System.

(c) *Notices by a Noteholder*. Notices to be given by any Noteholder shall be made in written form together with an evidence of the Noteholder's entitlement in accordance with § 14 (c)(i) to the Principal Paying Agent. Such notice may be given through the Clearing System in such manner as the Principal Paying Agent and the Clearing System may approve for such purpose.

§ 12 Begebung weiterer Schuldverschreibungen

Die Emittentin behält sich das Recht vor, ohne Zustimmung der Anleihegläubiger weitere Schuldverschreibungen mit gleicher Ausstattung (gegebenenfalls mit Ausnahme des Begebungstags, des Verzinsungsbeginns und/oder des Ausgabepreises) wie die vorliegenden Schuldverschreibungen zu begeben, so dass sie mit diesen eine einheitliche Gesamtemission bilden. Der Begriff „Schuldverschreibungen" umfasst im Fall einer solchen weiteren Begebung auch solche zusätzlich begebenen Schuldverschreibungen.

§ 12 Further Issues

The Issuer reserves the right from time to time, without the consent of the Noteholders to issue additional notes with identical terms and conditions as the Notes in all respects (or in all respects except for the Issue Date, the interest commencement date and/or the issue price) so as to be consolidated and form a single series with such Notes. The term "Notes" shall, in the event of such further issue, also comprise such further notes.

§ 13 Änderung der Anleihebedingungen; Gemeinsamer Vertreter, Änderung der Garantie

(a) *Änderung der Anleihebedingungen*. Die Emittentin kann die Anleihebedingungen mit Zustimmung aufgrund Mehrheitsbeschlusses der Anleihegläubiger nach Maßgabe der §§ 5 ff. des Gesetzes über Schuldverschreibungen aus Gesamtemissionen („**SchVG**") ändern. Eine Änderung der Anleihebedingungen ohne Zustimmung der Emittentin scheidet aus.

Die Anleihegläubiger können insbesondere einer Änderung wesentlicher Inhalte der Anleihebedingungen, einschließlich der in § 5 Absatz 3 SchVG vorgesehenen Maßnahmen mit Ausnahme der Ersetzung der Emittentin, die in § 10 abschließend geregelt ist, mit den in dem nachstehenden § 13(b) genannten Mehrheiten zustimmen. Ein ordnungsgemäß gefasster Mehrheitsbeschluss ist für alle Anleihegläubiger verbindlich.

§ 13 Amendments to the Terms and Conditions; Joint Representative, Amendments to the Guarantee

(a) *Amendment of the Terms and Conditions*. The Issuer may amend the Terms and Conditions with the consent of a majority resolution of the Noteholders pursuant to §§ 5 et seq. of the German Act on Issues of Debt Securities (*Gesetz über Schuldverschreibungen aus Gesamtemissionen*—"**SchVG**"). There will be no amendment of the Terms and Conditions without the Issuer's consent.

In particular, the Noteholders may consent to amendments which materially change the substance of the Terms and Conditions, including such measures as provided for under § 5(3) of the SchVG, but excluding a substitution of the Issuer, which is exclusively subject to the provisions in § 10, by resolutions passed by such majority of the votes of the Noteholders as stated under § 13(b) below. A duly passed majority resolution will be binding upon all Noteholders.

(b) *Mehrheitserfordernisse*. Vorbehaltlich des nachstehenden Satzes und der Erreichung der erforderlichen Beschlussfähigkeit, beschließen die Anleihegläubiger mit der einfachen Mehrheit der an der Abstimmung teilnehmenden Stimmrechte. Beschlüsse, durch welche der wesentliche Inhalt der Anleihebedingungen, insbesondere in den Fällen des § 5 Absatz 3 Nummer 1 bis 9 SchVG, geändert wird, bedürfen zu ihrer Wirksamkeit einer Mehrheit von mindestens 75% der an der Abstimmung teilnehmenden Stimmrechte (eine „**Qualifizierte Mehrheit**"). Das Stimmrecht ruht, solange die Schuldverschreibungen der Emittentin oder einem mit ihr verbundenen Unternehmen (§ 271 Absatz 2 HGB) zustehen oder für Rechnung der Emittentin oder eines mit ihr verbundenen Unternehmens gehalten werden.

(c) *Beschlüsse.* Beschlüsse der Anleihegläubiger werden entweder in einer Gläubigerversammlung nach § 13(c)(i) oder im Wege der Abstimmung ohne Versammlung nach § 13(c)(ii) getroffen, die von der Emittentin oder einem gemeinsamen Vertreter einberufen wird. Anleihegläubiger, deren Schuldverschreibungen zusammen 5% des jeweils ausstehenden Gesamtnennbetrags der Schuldverschreibungen erreichen, können gemäß § 9 Absatz 1 S. 2 SchVG schriftlich die Einberufung einer Anleihegläubigerversammlung oder Abstimmung ohne Versammlung mit einer gemäß § 9 Absatz 1 S. 2 SchVG zulässigen Begründung verlangen.

(i) Beschlüsse der Anleihegläubiger im Rahmen einer Gläubigerversammlung werden nach §§ 9 ff. SchVG getroffen. Die Einberufung der Gläubigerversammlung regelt die weiteren Einzelheiten der Beschlussfassung und der Abstimmung. Mit der Einberufung der Gläubigerversammlung werden in der Tagesordnung die Beschlussgegenstände sowie die Vorschläge zur Beschlussfassung den Anleihegläubigern bekannt gegeben.

(b) *Majority requirements.* Except as provided by the following sentence and provided that the quorum requirements are being met, the Noteholders may pass resolutions by simple majority of the voting rights participating in the vote. Resolutions which materially change the substance of the Terms and Conditions, in particular in the cases of § 5(3) numbers 1 through 9 of the SchVG, may only be passed by a majority of at least 75 per cent. of the voting rights participating in the vote (a "**Qualified Majority**"). The voting right is suspended as long as any Notes are attributable to the Issuer or any of its affiliates (within the meaning of § 271(2) of the German Commercial Code (*Handelsgesetzbuch*)) or are being held for the account of the Issuer or any of its affiliates.

(c) *Resolutions*. Resolutions of the Noteholders will be made either in a Noteholders' meeting in accordance with § 13(c)(i) or by means of a vote without a meeting (*Abstimmung ohne Versammlung*) in accordance with § 13(c)(ii), in either case convened by the Issuer or a joint representative, if any. Pursuant to § 9(1) sentence 2 of the SchVG, Noteholders holding Notes in the total amount of 5 per cent. of the outstanding principal amount of the Notes may in writing request to convene a Noteholders' meeting or vote without a meeting for any of the reasons permitted pursuant to § 9(1) sentence 2 of the SchVG.

(i) Resolutions of the Noteholders in a Noteholders' meeting will be made in accordance with § 9 et seq. of the SchVG. The convening notice of a Noteholders' meeting will provide the further details relating to the resolutions and the voting procedure. The subject matter of the vote as well as the proposed resolutions will be notified to Noteholders in the agenda of the meeting.

(ii) Beschlüsse der Anleihegläubiger im Wege der Abstimmung ohne Versammlung werden nach § 18 SchVG getroffen. Die Aufforderung zur Stimmabgabe durch den Abstimmungsleiter regelt die weiteren Einzelheiten der Beschlussfassung und der Abstimmung. Mit der Aufforderung zur Stimmabgabe werden die Beschlussgegenstände sowie die Vorschläge zur Beschlussfassung den Anleihegläubigern bekannt gegeben.

(d) *Zweite Gläubigerversammlung.* Wird die Beschlussfähigkeit bei der Abstimmung ohne Versammlung nach § 13(c)(ii) nicht festgestellt, kann der Abstimmungsleiter eine Gläubigerversammlung einberufen, welche als zweite Gläubigerversammlung im Sinne des § 15 Absatz 3 Satz 3 SchVG gilt.

(e) *Anmeldung*. Die Stimmrechtsausübung ist von einer vorherigen Anmeldung der Anleihegläubiger abhängig. Die Anmeldung muss bis zum dritten Tag vor der Gläubigerversammlung im Falle einer Gläubigerversammlung (wie in § 13(c)(i) oder § 13(d) beschrieben) bzw. vor dem Beginn des Abstimmungszeitraums im Falle einer Abstimmung ohne Versammlung (wie in § 13(c)(ii) beschrieben) unter der in der Aufforderung zur Stimmabgabe angegebenen Anschrift zugehen. Zusammen mit der Anmeldung müssen Anleihegläubiger den Nachweis ihrer Berechtigung zur Teilnahme an der Abstimmung durch eine besondere Bescheinigung ihrer Depotbank in Textform und die Vorlage eines Sperrvermerks der Depotbank erbringen, aus dem hervorgeht, dass die relevanten Schuldverschreibungen für den Zeitraum vom Tag der Absendung der Anmeldung (einschließlich) bis zu dem angegebenen Ende der Versammlung (einschließlich) bzw. dem Ende des Abstimmungszeitraums (einschließlich) nicht übertragen werden können.

(ii) Resolutions of the Noteholders by means of a voting not requiring a physical meeting (*Abstimmung ohne Versammlung*) will be made in accordance § 18 of the SchVG. The request for voting as submitted by the chairman (*Abstimmungsleiter*) will provide the further details relating to the resolutions and the voting procedure. The subject matter of the vote as well as the proposed resolutions will be notified to Noteholders together with the request for voting.

(d) *Second noteholders' meeting*. If it is ascertained that no quorum exists for the vote without meeting pursuant to § 13(c)(ii), the chairman (*Abstimmungsleiter*) may convene a meeting, which shall be deemed to be a second meeting within the meaning of § 15(3) sentence 3 of the SchVG.

(e) *Registration*. The exercise of voting rights is subject to the registration of the Noteholders. The registration must be received at the address stated in the request for voting no later than the third day prior to the meeting in the case of a Noteholders' meeting (as described in § 13(c)(i) or § 13(d)) or the beginning of the voting period in the case of voting not requiring a physical meeting (as described in § 13(c)(ii)), as the case may be. As part of the registration, Noteholders must demonstrate their eligibility to participate in the vote by means of a special confirmation of their respective custodian bank hereof in text form and by submission of a blocking instruction by the custodian bank stating that the relevant Notes are not transferable from and including the day such registration has been sent until and including the stated end of the meeting or day the voting period ends, as the case may be.

(f) *Gemeinsamer Vertreter*. Die Anleihegläubiger können durch Mehrheitsbeschluss die Bestellung und Abberufung eines gemeinsamen Vertreters, die Aufgaben und Befugnisse des gemeinsamen Vertreters, die Übertragung von Rechten der Anleihegläubiger auf den gemeinsamen Vertreter und eine Beschränkung der Haftung des gemeinsamen Vertreters bestimmen. Die Bestellung eines gemeinsamen Vertreters bedarf einer Qualifizierten Mehrheit, wenn er ermächtigt wird, wesentlichen Änderungen der Anleihebedingungen gemäß § 13(a) zuzustimmen.

(g) *Bekanntmachungen*. Bekanntmachungen betreffend diesen § 13 erfolgen gemäß den §§ 5ff. SchVG sowie nach § 11.

(h) *Änderung der Garantie*. Die oben aufgeführten auf die Änderung der Anleihebedingungen anwendbaren Bestimmungen finden sinngemäß auf die Bestimmungen der Garantie und einer etwaigen Ersetzungsgarantie.

§ 14 Anwendbares Recht, Erfüllungsort und Gerichtsstand

(a) *Geltendes Recht; Erfüllungsort*. Form und Inhalt der Schuldverschreibungen sowie alle sich daraus ergebenden Rechte und Pflichten bestimmen sich ausschließlich nach dem Recht der Bundesrepublik Deutschland. Erfüllungsort ist Frankfurt am Main.

(b) *Gerichtsstand*. Vorbehaltlich eines zwingend vorgeschriebenen Gerichtsstands für bestimmte Verfahren nach dem SchVG ist nicht-ausschließlicher Gerichtsstand für alle sich aus den in diesen Anleihebedingungen geregelten Rechtsverhältnissen ergebenden Rechtsstreitigkeiten mit der Emittentin Frankfurt am Main.

(f) *Joint representative*. The Noteholders may by majority resolution provide for the appointment or dismissal of a joint representative, the duties and responsibilities and the powers of such joint representative, the transfer of the rights of the Noteholders to the joint representative and a limitation of liability of the joint representative. Appointment of a joint representative may only be passed by a Qualified Majority if such joint representative is to be authorised to consent to a material change in the substance of the Terms and Conditions in accordance with § 13(a) hereof.

(g) *Notices*. Any notices concerning this § 13 will be made in accordance with § 5 et seq. of the SchVG and § 11.

(h) *Amendments to the Guarantee*. The provisions set out above applicable to the amendment of the Terms and Conditions shall apply *mutatis mutandis* to the Guarantee and to any Substitution Guarantee.

§ 14 Applicable Law, Place of Performance and Jurisdiction

(a) *Applicable law; place of performance*. The form and content of the Notes as well as all the rights and duties arising therefrom are governed exclusively by the laws of the Federal Republic of Germany. Place of performance is Frankfurt am Main.

(b) *Jurisdiction*. Subject to any mandatory jurisdiction for specific proceedings under the SchVG, the non-exclusive court of venue for all litigation with the Issuer arising from the legal relations established in these Terms and Conditions is Frankfurt am Main.

(c) *Gerichtliche Geltendmachung*. Jeder Anleihegläubiger kann in Rechtsstreitigkeiten gegen die Emittentin im eigenen Namen seine Rechte aus den ihm zustehenden Schuldverschreibungen geltend machen unter Vorlage der folgenden Dokumente: (i) einer Bescheinigung seiner Depotbank, die (A) den vollen Namen und die volle Anschrift des Anleihegläubigers bezeichnet, (B) den Gesamtnennbetrag der Schuldverschreibungen angibt, die am Ausstellungstag dieser Bescheinigung dem bei dieser Depotbank bestehenden Depot dieses Anleihegläubigers gutgeschrieben sind, und (C) bestätigt, dass die Depotbank dem Clearingsystem und der Hauptzahlstelle eine schriftliche Mitteilung zugeleitet hat, die die Angaben gemäß (A) und (B) enthält und Bestätigungsvermerke des Clearingsystems sowie des jeweiligen Clearingsystem-Kontoinhabers trägt, sowie (ii) einer von einem Vertretungsberechtigten des Clearingsystems oder der Hauptzahlstelle bestätigten Ablichtung der Globalurkunde.

§ 15 Sprache

Diese Anleihebedingungen sind in deutscher Sprache abgefasst. Eine Übersetzung in die englische Sprache ist beigefügt. Der deutsche Text ist bindend und maßgeblich. Die Übersetzung in die englische Sprache ist unverbindlich.

(c) *Enforcement*. Any Noteholder may in any proceedings against the Issuer protect and enforce in its own name its rights arising under its Notes by submitting the following documents: (i) a certificate issued by its Custodian (A) stating the full name and address of the Noteholder, (B) specifying an aggregate principal amount of Notes credited on the date of such certificate to such Noteholder's securities account maintained with such Custodian and (C) confirming that the Custodian has given a written notice to the Clearing System as well as to the Principal Paying Agent containing the information pursuant to (A) and (B) and bearing acknowledgements of the Clearing System and the relevant Clearing System accountholder as well as (ii) a copy of the Global Note certified by a duly authorised officer of the Clearing System or the Principal Paying Agent as being a true copy.

§ 15 Language

These Terms and Conditions are written in the German language and provided with an English language translation. The German text shall be controlling and binding. The English language translation is non-binding.

ANLEIHEBEDINGUNGEN
(„Anleihebedingungen")

Diese Anleihebedingungen sind in deutscher Sprache abgefasst. Eine Übersetzung in die englische Sprache ist beigefügt. Der deutsche Text ist bindend und maßgeblich. Die Übersetzung in die englische Sprache ist unverbindlich.

§ 1 Währung, Stückelung, Form

(a) *Währung; Stückelung*. Die Wintershall Dea Finance B.V. (die „**Emittentin**") begibt am 25. September 2019 (der „**Begebungstag**") Schuldverschreibungen (die „**Schuldverschreibungen**") in Euro (die „**Festgelegte Währung**") im Gesamtnennbetrag von EUR 1.000.000.000 eingeteilt in Schuldverschreibungen im festgelegten Nennbetrag von je EUR 100.000 (der „**Nennbetrag**").

Die Schuldverschreibungen werden von der Wintershall Dea GmbH (die „**Garantin**") garantiert.

(b) *Form*. Die Schuldverschreibungen lauten auf den Inhaber.

(c) *Vorläufige Globalurkunde, Austausch*. Die Schuldverschreibungen sind zunächst in einer vorläufigen Globalurkunde (die „**Vorläufige Globalurkunde**") ohne Zinsscheine verbrieft.

Die Vorläufige Globalurkunde wird insgesamt oder teilweise und unentgeltlich am oder nach dem Tag, der 40 Tage nach dem Beginn des Angebots bzw. dem Begebungstag liegt, je nachdem, welcher Tage später ist, gegen Nachweis über das Nichtbestehen wirtschaftlichen U.S.-Eigentums im Sinne des U.S.-Rechts (non-U.S. beneficial ownership) in der in der Vorläufigen Globalurkunde vorgesehenen Form, für den Inhaber von Schuldverschreibungen gegen eine dauerhafte Globalurkunde (die „**Dauer-Globalurkunde**") (die Vorläufige Globalurkunde und die Dauer-Globalurkunde jeweils auch eine „**Globalurkunde**") ohne Zinsscheine eingetauscht. Ein Recht der Anleihegläubiger auf Ausgabe und Lieferung von Einzelurkunden oder Zinsscheinen besteht nicht.

(d) *Clearingsystem*. Die Vorläufige Globalurkunde und die Dauer-Globalurkunde werden solange von einem Clearingsystem oder im Auftrag eines Clearingsystems verwahrt, bis sämtliche Verpflichtungen der Emittentin aus den Schuldverschreibungen erfüllt sind.

TERMS AND CONDITIONS
("Terms and Conditions")

These Terms and Conditions are written in the German language and provided with an English language translation. The German text shall be controlling and binding. The English language translation is non-binding.

§ 1 Currency, Denomination, Form

(a) *Currency; Denomination*. The Notes are issued on 25 September 2019 (the "**Issue Date**") by Wintershall Dea Finance B.V. (the "**Issuer**") in Euro (the "**Specified Currency**"), in the aggregate principal amount of EUR 1,000,000,000 divided into notes in the specified denomination of EUR 100,000 (the "**Principal Amount**") each (the "**Notes**").

The Notes are guaranteed by Wintershall Dea GmbH (the "**Guarantor**").

(b) *Form*. The Notes are issued in bearer form.

(c) *Temporary Global Note, Exchange*. The Notes are initially represented by a temporary global Note (the "**Temporary Global Note**") without interest coupons.

The Temporary Global Note shall be exchanged, in whole or in part and free of charge to the holder of Notes, on or after the day that is 40 days after the later of the commencement of the offering and the Issue Date for a permanent global Note (the "**Permanent Global Note**") (the Temporary Global Note and the Permanent Global Note, each a "**Global Note**") without interest coupons upon certification as to non-U.S. beneficial ownership in the form set out in the Temporary Global Note. The right of the Noteholders to require the issue and delivery of definitive notes or interest coupons is excluded.

(d) *Clearing System*. Each of the Temporary Global Note and the Permanent Global Note will be held in custody by or on behalf of a Clearing System until all obligations of the Issuer under the Notes have been satisfied.

„**Clearingsystem**" bedeutet jeweils Folgendes: Clearstream Banking S.A., Luxemburg („**CBL**") und Euroclear Bank SA/NV, Brüssel („**Euroclear**") (CBL und Euroclear jeweils ein internationaler Zentralverwahrer von Wertpapieren (international central securities depositary) („**ICSD**" und zusammen die „**ICSDs**")) sowie jeden Funktionsnachfolger eines ICSD.

Die Schuldverschreibungen werden in Form einer New Global Note („**NGN**") ausgegeben und von einem gemeinsamen Wertpapierverwahrer (common safekeeper) im Namen beider ICSDs verwahrt.

Der Gesamtnennbetrag der durch die Globalurkunde verbrieften Schuldverschreibungen entspricht dem jeweils in den Registern beider ICSDs eingetragenen Gesamtbetrag. Die Register der ICSDs (unter denen man die Register versteht, die jeder ICSD für seine Kunden über den Betrag ihres Anteils an den Schuldverschreibungen führt) sind schlüssiger Nachweis über den Gesamtnennbetrag der durch die Globalurkunde verbrieften Schuldverschreibungen, und eine zu diesen Zwecken von einem ICSD jeweils ausgestellte Bestätigung mit dem Nennbetrag der so verbrieften Schuldverschreibungen ist ein schlüssiger Nachweis über den Inhalt des Registers des jeweiligen ICSD zu diesem Zeitpunkt.

Bei Rückzahlung oder einer Zinszahlung bezüglich der durch die Globalurkunde verbrieften Schuldverschreibungen bzw. bei Kauf und Entwertung der durch die Globalurkunde verbrieften Schuldverschreibungen stellt die Emittentin sicher, dass die Einzelheiten über Rückzahlung, Zahlung bzw. Kauf und Entwertung bezüglich der Globalurkunde *pro rata* in die Register der ICSDs eingetragen werden und dass nach dieser Eintragung vom Gesamtnennbetrag der in die Register der ICSDs aufgenommenen und durch die Globalurkunde verbrieften Schuldverschreibungen der Gesamtnennbetrag der zurückgezahlten bzw. gekauften und entwerteten Schuldverschreibungen abgezogen wird.

"**Clearing System**" means Clearstream Banking S.A., Luxembourg ("**CBL**") and Euroclear Bank SA/NV, Brussels ("**Euroclear**") (CBL and Euroclear each an international central securities depositary ("**ICSD**" and together the "**ICSDs**")) as well as any successor in respect of the functions performed by each ICSD.

The Notes are issued in new global note ("**NGN**") form and are kept in custody by a common safekeeper on behalf of both ICSDs.

The aggregate principal amount of Notes represented by the Global Note shall be the aggregate amount from time to time entered in the records of both ICSDs. The records of the ICSDs (which expression means the records that each ICSD holds for its customers which reflect the amount of such customers' interest in the Notes) shall be conclusive evidence of the aggregate principal amount of Notes represented by the Global Note and, for these purposes, a statement issued by an ICSD stating the principal amount of Notes so represented at any time shall be conclusive evidence of the records of the relevant ICSD at that time.

On any redemption or interest being made in respect of, or purchase and cancellation of, any of the Notes represented by the Global Note the Issuer shall procure that details of such redemption, payment or purchase and cancellation (as the case may be) in respect of the Global Note shall be entered *pro rata* in the records of the ICSDs and, upon any such entry being made, the aggregate principal amount of the Notes recorded in the records of the ICSDs and represented by the Global Note shall be reduced by the aggregate principal amount of the Notes so redeemed or purchased and cancelled.

Bei Austausch eines Anteils von ausschließlich durch eine vorläufige Globalurkunde verbrieften Schuldverschreibungen wird die Emittentin sicherstellen, dass die Einzelheiten dieses Austauschs *pro rata* in die Aufzeichnungen der ICSDs aufgenommen werden.

Die Vorläufige Globalurkunde und die Dauer-Globalurkunde tragen jeweils die eigenhändige Unterschrift von einem Vertretungsberechtigten der Emittentin sowie die eigenhändige Unterschrift eines Kontrollbeauftragten der Hauptzahlstelle.

(e) *Anleihegläubiger*. Den Inhabern von Schuldverschreibungen („**Anleihegläubiger**") stehen Miteigentumsanteile oder vergleichbare andere Rechte an der Globalurkunde zu, die gemäß anwendbarem Recht und den Bestimmungen und Regeln des Clearingsystems übertragen werden können.

§ 2 **Status, Negativerklärung und Garantie**

(a) *Status*. Die Schuldverschreibungen begründen nicht nachrangige und, vorbehaltlich der Garantie, nicht besicherte Verbindlichkeiten der Emittentin, die im gleichen Rang untereinander und, im Falle der Insolvenz, der Auflösung oder der Liquidation der Emittentin oder eines der Abwendung der Insolvenz der Emittentin dienenden Verfahrens, im gleichen Rang mit allen anderen gegenwärtigen und zukünftigen nicht besicherten und nicht nachrangigen Verbindlichkeiten der Emittentin stehen, mit Ausnahme von Verbindlichkeiten, die nach geltenden Rechtsvorschriften vorrangig sind.

On an exchange of a portion only of the Notes represented by a Temporary Global Note, the Issuer shall procure that details of such exchange shall be entered *pro rata* in the records of the ICSDs.

The Temporary Global Note and the Permanent Global Note shall each bear the manual signature of one duly authorised officer of the Issuer as well as the manual signature of an authentication officer of the Principal Paying Agent.

(e) *Noteholders*. The holders of Notes ("**Noteholders**") are entitled to co-ownership participations or other comparable rights in the Global Note, which are transferable in accordance with applicable laws and the rules and regulations of the Clearing System.

§ 2 **Status, Negative Pledge and Guarantee**

(a) *Status*. The Notes constitute *unsubordinated* and, subject to the Guarantee, unsecured obligations of the Issuer ranking *pari passu* among themselves and, in the event of the insolvency, dissolution or liquidation of the Issuer or any proceeding to avoid insolvency of the Issuer, *pari passu* with all other present and future unsubordinated and unsecured obligations of the Issuer, save for such obligations which may be preferred by applicable law.

(b) *Negativerklärung der Emittentin*. Solange noch Kapital- oder Zinsbeträge aus den Schuldverschreibungen ausstehen, jedoch nur bis zu dem Zeitpunkt, an dem alle auf die Schuldverschreibungen gemäß diesen Anleihebedingungen zu zahlenden Beträge an Kapital und Zinsen dem Clearingsystem zur Verfügung gestellt worden sind, verpflichtet sich die Emittentin, kein Grundpfandrecht, Mobiliarpfandrecht, Pfandrecht oder sonstiges dingliches Sicherungsrecht (jedes ein „**Sicherungsrecht**") an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder Teilen davon zur Besicherung einer Maßgeblichen Fremdkapitalverbindlichkeit zu gewähren oder bestehen zu lassen, ohne zuvor oder gleichzeitig entweder die Anleihegläubiger gleichrangig und anteilig an einem solchen Sicherungsrecht zu beteiligen oder zu Gunsten der Anleihegläubiger ein anderes, gleichwertiges Sicherungsrecht zu bestellen, welches von einem unabhängigen Sachverständigen als gleichwertige Sicherheit beurteilt wird.

Die Verpflichtung nach Satz 1 dieses § 2(b) findet keine Anwendung auf ein Sicherungsrecht, das

(i) von der Emittentin an gegenwärtigen oder zukünftigen, tatsächlichen oder bedingten Forderungen bestellt wird, die der Emittentin gegen die Garantin oder eine andere Tochtergesellschaft der Garantin aufgrund der darlehensweisen Weiterleitung des Emissionserlöses aus der Begebung von Wertpapieren zustehen, sofern ein solches Sicherungsrecht der Besicherung der Verpflichtungen der Emittentin aus den jeweiligen Wertpapieren dient;

(ii) gesetzlich vorgeschrieben ist oder kraft Gesetzes entsteht;

(iii) eine Maßgebliche Fremdkapitalverbindlichkeit besichert, die infolge einer zukünftigen Akquisition zu einer Verbindlichkeit der Emittentin wird; oder

(iv) der vollständigen oder teilweisen Verlängerung, Erneuerung oder Ersetzung (oder wiederholte Verlängerungen, Erneuerungen oder Ersetzungen) eines der vorstehend in den Klauseln (i) bis (iii) aufgeführten Sicherungsrechte dient.

(b) *Negative pledge of the Issuer.* So long as any amounts of interest or principal remain outstanding under the Notes, but only up to the time all amounts payable to Noteholders under the Notes in accordance with these Terms and Conditions have been placed at the disposal of the Clearing System, the Issuer undertakes not to create or permit to subsist any mortgage, charge, pledge or other form of encumbrance *in rem* (each a "**Security Interest**") over the whole or any part of its present or future assets or revenues to secure any Relevant Indebtedness, without prior thereto or at the same time letting the Noteholders either share equally and rateably in such Security Interest or benefit from an equivalent other Security Interest which will be approved by an independent expert as being equivalent security.

The undertaking pursuant to sentence 1 of this § 2(b) will not apply to any Security Interest which

(i) is provided by the Issuer over any present or future, actual or contingent claims of the Issuer against the Guarantor or another Subsidiary of the Guarantor arising from the on-lending of the proceeds from the issuance by the Issuer of any securities, provided that any such Security Interest secures the obligations of the Issuer under any such securities;

(ii) is mandatory according to, or created by operation of, applicable laws;

(iii) secures a Relevant Indebtedness that becomes an obligation of the Issuer as a consequence of a future acquisition; or

(iv) is provided for any extension, renewal or replacement (or successive extensions, renewals or replacements) in whole or in part of any Security Interest referred to in clauses (i) through (iii) above.

Ein nach § 2(b) zu leistendes Sicherungsrecht kann auch zu Gunsten eines für die Anleihegläubiger handelnden Treuhänders bestellt werden.

„**Maßgebliche Fremdkapitalverbindlichkeiten**" bezeichnet jegliche Fremdkapitalverbindlichkeiten in Form von (oder verbrieft durch) Anleihen, Schuldverschreibungen, Schuldtitel oder sonstige Wertpapiere, soweit sie an einer Börse oder im Freiverkehr oder in einem anderen Wertpapiermarkt notiert, zugelassen oder gehandelt werden oder notiert, zugelassen oder gehandelt werden können sowie Schuldscheine.

Any Security Interest which is to be provided pursuant to § 2(b) may also be provided to a person acting as trustee for the Noteholders.

"**Relevant Indebtedness**" means any indebtedness which is in the form of, or represented or evidenced by, bonds, notes, debentures, loan stock or other securities which for the time being are capable of being, quoted, listed or dealt in or traded on any stock exchange or over-the-counter or other securities market, as well as loan notes (*Schuldscheine*).

(c) *Garantie*. Die Garantin hat die unbedingte und unwiderrufliche Garantie für die fristgerechte Zahlung von Kapital, Zinsen und sonstigen aus den Schuldverschreibungen zu zahlenden Beträgen gemäß einer Garantie datiert September 2019 (die „**Garantie**") übernommen. Die Garantie ist ein Vertrag zugunsten jedes Anleihegläubigers als begünstigtem Dritten gem. § 328 Absatz 1 BGB, der das Recht begründet, die Garantin unmittelbar aus der Garantie auf Erfüllung in Anspruch zu nehmen und Ansprüche aus der Garantie gegen die Garantin unmittelbar durchzusetzen.

(c) *Guarantee.* The Guarantor has given an unconditional and irrevocable guarantee pursuant to a guarantee dated September 2019 (the "**Guarantee**") for the due payment of principal of, and interest on, and any other amounts expressed to be payable under the Notes. The Guarantee constitutes a contract for the benefit of the Noteholders from time to time as third-party beneficiaries in accordance with § 328 paragraph 1 of the German Civil Code (*Bürgerliches Gesetzbuch*), giving rise to the right of each Noteholder to require performance under the Guarantee directly from the Guarantor and to enforce the Guarantee directly against the Guarantor.

(d) *Negativerklärung der Garantin*. In der Garantie hat sich die Garantin verpflichtet, solange noch Kapital- oder Zinsbeträge aus den Schuldverschreibungen ausstehen, jedoch nur bis zu dem Zeitpunkt, an dem alle auf die Schuldverschreibungen gemäß diesen Anleihebedingungen zu zahlenden Beträgen an Kapital und Zinsen dem Clearingsystem zur Verfügung gestellt worden sind,

(i) kein Sicherungsrecht an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder Teilen davon zur Besicherung einer Maßgeblichen Fremdkapitalverbindlichkeit zu gewähren oder bestehen zu lassen; und

(d) *Negative Pledge of the Guarantor*. In the Guarantee the Guarantor has undertaken, so long as any amounts of interest or principal remain outstanding under the Notes, but only up to the time all amounts payable to Noteholders under the Notes in accordance with these Terms and Conditions have been placed at the disposal of the Clearing System,

(i) not to create or permit to subsist any Security Interest over the whole or any part of its present or future assets or revenues to secure any Relevant Indebtedness; and

(ii) zu veranlassen (soweit rechtlich möglich und zulässig), dass keine Tochtergesellschaft ein Sicherungsrecht an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder jeweiligen Teilen davon zur Besicherung einer Maßgeblichen Fremdkapitalverbindlichkeit gewährt oder bestehen lässt,

ohne zuvor oder gleichzeitig entweder die Anleihegläubiger gleichrangig und anteilig an einem solchen Sicherungsrecht zu beteiligen oder zu Gunsten der Anleihegläubiger ein anderes, gleichwertiges Sicherungsrecht zu bestellen, welches von einem unabhängigen Sachverständigen als gleichwertige Sicherheit beurteilt wird.

Die in Satz 1 dieses § 2(d) beschriebene Verpflichtung findet keine Anwendung auf ein Sicherungsrecht, das

(i) von einer Tochtergesellschaft an gegenwärtigen oder zukünftigen, tatsächlichen oder bedingten Forderungen bestellt wird, die der Tochtergesellschaft gegen die Garantin oder eine andere Tochtergesellschaft der Garantin aufgrund der darlehensweisen Weiterleitung des Emissionserlöses aus der Begebung von Wertpapieren zustehen, sofern ein solches Sicherungsrecht der Besicherung der Verpflichtungen der Tochtergesellschaft aus den jeweiligen Wertpapieren dient;

(ii) gesetzlich vorgeschrieben ist oder kraft Gesetzes entsteht;

(iii) eine Maßgebliche Fremdkapitalverbindlichkeit besichert, die infolge einer zukünftigen Akquisition zu einer Verbindlichkeit der Garantin oder einer Tochtergesellschaft wird;

(iv) der vollständigen oder teilweisen Verlängerung, Erneuerung oder Ersetzung (oder wiederholte Verlängerungen, Erneuerungen oder Ersetzungen) eines der vorstehend in den Klauseln (i) bis (iii) aufgeführten Sicherungsrechte dient.

Ein nach § 2(d) zu leistendes Sicherungsrecht kann auch zu Gunsten eines für die Anleihegläubiger handelnden Treuhänders bestellt werden.

(ii) to procure (to the extent legally possible and permissible) that no Subsidiary will create or permit to subsist any present or future Security Interest over the whole or any part of its assets or revenues to secure any Relevant Indebtedness,

without prior thereto or at the same time letting the Noteholders either share equally and rateably in such Security Interest or benefit from an equivalent other Security Interest which will be approved by an independent expert as being equivalent security.

The undertaking described in sentence 1 of this § 2(d) will not apply to any Security Interest which

(i) is provided by any Subsidiary over any present or future, actual or contingent claims of the Subsidiary against the Guarantor or another Subsidiary of the Guarantor arising from the on-lending of the proceeds from the issuance by the Subsidiary of any securities, provided that any such Security Interest secures the obligations of the Subsidiary under any such securities;

(ii) is mandatory according to, or created by operation of, applicable laws;

(iii) secures a Relevant Indebtedness that becomes an obligation of the Guarantor or any Subsidiary as a consequence of a future acquisition;

(iv) is provided for any extension, renewal or replacement (or successive extensions, renewals or replacements) in whole or in part of any Security Interest referred to in clauses (i) through (iii) above.

Any Security Interest which is to be provided pursuant to § 2(d) may also be provided to a person acting as trustee for the Noteholders.

„**Tochtergesellschaft**" bezeichnet eine Rechtsträger, dessen Abschluss aufgrund gesetzlicher Vorgaben oder nach Maßgabe allgemein anerkannter Rechnungslegungsgrundsätze zu einem beliebigen Zeitpunkt mit dem der Garantin zu konsolidieren ist (Vollkonsolidierung).

§ 3 Zinsen

(a) *Zinssatz und Zinszahlungstage*. Die Schuldverschreibungen werden bezogen auf ihren ausstehenden Nennbetrag ab dem 25. September 2019 (der „**Verzinsungsbeginn**") (einschließlich) bis zum Endfälligkeitstag (ausschließlich) verzinst.

Die Schuldverschreibungen werden mit jährlich 1,332% verzinst. Die Zinsen sind nachträglich an jedem Zinszahlungstag zahlbar.

„**Zinszahlungstag**" bezeichnet den 25. September eines jeden Jahres, erstmals den 25. September 2020.

(b) *Zinstagequotient*. Zinsen für einen beliebigen Zeitraum (ausgenommen ist ein etwaiger Zeitraum, für den ein Bruchteilzinsbetrag festgelegt ist) werden auf der Grundlage des Zinstagequotienten berechnet.

„**Zinstagequotient**" bezeichnet bei der Berechnung des Zinsbetrages für einen beliebigen Zeitraum (ab dem ersten Tag dieses Zeitraums (einschließlich) bis zum letzten Tag dieses Zeitraums (ausschließlich)) (der „**Zinsberechnungszeitraum**"):

(i) wenn der Zinsberechnungszeitraum der Feststellungsperiode entspricht, in die er fällt, oder kürzer als diese ist, die Anzahl von Tagen in dem Zinsberechnungszeitraum dividiert durch die Anzahl von Tagen in der betreffenden Feststellungsperiode; und

(ii) wenn der Zinsberechnungszeitraum länger als eine Feststellungsperiode ist, die Summe aus:

(A) der Anzahl der Tage in dem betreffenden Zinsberechnungszeitraum, die in die Feststellungsperiode fallen, in der der Zinsberechnungszeitraum beginnt, dividiert durch die Anzahl der Tage in der betreffenden Feststellungsperiode; und

"**Subsidiary**" means any entity whose financial statements at any time are required by law or in accordance with generally accepted accounting principles to be fully consolidated with those of the Guarantor.

§ 3 Interest

(a) *Rate of interest and Interest Payment Dates*. The Notes bear interest on their outstanding principal amount from and including 25 September 2019 (the "**Interest Commencement Date**") to but excluding the Maturity Date.

The Notes bear interest at the rate of 1.332 per cent. per annum, such interest being payable in arrear on each Interest Payment Date.

"**Interest Payment Date**" means 25 September in each year, commencing on 25 September 2020.

(b) *Day Count Fraction*. If interest is required to be calculated for any period of time (other than any period of time for which a broken interest amount has been fixed), such interest shall be calculated on the basis of the Day Count Fraction.

"**Day Count Fraction**" means, in respect of the calculation of an amount of interest on any Note for any period of time (from and including the first day of such period to but excluding the last day of such period) (the "**Calculation Period**"):

(i) if the Calculation Period is equal to or shorter than the Determination Period during which it falls, the number of days in the Calculation Period divided by the number of days in such Determination Period; and

(ii) if the Calculation Period is longer than one Determination Period, the sum of:

(A) the number of days in such Calculation Period falling in the Determination Period in which the Calculation Period begins divided by the number of days in such Determination Period; and

(B) die Anzahl der Tage in dem betreffenden Zinsberechnungszeitraum, die in die nachfolgende Feststellungsperiode fallen, dividiert durch die Anzahl der Tage in der betreffenden Feststellungsperiode.

Dabei gilt Folgendes:

„**Feststellungstermin**" bezeichnet den 25. September eines jeden Jahres;

„**Feststellungsperiode**" bezeichnet jeden Zeitraum ab einem Feststellungstermin (einschließlich), der in ein beliebiges Jahr fällt, bis zum nächsten Feststellungstermin (ausschließlich).

(c) *Ende des Zinslaufs*. Der Zinslauf der Schuldverschreibungen endet an dem Ende des Tages, der dem Tag vorausgeht, an dem sie zur Rückzahlung fällig werden. Falls die Emittentin die *Schuldverschreibungen* bei Fälligkeit nicht einlöst, wird der ausstehende Betrag ab dem Tag der Fälligkeit (einschließlich) bis zum Tag der vollständigen Zahlung an die Anleihegläubiger (ausschließlich) mit dem gesetzlich bestimmten Verzugszins verzinst.[5].

§ 4 Rückzahlung

(a) *Rückzahlung bei Endfälligkeit*. Soweit nicht zuvor bereits insgesamt oder teilweise zurückgezahlt oder angekauft und eingezogen, werden die Schuldverschreibungen zu ihrem Nennbetrag am 25. September 2028 (der „**Endfälligkeitstag**") zurückgezahlt.

(b) *Rückkauf.* Die Emittentin kann jederzeit im Markt oder auf andere Weise Schuldverschreibungen ankaufen und verkaufen. Sofern solche Käufe durch öffentliches Angebot erfolgen, muss dieses Angebot allen Anleihegläubigern gemacht werden.

(B) the number of days in such Calculation Period falling in the next Determination Period divided by the number of days in such Determination Period.

Where:

"**Determination Date**" means 25 September in each year;

"**Determination Period**" means each period from and including a Determination Date in any year to but excluding the next Determination Date.

(c) *Cessation of Interest Accrual*. The Notes shall cease to bear interest from the end of the day preceding their due date for redemption. If the Issuer fails to redeem the Notes when due, interest shall continue to accrue on the outstanding amount from (and including) the due date to (but excluding) the day on which such payment is received by or on behalf of the Noteholders at the default rate of interest established by statutory law.[6]

§ 4 Redemption

(a) *Redemption at maturity*. To the extent not previously redeemed in whole or in part or purchased and cancelled the Notes shall be redeemed at their Principal Amount on 25 September 2028 (the "**Maturity Date**").

(b) *Purchases*. The Issuer is entitled to purchase and resell Notes at any time in the market or otherwise. If such purchases are made by tender, tenders for such Notes must be made available to all Noteholders of such Notes alike.

[5] Der gesetzliche Verzugszinssatz entspricht dem von der Deutschen Bundesbank von Zeit zu Zeit veröffentlichten Basiszinssatz zuzüglich fünf Prozentpunkten, §§ 288 Abs. 1, 247 Abs. 1 BGB.

[6] The default rate of interest established by statutory law is five percentage points above the basis rate of interest published by Deutsche Bundesbank from time to time, §§ 288 paragraph 1, 247 paragraph 1 of the German Civil Code (*Bürgerliches Gesetzbuch*).

(c) *Vorzeitige Rückzahlung nach Wahl der Emittentin*.

(i) Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) mit Wirkung zu jedem Tag während des Zeitraums ab dem Begebungstag der Schuldverschreibungen (einschließlich) bis zum 25. Juni 2028 (ausschließlich) durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen zum Wahl-Rückzahlungsbetrag (wie nachstehend definiert) zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin (der „**Wahl-Rückzahlungstag**") in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

Definitionen:

Der „**Wahl-Rückzahlungsbetrag**" je Schuldverschreibung entspricht dem höheren von:

(i) dem Nennbetrag; oder

(ii) dem Abgezinsten Marktwert.

Der Wahl-Rückzahlungsbetrag wird von der Berechnungsstelle berechnet.

Der „**Abgezinste Marktwert**" ist die Summe aus

(a) dem auf den Wahl-Rückzahlungstag abgezinsten Wert des Nennbetrags der zurückzuzahlenden Schuldverschreibung, der ansonsten am Endfälligkeitstag fällig werden würde; und

(b) den jeweils auf den Wahl-Rückzahlungstag abgezinsten Werten der verbleibenden Zinszahlungen, die ansonsten an jedem *Zinszahlungstag* nach dem Wahl-Rückzahlungstag bis zum Endfälligkeitstag (einschließlich) fällig werden würden (ausschließlich etwaiger, bis zum Wahl-Rückzahlungstag (ausschließlich) aufgelaufener Zinsen).

(c) *Early redemption at the option of the Issuer*.

(i) The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) with effect as of any date during the period from and including the Issue Date to but excluding 25 June 2028. In the case such notice is given, the Issuer will redeem the remaining Notes at the Call Redemption Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice (the "**Call Redemption Date**").

Definitions:

The "**Call Redemption Amount**" per Note shall be the higher of:

(i) the Principal Amount; or

(ii) the Present Value.

The Call Redemption Amount shall be calculated by the Calculation Agent.

The "**Present Value**" will be the sum of

(a) the principal amount of the Note to be redeemed which would otherwise become due on the Maturity Date, discounted to the Call Redemption Date; and

(b) the remaining interest payments which would otherwise become due on each Interest Payment Date falling after the Call Redemption Date to and including the Maturity Date (excluding any interest accrued to but excluding the Call Redemption Date), each discounted to the Call Redemption Date.

Die Berechnungsstelle errechnet den Abgezinsten Marktwert gemäß der Marktkonvention auf einer Grundlage, die der Berechnung von Zinsen gemäß § 3 entspricht, wobei sie die Benchmark-Rendite zuzüglich 0,30% zugrunde legt.

The Calculation Agent will calculate the Present Value in accordance with market convention on a basis which is consistent with the calculation of interest as set out in § 4, using the Benchmark Yield plus 0.30%.

Die „**Benchmark-Rendite**" bezeichnet die am Rückzahlungs-Berechnungstag bestehende Rendite der 0,25% Bundesanleihe 2018 (2028), basierend auf dem Referenzpreis für diese Referenz-Anleihe an diesem Tag, wie um oder gegen 12:00 Uhr mittags (Frankfurter Zeit) an diesem Tag auf der Bloomberg Seite DE0001102457 Govt HP (unter Nutzung der Einstellung „**Fixing Price**" und der Preisquelle „**FRNK**") abgelesen, oder wie von einer anderen, durch die Berechnungsstelle festgelegten, Quelle hergeleitet oder veröffentlicht oder sollte die Rendite zu diesem Zeitpunkt nicht verfügbar sein, bezeichnet die Benchmark-Rendite eine ersetzende Referenzanleihe, die von der Berechnungsstelle festgesetzt wird, die jeweils mit einer Laufzeit, die mit der verbleibenden Restlaufzeit der Schuldverschreibung bis zum Endfälligkeitstag vergleichbar ist, und die im Zeitpunkt der Auswahlentscheidung und entsprechend der üblichen Finanzmarktpraxis zur Preisbestimmung bei Neuemissionen von Unternehmensanleihen mit einer bis zum Endfälligkeitstag der Schuldverschreibung vergleichbaren Laufzeit verwendet werden würde.

The "**Benchmark Yield**" means the yield at the Redemption Calculation Date of the 0.25% Bundesanleihe 2018 (2028), based on the reference price for such benchmark security on such day, as observed at or about noon (Frankfurt time) on such date on Bloomberg page DE0001102457 Govt HP (using the setting "**Fixing Price**" and the pricing source "**FRNK**"), or as derived or published by such other source as determined by the Calculation Agent, and if such yield is not available at that time the Benchmark Yield shall be the yield of a substitute benchmark security chosen by the Calculation Agent, in each case as having a maturity comparable to the remaining term of the Note to the Maturity Date, that would be used at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the Maturity Date.

„**Rückzahlungs-Berechnungstag**" ist der sechste Geschäftstag vor dem Tag, an dem die Schuldverschreibungen gemäß § 5(c)(i) zurückgezahlt werden.

"**Redemption Calculation Date**" means the sixth Business Day prior to the date on which the Notes are redeemed in accordance with this § 5(c)(i).

(ii) Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) mit Wirkung zu jedem Tag während des Zeitraums ab dem 25. Juni 2028 (einschließlich) bis zum Endfälligkeitstag (ausschließlich) durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin zum Nennbetrag zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

(ii) The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) with effect as of any date during the period from and including 25 June 2028 to but excluding the Maturity Date. In the case such notice is given, the Issuer will redeem the remaining Notes at the Principal Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice.

(d) *Vorzeitige Rückzahlung durch die Emittentin bei geringem ausstehenden Gesamtnennbetrag*. Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) jederzeit durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen, wenn 80% oder mehr des *Gesamtnennbetrags* der ursprünglich begebenen Schuldverschreibungen zurückgezahlt oder zurückgekauft und entwertet wurden. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin zum Nennbetrag zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

(e) *Vorzeitige Rückzahlung durch die Emittentin aus steuerlichen Gründen*. Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) jederzeit durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen, wenn ein Gross-up-Ereignis eingetreten ist. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin zum Nennbetrag zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

Eine solche Rückzahlung darf nicht früher als 90 Tage vor dem Tag erfolgen, an dem die Emittentin oder die Garantin erstmals verpflichtet wäre, Zusätzliche Beträge (wie in § 6 definiert) zu zahlen bzw. wenn eine ordnungsgemäße Zahlungsaufforderung unter der Garantie erfolgen würde.

(d) *Clean-up Call*. The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) at any time if 80 per cent. or more of the aggregate principal amount of the Notes initially issued have been redeemed or repurchased and cancelled. In the case such notice is given, the Issuer will redeem the remaining Notes at the Principal Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice.

(e) *Early Redemption by the Issuer for Reasons of Taxation*. The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) at any time if a Gross-up Event has occurred. In the case such notice is given, the Issuer will redeem the remaining Notes at the Principal Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice.

No such redemption may be made earlier than 90 days prior to the earliest date on which the Issuer or the Guarantor would be obliged to pay the Additional Amounts (as defined in § 6) or (as the case may be) in respect of a demand for payment duly made under the Guarantee, for the first time.

Ein „**Gross-up-Ereignis**" tritt ein, wenn, der Emittentin oder der Garantin ein Gutachten einer anerkannten Anwaltskanzlei vorliegt (und die Emittentin oder die Garantin der Hauptzahlstelle eine Kopie davon gibt) aus dem hervorgeht, dass die Emittentin oder die Garantin aufgrund einer an oder nach dem Begebungstag der Schuldverschreibungen in Kraft tretenden Gesetzesänderung (oder einer Änderung von darunter erlassenen Bestimmungen und Vorschriften) der Niederlande oder der Bundesrepublik Deutschland oder einer zur Erhebung von Steuern berechtigten Gebietskörperschaft oder Behörde der Niederlande oder der Bundesrepublik Deutschland, oder als Folge einer Änderung der offiziellen Auslegung oder Anwendung dieser Gesetze, Bestimmungen oder Vorschriften durch eine gesetzgebende Körperschaft, ein Gericht, eine Regierungsstelle oder eine Aufsichtsbehörde (einschließlich des Erlasses von Gesetzen sowie der Bekanntmachung gerichtlicher oder aufsichtsrechtlicher Entscheidungen), verpflichtet ist oder verpflichtet sein wird, Zusätzliche Beträge gemäß § 6 auf die Schuldverschreibungen zu zahlen, oder die Garantin verpflichtet ist oder verpflichtet sein wird, Zusätzliche Beträge auf fällige Beträge aus der Garantie zu zahlen, und die Emittentin bzw. die Garantin diese Verpflichtung nicht abwenden kann, indem sie Maßnahmen ergreift, die sie nach Treu und Glauben für zumutbar und angemessen hält.

(f) *Erklärung der vorzeitigen Rückzahlung*. Die Emittentin kann die Erklärung der vorzeitigen Rückzahlung der Schuldverschreibungen gemäß § 4(c), § 4(d) oder § 4(e) durch Veröffentlichung einer Mitteilung an die Anleihegläubiger gemäß § 11 unter Einhaltung einer Frist von nicht weniger als 30 und nicht mehr als 60 Tagen vor dem Rückzahlungstag erklären.

Diese Mitteilung hat den Rückzahlungstermin festzulegen sowie die Tatsachen anzugeben, die das Kündigungsrecht der Emittentin begründen.

Die Emittentin wird jeder Börse, an der die Schuldverschreibungen notiert sind und deren Regeln eine Mitteilung an die Börse verlangen, umgehend Mitteilung über die Kündigung machen.

A "**Gross up Event**" will occur if an opinion of a recognised law firm has been delivered to the Issuer or the Guarantor (and the Issuer or the Guarantor has provided the Principal Paying Agent with a copy thereof) stating that, the Issuer or the Guarantor, as a result of any change in, or amendment to, the laws (or any rules or regulations thereunder) of the Netherlands or the Federal Republic of Germany or any political subdivision or any authority of or in the Netherlands or the Federal Republic of Germany having power to tax, or as a result of any change in, or amendment to, the official interpretation or application of any such laws, rules or regulations by any legislative body, court, governmental agency or regulatory authority (including the enactment of any legislation and the publication of any judicial decision or regulatory determination), which change or amendment becomes effective on or after the Issue Date has or will become obliged to pay Additional Amounts pursuant to § 6 on the Notes or the Guarantor has or will become obliged to pay Additional Amounts in respect of payments due under the Guarantee, and that obligation cannot be avoided by the Issuer and the Guarantor, respectively, taking such measures it (acting in good faith) deems reasonable and appropriate.

(f) *Notice of early redemption*. The Issuer may call the Notes for early redemption pursuant to § 4(c), § 4(d) or § 4(e) by publishing a notice to the Noteholders in accordance with § 11 subject to observing a notice period of not less than 30 nor more than 60 days prior to the specified redemption date.

This notice must specify the redemption date and state the facts which establish the right of the Issuer to redeem the Notes.

The Issuer will inform, if required by such stock exchange on which the Notes are listed, such stock exchange as soon as possible of such redemption.

(g) *Kontrollwechsel*.

(i) Wenn ein Rückzahlungsereignis (wie nachstehend definiert) eintritt, wird die Emittentin innerhalb von 30 Tagen nach Ablauf des jeweiligen Kontrollwechselzeitraums (wie nachstehend definiert) das Rückzahlungsereignis und den Rückzahlungsstichtag unter Angabe der Umstände des Rückzahlungsereignisses gemäß § 11 bekannt machen.

„**Rückzahlungsstichtag**" bezeichnet den von der Emittentin gemäß § 4(g)(i) festgelegten Geschäftstag, der nicht weniger als 15 und nicht mehr als 30 Tage nach dem Tag der Bekanntmachung des Rückzahlungsereignisses gemäß § 11 liegen darf.

(ii) Falls die Emittentin gemäß § 4(g)(i) ein Rückzahlungsereignis bekannt gemacht hat, ist jeder Anleihegläubiger nach seiner Wahl berechtigt, mit einer Frist von mindestens 10 Tagen mit Wirkung zum Rückzahlungsstichtag alle oder einzelne seiner Schuldverschreibungen, die noch nicht zurückgezahlt wurden, vorzeitig fällig zu stellen. In einem solchen Fall hat die Emittentin die betreffenden Schuldverschreibungen am Rückzahlungsstichtag zu 101% des Nennbetrags zuzüglich etwaiger bis zu dem Rückzahlungsstichtag (ausschließlich) aufgelaufener Zinsen zurückzuzahlen.

Eine Fälligstellung gemäß diesem § 4(g)(ii) hat durch Übergabe einer Erklärung in Textform gegenüber der Hauptzahlstelle zu erfolgen und ist unwiderruflich. Der betreffende Anleihegläubiger hat dabei durch eine Bescheinigung seiner Depotbank nachzuweisen, dass er zu dem Zeitpunkt der Erklärung Inhaber der betreffenden Schuldverschreibung(en) ist, und seine Schuldverschreibung(en), für die das Recht ausgeübt werden soll, an die Hauptzahlstelle zu liefern.

(iii) Ein „**Rückzahlungsereignis**" tritt ein, wenn

(A) die Emittentin einen Kontrollwechsel (wie nachstehend definiert) bekannt macht; und

(g) *Change of Control*.

(i) If a Put Event (as defined below) occurs, the Issuer will give notice in accordance with § 11 of the Put Event and the Put Record Date specifying the nature of the Put Event within 30 days of the end of the respective Change of Control Period (as defined below).

"**Put Record Date**" means the Business Day fixed by the Issuer pursuant to § 4(g)(i) which will be not less than 15 nor more than 30 days after the notice of the Put Event and which is published in accordance with § 11.

(ii) If the Issuer gives notice in accordance with § 4(g)(i) of a Put Event, each Noteholder may at his option on giving not less than 10 days' notice declare all or some only of his Notes not previously redeemed due which notice shall take effect on the Put Record Date. In such case the Issuer will redeem such Notes on the Put Record Date at 101 per cent. of the Principal Amount plus interest accrued to but excluding the Put Record Date.

A notice pursuant to this § 4(g)(ii) has to be effected by delivering a notice in text form to the Principal Paying Agent and is irrevocable. The respective Noteholder must demonstrate with a certificate from his Custodian that he is the holder of the respective Note(s) at the time of the declaration and deliver to the Principal Paying Agent the Note(s) for which the right shall be exercised.

(iii) A "**Put Event**" will occur if

(A) the Issuer announces a Change of Control (as defined below); and

(B) nach Eintritt des Kontrollwechsels und, in den Fällen gemäß § (4)(g)(v)(A)(y) und § (4)(g)(v)(A)(z) unten, aufgrund dessen ein Negatives Ratingereignis (wie nachstehend definiert) eintritt.

(iv) Ein „**Kontrollwechsel**" gilt jedes Mal als eingetreten, wenn ein Kontrollwechselereignis (wie nachstehend definiert) eingetreten ist.

(A) „**Kontrollwechselereignis**" bedeutet, dass

(x) an oder nach dem Begebungstag, aber vor dem Zeitpunkt eines Qualifizierten IPO die BASF SE, Ludwigshafen am Rhein, Deutschland („**BASF**") und die Letterone Holdings S.A., Luxemburg („**Letterone Holdings**") (ob unmittelbar oder mittelbar über irgendeine Person) zusammen nicht mehr wirtschaftliche Eigentümer von mindestens 51% der Stammgeschäftsanteile der Garantin sind; dies gilt mit der Maßgabe, dass kein Kontrollwechsel eintritt, wenn BASF alleine mindestens 51% der Stammgeschäftsanteile der Garantin hält; oder

(y) zum oder nach dem Zeitpunkt eines Qualifizierten IPO ein Ereignis eintritt, durch das eine oder mehrere Person(en) (außer einer börsennotierten Holdinggesellschaft der Garantin und außer BASF (oder eines ihrer Tochterunternehmen)), die entweder alleine oder gemeinsam im Sinne von § 2 Abs. 5 des Wertpapiererwerbs- und Übernahmegesetzes handeln, unmittelbar oder mittelbar einen Stimmrechtsanteil von mehr als 50% an der Garantin erwerben, wobei der Stimmrechtsanteil nach § 34 Abs. 1 und 2 WpHG berechnet wird.

(B) a Negative Rating Event (as defined below) occurs after the occurrence and, in the cases of § 4(g)(v)(A)(y) and § 4(g)(v)(A)(z) below, as a result of the Change of Control.

(iv) A "**Change of Control**" shall be deemed to have occurred at each time that a Change of Control Event (as defined below) has occurred.

(A) "**Change of Control Event**" means

(x) on or after the Issue Date but prior to the date of a Qualified IPO, BASF SE, Ludwigshafen am Rhein, Germany ("**BASF**") and Letterone Holdings S.A., Luxembourg ("**Letterone Holdings**") (whether directly or indirectly through any person) together cease to hold beneficially a minimum of 51 per cent. of the ordinary shares of the Guarantor, provided that no change of control shall occur if BASF individually holds a minimum of 51 per cent. of the ordinary shares in the Guarantor; or

(y) on or after the date of a Qualified IPO, the occurrence of any event pursuant to which one or more person(s) (other than any listed Holding Company of the Guarantor and other than BASF (or any of its subsidiaries)) acting either individually or acting in concert within the meaning of §2(5) of the German Securities Acquisition and Take Over Act (*Wertpapiererwerbs- und Übernahmegesetz*) acquire(s) directly or indirectly more than 50 per cent. of the voting rights of the Guarantor, provided that the share of voting rights shall be calculated pursuant to section 34 paras. (l) and (2) WpHG.

„**Holdinggesellschaft**" bedeutet in Bezug auf eine Gesellschaft oder ein Unternehmen, jede andere Gesellschaft oder jedes andere Unternehmen, dessen Tochtergesellschaft es ist.

„**WpHG**" bezeichnet das Wertpapierhandelsgesetz in seiner jeweils gültigen Fassung.

„**Qualifizierter IPO**" bezeichnet eine erstmalige Börsenzulassung der Gesamtheit oder eines Teils der Aktien der Garantin oder einer Holdinggesellschaft der Garantin (deren einziger wesentliche Vermögensgegenstand die unmittelbare oder mittelbare Beteiligung an der Garantin ist) an einer international anerkannten Wertpapierbörse oder eine andere Emission im Wege eines Börsengangs oder eines öffentlichen Angebots oder unter entsprechenden Umständen in Bezug auf die Garantin oder eine Holdinggesellschaft der Garantin.

(B) Wenn ein Kontrollwechsel eintritt, wird die Emittentin sobald wie möglich, nachdem sie Kenntnis davon erhalten hat, den Kontrollwechsel und den Tag, an dem die Transaktion, die den Kontrollwechsel bewirkt, vollzogen worden ist (der „**Stichtag**"), gemäß § 11 bekannt machen.

(v) Ein „**Negatives Ratingereignis**" gilt im Hinblick auf einen zuvor eingetretenen Kontrollwechsel als eingetreten, wenn innerhalb des Kontrollwechselzeitraums (wie nachstehend definiert):

(A)

(x) für den Fall, dass die Schuldverschreibungen am Stichtag über kein Rating von einer Ratingagentur (wie nachstehend definiert) verfügen, keine einzige Ratingagentur ein Investment Grade Rating (d.h. mindestens „**BBB−**" durch S&P oder Fitch oder „**Baa3**" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur) für die Schuldverschreibungen vergibt; oder

"**Holding Company**" means in relation to a company or corporation, any other company or corporation in respect of which it is a subsidiary.

"**WpHG**" means the German Securities Trading Act (*Wertpapierhandelsgesetz*) as amended from time to time.

"**Qualified IPO**" means an initial listing of all or part of the share capital of the Guarantor or any Holding Company of the Guarantor (whose only principal asset is the direct or indirect ownership in the Guarantor) on any internationally recognized stock exchange or any other issue by way of flotation or public offering or any equivalent circumstances in relation to the Guarantor or any Holding Company of the Guarantor.

(B) If a Change of Control occurs, the Issuer will give notice in accordance with § 11 of the Change of Control and the date on which the transaction that constitutes the Change of Control has taken effect (the "**Record Date**") as soon as practicable after becoming aware thereof.

(v) A "**Negative Rating Event**" shall be deemed to have occurred in respect of a Change of Control if within the Change of Control Period (as defined below):

(A)

(x) in case, on the Record Date, no credit rating from any Rating Agency (as defined below) is assigned to the Notes and no single Rating Agency assigns an investment grade credit rating (i.e. at least "**BBB−**" by S&P or Fitch or "**Baa3**" by Moody's or such other equivalent rating as may be assigned by any other rating agency) to the Notes; or

(y) für den Fall, dass die Schuldverschreibungen am Stichtag zwar über kein Investment Grade Rating aber über ein oder mehrere (mit Zustimmung der Emittentin erteilte) Non-Investment Grade Ratings („**BB+**" durch S&P oder Fitch oder "**Ba1**" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur oder gleichwertig oder schlechter) verfügen, eine der Ratingagenturen ihr jeweiliges Rating um einen oder mehrere Punkte (zur Erläuterung: „**BB+**" nach „**BB**" bzw. „**Ba1**" nach „**Ba2**" entspricht einem Punkt) absenkt, wobei kein Negatives Ratingereignis eintritt, wenn dieses Rating anschließend durch diese Ratingagentur auf das ursprüngliche oder ein besseres Rating angehoben wird; oder

(y) in case, on the Record Date, no investment grade credit rating is assigned to the Notes but one or more non-investment grade credit ratings ("**BB+**" by S&P or Fitch or "**Ba1**" by Moody's or such other equivalent rating as may be assigned by any other rating agency, or equivalent, or worse) are assigned to the Notes (with the consent of the Issuer), any of the Rating Agencies downgrades its respective credit rating by one or more notches (for illustration, "**BB+**" to "**BB**" or "**Ba1**" to "**Ba2**" being one notch), provided that no Negative Rating Event occurs if such credit rating is subsequently reinstated to its earlier or a better credit rating by such Rating Agency; or

(z) für den Fall, dass die Schuldverschreibungen am Stichtag über ein oder mehrere Investment Grade Ratings verfügen, eine der Ratingagenturen ihr Investment Grade Rating (d.h. mindestens „**BBB−**" durch S&P oder Fitch oder „**Baa3**" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur) (i) zurückzieht oder (ii) von einem Investment Grade Rating auf ein non-Investment Grade Rating („**BB+**" durch S&P oder Fitch oder „**Ba1**" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur oder gleichwertig oder schlechter) herabstuft, wobei kein Negatives Ratingereignis eintritt, wenn dieses Rating anschließend durch die jeweilige Ratingagentur auf das ursprüngliche oder ein besseres Investment Grade Rating angehoben wird oder (im Falle einer Zurückziehung) das betreffende Rating durch das Investment Grade Rating einer anderen Ratingagentur ersetzt wird; und

(B) die jeweilige Ratingagentur bei ihrer Entscheidung zur Herabstufung oder Zurücknahme eines Kreditratings gemäß den obigen Ziffern (v)(A)(y) und (v)(A)(z) öffentlich bekannt gibt oder schriftlich bestätigt, dass diese Entscheidung(en) ganz oder teilweise aufgrund des Eintritts des Kontrollwechsels erfolgte(n).

Falls die Schuldverschreibungen zum Stichtag über ein Rating von mehr als einer Rating Agentur verfügen, von denen mindestens eines ein Investment Grade Rating ist, findet § 4(g)(v)(A)(z) Anwendung.

„**Ratingagentur**" bezeichnet jeweils Moody's Investors Services Limited („**Moody's**") oder S&P Global Ratings Europe Limited („**S&P**"), oder Fitch Ratings Ltd („**Fitch**") oder eine jeweilige Nachfolgegesellschaft.

(z) in case, on the Record Date, one or more investment grade credit ratings are assigned to the Notes, any of the Rating Agencies (i) withdraws or (ii) downgrades such its investment grade credit rating (i.e. at least "**BBB−**" by S&P or Fitch or "**Baa3**" by Moody's or such other equivalent rating as may be assigned by any other rating agency) to a non-investment grade credit rating ("**BB+**" by S&P or Fitch or "**Ba1**" by Moody's or such other equivalent rating as may be assigned by any other rating agency, or equivalent, or worse), provided that no Negative Rating Event occurs if such credit rating is subsequently reinstated to its earlier or a better investment grade credit rating by such Rating Agency or (in the case of a withdrawal) replaced by an investment grade credit rating from any other Rating Agency; and

(B) in making any decision to downgrade or withdraw a credit rating pursuant to paragraphs (v)(A)(y) and (v)(A)(z) above, the relevant Rating Agency announces publicly or confirms in writing that such decision(s) resulted, in whole or in part, from the occurrence of the Change of Control.

If on the Record Date the Notes carry a rating from more than one Rating Agency, at least one of which is investment grade, then § 4(g)(v)(A)(z) will apply.

"**Rating Agency**" means each of Moody's Investors Services Limited ("**Moody's**") or S&P Global Ratings Europe Limited ("**S&P**") or Fitch Ratings Ltd ("**Fitch**"), or any of their respective successors.

„**Kontrollwechselzeitraum**" bezeichnet den Zeitraum von 120 Tagen ab dem Stichtag (ausschließlich).

Falls sich die von Moody's, S&P oder Fitch verwendeten Rating Kategorien gegenüber denen, die in § 4(g)(v) angegeben wurde, ändern sollten, wird die Emittentin diejenigen Rating Kategorien von Moody's, S&P bzw. Fitch bestimmen, die den früheren Rating Kategorien von Moody's, S&P bzw. Fitch möglichst nahekommen. § 4(g)(v) ist dann entsprechend auszulegen.

§ 5 Zahlungen

(a) *Zahlungen*.

(i) Die Zahlung von Kapital und Zinsen auf die Schuldverschreibungen erfolgt an das Clearingsystem oder an dessen Order zur Gutschrift auf den Konten der jeweiligen Kontoinhaber des Clearingsystems außerhalb der Vereinigten Staaten von Amerika. Die Zahlung von Zinsen auf Schuldverschreibungen, die durch eine Vorläufige Globalurkunde verbrieft sind, erfolgt nach ordnungsgemäßem Nachweis gemäß § 1(c).

(ii) Sämtliche Zahlungen stehen in allen Fällen unter dem Vorbehalt geltender steuerlicher und sonstiger gesetzlicher Vorschriften, Richtlinien und/oder Verordnungen. Die Emittentin, die Garantin, die Hauptzahlstelle bzw. Zahlstelle sind nicht für irgendwelche Steuern oder Abgaben gleich welcher Art verantwortlich, die aufgrund solcher gesetzlichen Vorschriften, Richtlinien oder Verordnungen oder Verträgen auferlegt oder erhoben werden. Dies berührt jedoch nicht die Bestimmungen von § 6. Den Anleihegläubigern werden keine Kosten oder Gebühren in Bezug auf diese Zahlungen auferlegt.

(iii) Eine Bezugnahme in diesen Anleihebedingungen auf Kapital oder Zinsen der Schuldverschreibungen schließt jegliche Zusätzlichen Beträge gemäß § 6 ein.

(b) *Zahlungsweise*. Zu leistende Zahlungen auf die Schuldverschreibungen erfolgen in der Festgelegten Währung.

"**Change of Control Period**" means the period ending 120 days from but excluding the Record Date.

If the rating designations employed by any of Moody's, S&P or Fitch are changed from those which are described in § 4(g)(v) above, the Issuer shall determine the rating designations of Moody's or S&P or Fitch (as appropriate) as are most equivalent to the prior rating designations of Moody's or S&P or Fitch and § 4(g)(v) shall be read accordingly.

§ 5 Payments

(a) *Payments*.

(i) Payment of principal and interest on the Notes shall be made to the Clearing System or to its order for credit to the relevant account holders of the Clearing System outside the United States of America. Payment of interest on Notes represented by a Temporary Global Note shall be made, upon due certification as provided in § 1(c).

(ii) All payments will be subject in all cases to any applicable fiscal and other laws, directives and/or regulations. The Issuer, the Guarantor or, as the case may be, the Principal Paying Agent or Paying Agent, as the case may be, will not be liable for any taxes or duties of whatever nature imposed or levied by such laws, regulations, directives or agreements, but without prejudice to the provisions of § 6. No commission or expenses shall be charged to the Noteholders in respect of such payments.

(iii) Any reference in these Terms and Conditions of the Notes to principal or interest will be deemed to include any Additional Amounts as set forth in § 6.

(b) *Manner of payment*. Payments of amounts due in respect of the Notes shall be made in the Specified Currency.

(c) *Erfüllung*. Die Emittentin bzw. die Garantin wird durch Leistung der Zahlung an das Clearingsystem oder an dessen Order von ihrer Zahlungspflicht befreit.

(c) *Discharge*. The Issuer or, as the case may be, the Guarantor shall be discharged by payment to, or to the order of, the Clearing System.

(d) *Zahltag*. Fällt der Fälligkeitstag einer Zahlung in Bezug auf eine Schuldverschreibung auf einen Tag, der kein Geschäftstag ist, dann hat der Anleihegläubiger keinen Anspruch auf Zahlung vor dem nächstfolgenden Geschäftstag. Der Anleihegläubiger ist nicht berechtigt, weitere Zinsen oder sonstige Zahlungen aufgrund dieser Verspätung zu verlangen.

(d) *Payment Business Day*. If the due date for payment of any amount in respect of any Note is not a Business Day then the Noteholder shall not be entitled to payment until the next Business Day and shall not be entitled to further interest or other payment in respect of such delay.

„**Geschäftstag**" bezeichnet einen Tag (außer einem Samstag oder Sonntag), an dem Banken in Frankfurt am Main für den allgemeinen Geschäftsverkehr geöffnet sind und an dem das Clearingsystem sowie alle maßgeblichen Bereiche des Trans-European Automated Real-time Gross Settlement Express Transfer System (TARGET2) betriebsbereit sind, um Zahlungen vorzunehmen.

"**Business Day**" means a day (other than a Saturday or a Sunday) on which banks are open for general business in Frankfurt am Main and on which the Clearing System as well as all relevant parts of the Trans-European Automated Real-time Gross Settlement Express Transfer system (TARGET2) are operational to effect payments.

§ 6 Besteuerung

Sämtliche auf die Schuldverschreibungen zu zahlenden Beträge (einschließlich sämtlicher von der Garantin auf die Garantie zu zahlender Beträge) werden ohne Einbehalt oder Abzug von Steuern, Abgaben, Festsetzungen oder behördlicher Gebühren jedweder Art geleistet („**Steuern**"), die von den Niederlanden bzw. der Bundesrepublik Deutschland oder einer ihrer Gebietskörperschaften oder Behörden oder sonstigen Stellen in den Niederlanden bzw. der Bundesrepublik Deutschland mit der Befugnis zur Erhebung von Steuern auferlegt, erhoben, eingezogen, einbehalten oder festgesetzt werden, sofern nicht kraft Gesetzes oder einer sonstigen Rechtsvorschrift einem solcher Einbehalt oder Abzug vorgeschrieben ist. Sofern die Emittentin oder die Garantin zu einem solchen Einbehalt oder Abzug verpflichtet ist, wird die Emittentin bzw. die Garantin zusätzliche Beträge (die „**Zusätzlichen Beträge**") an die Anleihegläubiger zahlen, so dass die Anleihegläubiger die Beträge erhalten, die sie ohne den betreffenden Einbehalt oder Abzug erhalten hätten. Solche Zusätzlichen Beträge sind jedoch nicht zahlbar wegen solcher Steuern in Bezug auf Schuldverschreibungen,

§ 6 Taxation

All amounts to be paid in respect of the Notes (including all amounts to be paid by the Guarantor under the Guarantee) will be paid free and clear of, and without withholding or deduction for, any taxes, duties, assessments or governmental charges of whatever nature ("**Taxes**") imposed, levied, collected, withheld or assessed by the Netherlands or the Federal Republic of Germany (as the case may be) or any political subdivision or any authority or any other agency of or in the Netherlands or the Federal Republic of Germany (as the case may be) that has power to tax, unless such withholding or deduction is required to be made by law. If the Issuer or the Guarantor is required to make such withholding or deduction, the Issuer or the Guarantor (as the case may be) will pay such additional amounts (the "**Additional Amounts**") to the Noteholders as the Noteholders would have received if no such withholding or deduction had been required, except that no such Additional Amounts will be payable for any such Taxes in respect of any Note,

(a) die auf andere Weise als durch Einbehalt oder Abzug von zahlbaren Beträgen zu entrichten sind; oder

(a) which are payable otherwise than by withholding or deduction from amounts payable; or

(b) die wegen einer Verbindung des betreffenden Anleihegläubigers zu den Niederlanden bzw. der Bundesrepublik Deutschland, die nicht nur aus der bloßen Inhaberschaft der Schuldverschreibungen besteht, einzubehalten oder abzuziehen sind; oder

(b) which are to be withheld or deducted by reason of the relevant Noteholder having some connection with the Netherlands or the Federal Republic of Germany other than the mere holding of that Note; or

(c) die aufgrund (i) einer Richtlinie oder Verordnung der Europäischen Union betreffend die Besteuerung von Zinserträgen oder (ii) einer zwischenstaatlichen Vereinbarung, eines zwischenstaatlichen Abkommens oder einer zwischenstaatlichen Verständigung über deren Besteuerung, an der die Niederlande, die Bundesrepublik Deutschland oder die Europäische Union beteiligt ist, oder (iii) einer gesetzlichen Vorschrift, die diese Richtlinie, Verordnung, Vereinbarung, Abkommen oder Verständigung umsetzt oder befolgt, abzuziehen oder einzubehalten sind.

(c) which are to be withheld or deducted pursuant to (i) any European Union Directive or Regulation concerning the taxation of interest income, or (ii) any international treaty, agreement or understanding relating to such taxation and to which the Netherlands or the Federal Republic of Germany or the European Union is a party, or (iii) any provision of law implementing, or complying with, or introduced to conform with, such Directive, Regulation, treaty, agreement or understanding.

Die Emittentin und die Garantin sind keinesfalls verpflichtet, zusätzliche Beträge in Bezug auf einen Einbehalt oder Abzug von Beträgen zu zahlen, die gemäß Sections 1471 bis 1474 des U.S. Internal Revenue Code (in der jeweils geltenden Fassung oder gemäß Nachfolgebestimmungen), gemäß zwischenstaatlicher Abkommen, gemäß den in einer anderen Rechtsordnung in Zusammenhang mit diesen Bestimmungen erlassenen Durchführungsvorschriften oder gemäß mit dem Internal Revenue Service geschlossenen Verträgen von der Emittentin, der jeweiligen Zahlstelle oder einem anderen Beteiligten abgezogen oder einbehalten wurden („**FATCA-Steuerabzug**") oder Anleger in Bezug auf einen FATCA-Steuerabzug schadlos zu halten.

In any event, the Issuer and the Guarantor will have no obligation to pay additional amounts deducted or withheld by the Issuer, the relevant Paying Agent or any other party ("**FATCA Withholding**") in relation to any withholding or deduction of any amounts required by the rules of U.S. Internal Revenue Code Sections 1471 through 1474 (or any amended or successor provisions), pursuant to any inter-governmental agreement, or implementing legislation adopted by another jurisdiction in connection with these provisions, or pursuant to any agreement with the U.S. Internal Revenue Service or indemnify any investor in relation to any FATCA Withholding.

§ 7 Vorlegung, Verjährung

(a) *Vorlegungsfrist*. Die Vorlegungsfrist gemäß § 801 Absatz 1 Satz 1 BGB für fällige Schuldverschreibungen wird auf zehn Jahre verkürzt.

(b) *Verjährungsfrist*. Die Verjährungsfrist für innerhalb der Vorlegungsfrist zur Zahlung vorgelegte Schuldverschreibungen beträgt zwei Jahre von dem Ende der betreffenden Vorlegungsfrist an.

§ 7 Presentation, Prescription

(a) *Presentation*. The period for presentation of Notes due, as established in § 801 paragraph 1 sentence 1 of the German Civil Code (*Bürgerliches Gesetzbuch*), is reduced to ten years.

(b) *Prescription*. The period for prescription for Notes presented for payment during the presentation period shall be two years beginning at the end of the relevant presentation period.

§ 8 Kündigungsgründe für die Anleihegläubiger

(a) *Kündigungsgründe*. Jeder Anleihegläubiger ist berechtigt, alle oder einzelne seiner Schuldverschreibungen zu kündigen und deren sofortige Rückzahlung zu ihrem Nennbetrag zuzüglich etwaiger bis zu dem Tag der Rückzahlung (ausschließlich) aufgelaufener Zinsen zu verlangen, falls eines der folgenden Ereignisse (jeweils ein „**Kündigungsgrund**") eintritt und fortbesteht:

(i) die Emittentin Kapital oder Zinsen oder eine andere Zahlung auf die Schuldverschreibungen oder die Garantin eine Zahlung auf die Garantie nicht innerhalb von 15 Tagen nach dem betreffenden Fälligkeitstag zahlt;

(ii) die Emittentin oder die Garantin irgendeine andere Verpflichtung aus den Schuldverschreibungen oder der Garantie nicht ordnungsgemäß erfüllt und die Unterlassung, sofern sie nicht unheilbar ist, länger als 45 Tage fortdauert, nachdem die Emittentin oder die Garantin (über die Hauptzahlstelle) hierüber eine Benachrichtigung von einem Anleihegläubiger erhalten hat;

(iii) eine andere Finanzverbindlichkeit (wie nachstehend definiert) der Emittentin, der Garantin oder einer Tochtergesellschaft bei Fälligkeit oder innerhalb der zutreffenden Nachfrist nicht erfüllt wird, wobei kein Anleihegläubiger berechtigt ist, seine Schuldverschreibungen gemäß diesem § 8(a)(iii) zu kündigen, falls der Gesamtbetrag aller solcher Finanzverbindlichkeiten nicht EUR 75.000.000 (oder den entsprechenden Gegenwert in einer oder mehreren anderen Währung(en)) übersteigt;

(iv) die Emittentin, die Garantin oder eine Wesentliche Tochtergesellschaft zahlungsunfähig ist oder ihre Zahlungsunfähigkeit einräumt;

(v) ein zuständiges Gericht gegen die Emittentin, die Garantin oder eine Wesentliche Tochtergesellschaft ein Insolvenzverfahren eröffnet, das nicht innerhalb von 60 Tagen nach dessen Eröffnung aufgehoben oder ausgesetzt worden ist;

§ 8 Events of Default

(a) *Events of Default*. Each Noteholder will be entitled to declare all or some only of its Notes due and demand immediate redemption of such Notes at the Principal Amount plus accrued interest to but excluding the date of redemption as provided hereinafter, if any of the following events (each an "**Event of Default**") occurs and is continuing:

(i) the Issuer fails to pay principal or interest or any other amount in respect of the Notes or the Guarantor fails to pay any amount in respect of the Guarantee within 15 days from the relevant due date;

(ii) the Issuer or the Guarantor fails to duly perform any other obligation arising from the Notes or the Guarantee and such default, except where such default is incapable of remedy, continues unremedied for more than 45 days after the Issuer or the Guarantor (through the Principal Paying Agent) has received notice thereof from a Noteholder;

(iii) any other Financial Indebtedness (as defined below) of the Issuer, the Guarantor or any Subsidiary is not paid when due or within any applicable grace period, as the case may be, provided that no Noteholder will be entitled to declare its Notes due in accordance with this § 8(a)(iii) if the aggregate amount of such Financial Indebtedness does not exceed EUR 75,000,000 (or its equivalent in any other currency or currencies);

(iv) the Issuer, the Guarantor or any Material Subsidiary is unable or admits its inability to pay its debts as they fall due;

(v) a competent court opens insolvency proceedings against the Issuer, the Guarantor or any Material Subsidiary which has not been dismissed or stayed within 60 days after the commencement thereof;

(vi) die Emittentin oder die Garantin in Liquidation tritt, es sei denn, dies geschieht im Zusammenhang mit einer Verschmelzung oder einer anderen Form des Zusammenschlusses mit einer anderen Gesellschaft oder im Zusammenhang mit einer Umwandlung und die andere oder neue Gesellschaft übernimmt alle Verpflichtungen, die die Emittentin aus den Schuldverschreibungen bzw. die Garantin aus der Garantie eingegangen ist;

(vi) the Issuer or the Guarantor is liquidated, unless this is effected in connection with a merger or another form of amalgamation with another company or in connection with a restructuring, and the other or the new company assumes all obligations of the Issuer arising under the Notes or the Guarantor arising under the Guarantee, as the case may be;

(vii) in den Niederlanden oder in der Bundesrepublik Deutschland ein Gesetz, eine Verordnung oder behördliche Anordnung Geltung erlangt, durch welche die Emittentin oder die Garantin rechtlich gehindert ist, Verpflichtungen aus den Schuldverschreibungen bzw. der Garantie zu erfüllen, und diese Lage nicht binnen 60 Tagen behoben ist; oder

(vii) any law, governmental order, decree or enactment will gain recognition in The Netherlands or in the Federal Republic of Germany whereby the Issuer or the Guarantor is legally prevented from performing its obligations under the Notes or under the Guarantee and this situation is not cured within 60 days; or

(viii) die Garantie mit rechtskräftiger Entscheidung eines zuständigen Gerichts für nicht vollumfänglich wirksam erklärt wird oder die Garantin einen Mangel der Wirksamkeit behauptet.

(viii) the Guarantee is determined by the final decision of a competent court or is claimed by the Guarantor not to be in full force.

Das Kündigungsrecht erlischt, falls der Kündigungsgrund vor Ausübung des Kündigungsrechts geheilt wurde. Vorbehaltlich anwendbaren zwingenden Rechts berechtigen andere Ereignisse oder Umstände als die in § 8(a) genannten die Anleihegläubiger nicht dazu, ihre Schuldverschreibungen vorzeitig zur Rückzahlung fällig zu stellen, es sei denn, dies ist ausdrücklich in diesen Anleihebedingungen bestimmt.

The right to declare Notes due will terminate if the situation giving rise to it has been resolved before such right is exercised. No event or circumstance other than an event specified in § 8(a) shall entitle Noteholders to declare their Notes due and payable prior to their stated maturity, save as expressly provided for in these Terms and Conditions and subject to applicable mandatory law.

(b) *Quorum*. In den Fällen gemäß § 8(a)(ii) und/oder § 8(a)(iii) wird eine Kündigungserklärung, sofern nicht bei deren Eingang zugleich einer der in Absatz § 8(a)(i) oder § 8(a)(iv) bis (viii) bezeichneten Kündigungsgründe vorliegt, erst wirksam, wenn bei der Hauptzahlstelle Kündigungserklärungen von Anleihegläubigern im Nennbetrag von mindestens 15% des Gesamtnennbetrages der zu diesem Zeitpunkt noch insgesamt ausstehenden Schuldverschreibungen eingegangen sind.

(b) *Quorum*. In the events specified in § 8(a)(ii) and/or § 8(a)(iii), any notice declaring any Note due shall, unless at the time such notice is received any of the events specified in § 8(a)(i) or § 8(a)(iv) through (viii) entitling Noteholders to declare their Notes due has occurred, become effective only when the Principal Paying Agent has received such default notices from the Noteholders representing at least 15 per cent. of the aggregate principal amount of Notes then outstanding.

(c) *Kündigungserklärung*. Eine Kündigung der Schuldverschreibungen gemäß § 8(a) ist schriftlich in deutscher oder englischer Sprache gegenüber der Hauptzahlstelle zu erklären und persönlich oder per Einschreiben an deren bezeichnete Geschäftsstelle zu übermitteln. Der Benachrichtigung ist ein Nachweis beizufügen, aus dem sich ergibt, dass der betreffende Anleihegläubiger zum Zeitpunkt der Abgabe der Benachrichtigung Inhaber der betreffenden Schuldverschreibung ist. Der Nachweis kann durch eine Bescheinigung der Depotbank oder auf andere geeignete Weise erbracht werden.

„**Depotbank**" bezeichnet ein Bank- oder sonstiges Finanzinstitut, bei dem der Anleihegläubiger Schuldverschreibungen in seinem Wertpapierdepotkonto verwahren lässt und das ein Konto bei dem Clearingsystem hat, und schließt das Clearingsystem ein.

„**Finanzverbindlichkeit**" bezeichnet jede gegenwärtige oder zukünftige Zahlungsverpflichtung im Zusammenhang mit einer Kredit- oder sonstigen Kapitalaufnahme.

„**Gruppe**" bezeichnet die Garantin und ihre Tochtergesellschaften.

„**Wesentliche Tochtergesellschaft**" bezeichnet jede Tochtergesellschaft, deren Nettoumsatz, wie anhand der Gewinn- und Verlustrechnung für das letzte Geschäftsjahr dieser Tochtergesellschaft ermittelt (auf nicht konsolidierter Basis und ohne konzerninterne Umsätze), mindestens 7,5% des Konzern-Nettoumsatzes der Gruppe, wie anhand der geprüften Konzern-Gewinn- und Verlustrechnung der Gruppe für dasselbe Geschäftsjahr ermittelt, ausmacht. Wurde eine Tochtergesellschaft nach Ablauf des Berichtszeitraums erworben, auf den sich der zu diesem Zeitpunkt aktuellste geprüfte Konzernabschluss der Gruppe bezieht, so gilt (für die Anwendung der vorstehend beschriebenen Überprüfung) die Bezugnahme auf den aktuellsten geprüften Konzernabschluss der Gruppe als Bezugnahme auf diesen Konzernabschluss so, als wäre die entsprechende Tochtergesellschaft unter Zugrundelegung ihres zu diesem Zeitpunkt aktuellsten Abschlusses darin ausgewiesen (nach Anpassung durch den jeweils aktuellen Abschlussprüfer der Gruppe nach dessen Ermessen in Absprache mit der Garantin).

(c) *Notice*. Any notice declaring Notes due in accordance with § 8(a) will be made by means of a written declaration in German or English delivered by hand or registered mail to the specified office of the Principal Paying Agent together with proof that such Noteholder at the time of such notice is a holder of the relevant Notes by means of a certificate of its Custodian or in any other appropriate manner.

"**Custodian**" means any bank or other financial institution with which the Noteholder maintains a securities account in respect of any Notes and having an account maintained with the Clearing System and includes the Clearing System.

"**Financial Indebtedness**" means any present or future indebtedness for or in respect of monies borrowed or raised.

"**Group**" means the Guarantor and its Subsidiaries.

"**Material Subsidiary**" means any Subsidiary that has, as determined on the basis of the profit and loss statement for such Subsidiary's latest financial year, net revenues (sales) (on an unconsolidated basis and excluding intercompany sales) representing 7.5 per cent. or more of the consolidated net revenues (sales) of the Group, as determined by the audited annual consolidated profit and loss statement of the Group for the same financial year, provided that in the case of a Subsidiary acquired after the end of the financial period to which the then latest audited annual consolidated financial statements of the Group relate, for the purposes of applying the foregoing test, the reference to the Group's most recent audited consolidated financial statements shall be deemed to be a reference to such consolidated financial statements as if such Subsidiary had been shown in such consolidated financial statements by reference to its then latest relevant financial statements, adjusted as deemed appropriate by the auditors for the time being of the Group after consultation with the Guarantor.

§ 9 Zahlstellen, Berechnungsstelle

(a) *Bestellung*. Die Emittentin hat Deutsche Bank Aktiengesellschaft als Hauptzahlstelle in Bezug auf die Schuldverschreibungen (die „**Hauptzahlstelle**" und gemeinsam mit jeder etwaigen von der Emittentin nach § 9(2) bestellten zusätzlichen Zahlstelle, die „**Zahlstellen**") bestellt.

Die Emittentin hat Conv-Ex Advisors Limited als Berechnungsstelle in Bezug auf die Schuldverschreibungen (die „**Berechnungsstelle**" und, gemeinsam mit den Zahlstellen, die „**Verwaltungsstellen**") bestellt.

Die Geschäftsräume der Verwaltungsstellen befinden sich unter den folgenden Adressen:

Hauptzahlstelle:
Deutsche Bank Aktiengesellschaft
Taunusanlage 12
60325 Frankfurt am Main
Deutschland

Berechnungsstelle:
Conv-Ex Advisors Limited
30 Crown Place
London, EC2A 4EB
Vereinigtes Königreich

(b) *Änderung oder Beendigung der Bestellung*. Die Emittentin behält sich das Recht vor, jederzeit die Benennung einer Zahlstelle oder Berechnungsstelle zu verändern oder zu beenden und Nachfolger bzw. zusätzliche Zahlstellen bzw. Berechnungsstellen zu ernennen. Den Anleihegläubigern werden Änderungen in Bezug auf die Zahlstellen bzw. Berechnungsstelle oder deren angegebenen Geschäftsstellen umgehend gemäß § 11 bekannt gemacht.

Auf keinen Fall dürfen sich die Geschäftsräume einer Zahlstelle innerhalb der Vereinigten Staaten von Amerika befinden.

(c) *Erfüllungsgehilfen der Emittentin*. Die Hauptzahlstelle, die Zahlstellen und die Berechnungsstelle handeln ausschließlich als Beauftragte der Emittentin und übernehmen keinerlei Verpflichtungen gegenüber dem Anleihegläubiger; es wird kein Auftrags- oder Treuhandverhältnis zwischen ihnen und dem Anleihegläubiger begründet.

§ 9 Paying Agents, Calculation Agent

(a) *Appointment*. The Issuer has appointed Deutsche Bank Aktiengesellschaft as principal paying agent with respect to the Notes (the "**Principal Paying Agent**" and, together with any additional paying agent appointed by the Issuer in accordance with § 9(2), the "**Paying Agents**").

The Issuer has appointed Conv-Ex Advisors Limited as calculation agent with respect to the Notes (the "**Calculation Agent**" and, together with the Paying Agents, the "**Agents**").

The addresses of the specified offices of the Agents are:

Principal Paying Agent:
Deutsche Bank Aktiengesellschaft
Taunusanlage 12
60325 Frankfurt am Main
Federal Republic of Germany

Calculation Agent:
Conv-Ex Advisors Limited
30 Crown Place
London, EC2A 4EB
United Kingdom

(b) *Variation or Termination of Appointment*. The Issuer reserves the right at any time to vary or terminate the appointment of any Paying Agent or Calculation Agent and to appoint successor or additional Paying Agents or Calculation Agent, as the case may be. Notice of any change in the Paying Agents or Calculation Agent, as the case may be, or in the specified office of any Paying Agent or Calculation Agent, as the case may be, will promptly be given to the Noteholders pursuant to § 11.

In no event will the specified office of any Paying Agent be within the United States of America.

(c) *Agents of the Issuer*. The Principal Paying Agent, the Paying Agents and the Calculation Agent act solely as agents of the Issuer and do not assume any obligations towards or relationship of agency or trust for the Noteholder.

§ 10 Schuldnerersetzung

(a) *Ersetzung*.

Die Emittentin ist jederzeit berechtigt, ohne Zustimmung der Anleihegläubiger, die Garantin oder eine andere Gesellschaft, die direkt oder indirekt von der Garantin kontrolliert wird, als neue Emittentin für alle sich aus oder im Zusammenhang mit den Schuldverschreibungen ergebenden Verpflichtungen mit schuldbefreiender Wirkung für die Emittentin an die Stelle der Emittentin zu setzen (die „**Neue Emittentin**"), sofern

(i) die Neue Emittentin sämtliche Verpflichtungen der Emittentin aus oder im Zusammenhang mit den Schuldverschreibungen rechtswirksam übernimmt und, sofern eine Zustellung an die Neue Emittentin außerhalb der Bundesrepublik Deutschland erfolgen müsste, einen Zustellungsbevollmächtigten in der Bundesrepublik Deutschland bestellt;

(ii) die Neue Emittentin in der Lage ist, sämtliche zur Erfüllung der aufgrund der Schuldverschreibungen bestehenden Zahlungsverpflichtungen erforderlichen Beträge in Euro an das Clearingsystem oder die Hauptzahlstelle zu zahlen, und zwar ohne Abzug oder Einbehalt von Steuern oder sonstigen Abgaben jedweder Art, die von dem Land (oder den Ländern), in dem (in denen) die Neue Emittentin ihren Sitz oder Steuersitz hat, auferlegt, erhoben oder eingezogen werden;

(iii) die Garantin (außer in dem Fall, dass sie selbst die Neue Emittentin ist) unbedingt und unwiderruflich die Verpflichtungen der Neuen Emittentin aus den Schuldverschreibungen zu Bedingungen garantiert, die sicherstellen, dass jeder Anleihegläubiger wirtschaftlich mindestens so gestellt wird, wie er ohne die Ersetzung stehen würde (jede solche Erklärung eine „**Ersetzungsgarantie**");

§ 10 Substitution

(a) *Substitution*.

The Issuer may at any time, without the consent of the Noteholders, substitute for the Issuer either the Guarantor or any other company which is directly or indirectly controlled by the Guarantor as new issuer (the "**New Issuer**") in respect of all obligations arising under or in connection with the Notes with the effect of releasing the Issuer of all such obligations, if:

(i) the New Issuer validly assumes any and all obligations of the Issuer arising under or in connection with the Notes and, if service of process *vis-à-vis* the New Issuer would have to be effected outside the Federal Republic of Germany, appoints a process agent within the Federal Republic of Germany;

(ii) the New Issuer is in the position to pay to the Clearing System or to the Principal Paying Agent in Euro and without deducting or withholding any taxes or other duties of whatever nature imposed, levied or deducted by the country (or countries) in which the New Issuer has its domicile or tax residence all amounts required for the performance of the payment obligations arising from or in connection with the Notes;

(iii) the Guarantor (except in the case that the Guarantor itself is the New Issuer) irrevocably and unconditionally guarantees such obligations of the New Issuer under the Notes on terms which ensure that each Noteholder will be put in an economic position that is at least as favourable as that which would have existed if the substitution had not taken place (each such declaration a "**Substitution Guarantee**");

(iv) die Neue Emittentin und die Emittentin alle für die Ersetzung notwendigen Genehmigungen und Einverständniserklärungen von Regierungsstellen und Aufsichtsbehörden erhalten haben, und die Garantin (falls sie nicht selbst Neue Emittentin ist) alle für die Abgabe der Ersetzungsgarantie notwendigen Genehmigungen und Einverständniserklärungen von Regierungsstellen und Aufsichtsbehörden erhalten hat, die Neue Emittentin alle für die Erfüllung ihrer Verpflichtungen aus den Schuldverschreibungen notwendigen Genehmigungen und Einverständniserklärungen von Regierungsstellen und Aufsichtsbehörden erhalten hat und weiterhin sämtliche dieser Genehmigungen und Einverständniserklärungen in vollem Umfang gültig und wirksam sind und zudem die Verpflichtungen der Neuen Emittentin und die von der Garantin, (falls sie nicht selbst Neue Emittentin ist) begebene Ersetzungsgarantie jeweils gemäß ihren Bestimmungen wirksam und rechtsverbindlich und durch jeden Anleihegläubiger durchsetzbar sind;

(v) die Neue Emittentin sich verpflichtet, jedem Anleihegläubiger alle Steuern, Gebühren oder Abgaben zu erstatten, die ihm im Zusammenhang mit Zahlungen auf die Schuldverschreibungen (einschließlich Steuern und Abgaben, die von der Neuen Emittentin an der Quelle abgeführt oder einbehalten wurden) infolge der Schuldübernahme durch die Neue Emittentin auferlegt werden, vorausgesetzt, dass sich die Verpflichtung auf Beträge beschränkt, die der Anleihegläubiger ohne die Ersetzung der Emittentin nicht hätte tragen müssen;

(vi) unmittelbar nach Wirksamwerden dieser Ersetzung kein Kündigungsgrund und kein Ereignis, das nach Mitteilung oder Fristablauf oder beidem einen Kündigungsgrund darstellen würde, eingetreten ist und fortbesteht; und

(vii) der Hauptzahlstelle bezüglich der betroffenen Rechtsordnungen jeweils ein Rechtsgutachten von anerkannten Rechtsanwälten vorgelegt wurde, das bestätigt, dass die Bestimmungen in § 10(a)(i) bis (vi) erfüllt wurden

(iv) the New Issuer and the Issuer have obtained all necessary governmental and regulatory approvals and consents for such substitution and the Guarantor (if it is not itself the New Issuer) has obtained all such approvals and consents for the giving of the Substitution Guarantee, that the New Issuer has obtained all necessary governmental and regulatory approvals and consents for the performance of its obligations under the Notes, and that all such approvals and consents are in full force and effect and that the obligations assumed by the New Issuer and the Substitution Guarantee given by the Guarantor (if it is not itself the New Issuer) are each valid and binding in accordance with their respective terms and enforceable by each Noteholder;

(v) the New Issuer undertakes to reimburse any Noteholder for such taxes, fees or duties which may be imposed upon such Noteholder in connection with any payments on the Notes (including taxes or duties being deducted or withheld at source by the New Issuer) as a consequence of the assumption of the Issuer's obligations by the New Issuer, provided that such undertaking shall be limited to amounts that would not have been imposed upon the Noteholder had such substitution not occurred;

(vi) immediately after giving effect to such substitution, no Event of Default, and no event which, after notice or lapse of time or both, would become an Event of Default, shall have occurred and be continuing; and

(vii) there shall have been delivered to the Principal Paying Agent for each jurisdiction affected one opinion of lawyers of recognized standing to the effect that § 10(a)(i) through (vi) above have been satisfied.

(b) *Bezugnahmen*.

Im Fall einer Schuldnerersetzung gemäß § 10(a) gilt jede Bezugnahme in diesen Anleihebedingungen auf die Emittentin als eine solche auf die Neue Emittentin.

Im Fall einer Schuldnerersetzung gilt jede Bezugnahme auf die Niederlande als eine solche auf den Staat, in welchem die Neue Emittentin steuerlich ansässig ist.

(c) *Bekanntmachung und Wirksamwerden der Ersetzung.* Die Ersetzung der Emittentin ist gemäß § 11 bekanntzumachen. Mit der Bekanntmachung der Ersetzung wird die Ersetzung wirksam und die Emittentin und im Fall einer wiederholten Anwendung dieses § 10 jede frühere Neue Emittentin von ihren sämtlichen Verpflichtungen aus den Schuldverschreibungen frei. Im Fall einer solchen Schuldnerersetzung wird (werden) die Wertpapierbörse(n) informiert, an der (denen) die Schuldverschreibungen dann notiert sind.

§ 11 Bekanntmachungen

(a) *Veröffentlichungen*. Alle Bekanntmachungen, die die Schuldverschreibungen betreffen, werden (solange die Schuldverschreibungen an der Luxemburger Wertpapierbörse notiert sind) auf der Internet-Seite der Luxemburger Börse unter www.bourse.lu veröffentlicht. Jede Mitteilung gilt am Tag der ersten Veröffentlichung als wirksam erfolgt.

(b) *Mitteilungen an das Clearingsystem*. Solange Schuldverschreibungen an der Luxemburger Börse notiert sind, findet § 11(a) Anwendung. Soweit die Regeln der Luxemburger Börse dies zulassen, kann die Emittentin eine Veröffentlichung nach § 11(a) durch eine Mitteilung an das Clearingsystem zur Weiterleitung an die Anleihegläubiger ersetzen; jede derartige Mitteilung gilt am fünften Tag nach dem Tag der Mitteilung an das Clearingsystem als den Anleihegläubigern mitgeteilt.

(c) *Mitteilungen des Anleihegläubigers.* Mitteilungen, die von einem Anleihegläubiger gemacht werden, müssen schriftlich erfolgen und zusammen mit dem Nachweis seiner Inhaberschaft gemäß § 14(c)(i) an die Hauptzahlstelle geleitet werden. Eine solche Mitteilung kann über das Clearingsystem in der von der Hauptzahlstelle und dem Clearingsystem dafür vorgesehenen Weise erfolgen.

(b) *References*.

In the event of a substitution pursuant to § 10(a), any reference in these Terms and Conditions to the Issuer shall be a reference to the New Issuer.

In the event of a substitution any reference to the Netherlands shall be a reference to the New Issuer's country of domicile for tax purposes.

(c) *Notice and effectiveness of substitution.* Notice of any substitution of the Issuer shall be given by notice in accordance with § 11. Upon such publication, the substitution shall become effective, and the Issuer and in the event of a repeated application of this § 10, any previous New Issuer shall be discharged from any and all obligations under the Notes. In the case of such substitution, the stock exchange(s), if any, on which the Notes are then listed will be notified.

§ 11 Notices

(a) *Publications*. All notices regarding the Notes will be published (so long as the Notes are listed on the Luxembourg Stock Exchange) on the website of the Luxembourg Stock Exchange on www.bourse.lu. Any notice will become effective for all purposes on the date of the first such publication.

(b) *Notification to Clearing System*. So long as any Notes are listed on the Luxembourg Stock Exchange, § 11(a) shall apply. If the Rules of the Luxembourg Stock Exchange so permit, the Issuer may deliver the relevant notice to the Clearing System for communication by the Clearing System to the Noteholders, in lieu of publication as set forth in § 11(a) above; any such notice shall be deemed to have been validly given on the fifth day after the day on which the said notice was given to the Clearing System.

(c) *Notices by a Noteholder*. Notices to be given by any Noteholder shall be made in written form together with an evidence of the Noteholder's entitlement in accordance with § 14 (c)(i) to the Principal Paying Agent. Such notice may be given through the Clearing System in such manner as the Principal Paying Agent and the Clearing System may approve for such purpose.

§ 12 Begebung weiterer Schuldverschreibungen

Die Emittentin behält sich das Recht vor, ohne Zustimmung der Anleihegläubiger weitere Schuldverschreibungen mit gleicher Ausstattung (gegebenenfalls mit Ausnahme des Begebungstags, des Verzinsungsbeginns und/oder des Ausgabepreises) wie die vorliegenden Schuldverschreibungen zu begeben, so dass sie mit diesen eine einheitliche Gesamtemission bilden. Der Begriff „**Schuldverschreibungen**" umfasst im Fall einer solchen weiteren Begebung auch solche zusätzlich begebenen Schuldverschreibungen.

§ 13 Änderung der Anleihebedingungen; Gemeinsamer Vertreter, Änderung der Garantie

(a) *Änderung der Anleihebedingungen*. Die Emittentin kann die Anleihebedingungen mit Zustimmung aufgrund Mehrheitsbeschlusses der Anleihegläubiger nach Maßgabe der §§ 5 ff. des Gesetzes über Schuldverschreibungen aus Gesamtemissionen („**SchVG**") ändern. Eine Änderung der Anleihebedingungen ohne Zustimmung der Emittentin scheidet aus.

Die Anleihegläubiger können insbesondere einer Änderung wesentlicher Inhalte der Anleihebedingungen, einschließlich der in § 5 Absatz 3 SchVG vorgesehenen Maßnahmen mit Ausnahme der Ersetzung der Emittentin, die in § 10 abschließend geregelt ist, mit den in dem nachstehenden § 13(b) genannten Mehrheiten zustimmen. Ein ordnungsgemäß gefasster Mehrheitsbeschluss ist für alle Anleihegläubiger verbindlich.

§ 12 Further Issues

The Issuer reserves the right from time to time, without the consent of the Noteholders to issue additional notes with identical terms and conditions as the Notes in all respects (or in all respects except for the Issue Date, the interest commencement date and/or the issue price) so as to be consolidated and form a single series with such Notes. The term "**Notes**" shall, in the event of such further issue, also comprise such further notes.

§ 13 Amendments to the Terms and Conditions; Joint Representative, Amendments to the Guarantee

(a) *Amendment of the Terms and Conditions*. The Issuer may amend the Terms and Conditions with the consent of a majority resolution of the Noteholders pursuant to §§ 5 et seq. of the German Act on Issues of Debt Securities (*Gesetz über Schuldverschreibungen aus Gesamtemissionen*—"**SchVG**"). There will be no amendment of the Terms and Conditions without the Issuer's consent.

In particular, the Noteholders may consent to amendments which materially change the substance of the Terms and Conditions, including such measures as provided for under § 5(3) of the SchVG, but excluding a substitution of the Issuer, which is exclusively subject to the provisions in § 10, by resolutions passed by such majority of the votes of the Noteholders as stated under § 13(b) below. A duly passed majority resolution will be binding upon all Noteholders.

(b) *Mehrheitserfordernisse*. Vorbehaltlich des nachstehenden Satzes und der Erreichung der erforderlichen Beschlussfähigkeit, beschließen die Anleihegläubiger mit der einfachen Mehrheit der an der Abstimmung teilnehmenden Stimmrechte. Beschlüsse, durch welche der wesentliche Inhalt der Anleihebedingungen, insbesondere in den Fällen des § 5 Absatz 3 Nummer 1 bis 9 SchVG, geändert wird, bedürfen zu ihrer Wirksamkeit einer Mehrheit von mindestens 75% der an der Abstimmung teilnehmenden Stimmrechte (eine „**Qualifizierte Mehrheit**"). Das Stimmrecht ruht, solange die Schuldverschreibungen der Emittentin oder einem mit ihr verbundenen Unternehmen (§ 271 Absatz 2 HGB) zustehen oder für Rechnung der Emittentin oder eines mit ihr verbundenen Unternehmens gehalten werden.

(c) *Beschlüsse.* Beschlüsse der Anleihegläubiger werden entweder in einer Gläubigerversammlung nach § 13(c)(i) oder im Wege der Abstimmung ohne Versammlung nach § 13(c)(ii) getroffen, die von der Emittentin oder einem gemeinsamen Vertreter einberufen wird. Anleihegläubiger, deren Schuldverschreibungen zusammen 5% des jeweils ausstehenden Gesamtnennbetrags der Schuldverschreibungen erreichen, können gemäß § 9 Absatz 1 S. 2 SchVG schriftlich die Einberufung einer Anleihegläubigerversammlung oder Abstimmung ohne Versammlung mit einer gemäß § 9 Absatz 1 S. 2 SchVG zulässigen Begründung verlangen.

(i) Beschlüsse der Anleihegläubiger im Rahmen einer Gläubigerversammlung werden nach §§ 9 ff. SchVG getroffen. Die Einberufung der Gläubigerversammlung regelt die weiteren Einzelheiten der Beschlussfassung und der Abstimmung. Mit der Einberufung der Gläubigerversammlung werden in der Tagesordnung die Beschlussgegenstände sowie die Vorschläge zur Beschlussfassung den Anleihegläubigern bekannt gegeben.

(b) *Majority requirements.* Except as provided by the following sentence and provided that the quorum requirements are being met, the Noteholders may pass resolutions by simple majority of the voting rights participating in the vote. Resolutions which materially change the substance of the Terms and Conditions, in particular in the cases of § 5(3) numbers 1 through 9 of the SchVG, may only be passed by a majority of at least 75 per cent. of the voting rights participating in the vote (a "**Qualified Majority**"). The voting right is suspended as long as any Notes are attributable to the Issuer or any of its affiliates (within the meaning of § 271(2) of the German Commercial Code (*Handelsgesetzbuch*)) or are being held for the account of the Issuer or any of its affiliates.

(c) *Resolutions*. Resolutions of the Noteholders will be made either in a Noteholders' meeting in accordance with § 13(c)(i) or by means of a vote without a meeting (*Abstimmung ohne Versammlung*) in accordance with § 13(c)(ii), in either case convened by the Issuer or a joint representative, if any. Pursuant to § 9(1) sentence 2 of the SchVG, Noteholders holding Notes in the total amount of 5 per cent. of the outstanding principal amount of the Notes may in writing request to convene a Noteholders' meeting or vote without a meeting for any of the reasons permitted pursuant to § 9(1) sentence 2 of the SchVG.

(i) Resolutions of the Noteholders in a Noteholders' meeting will be made in accordance with § 9 et seq. of the SchVG. The convening notice of a Noteholders' meeting will provide the further details relating to the resolutions and the voting procedure. The subject matter of the vote as well as the proposed resolutions will be notified to Noteholders in the agenda of the meeting.

(ii) Beschlüsse der Anleihegläubiger im Wege der Abstimmung ohne Versammlung werden nach § 18 SchVG getroffen. Die Aufforderung zur Stimmabgabe durch den Abstimmungsleiter regelt die weiteren Einzelheiten der Beschlussfassung und der Abstimmung. Mit der Aufforderung zur Stimmabgabe werden die Beschlussgegenstände sowie die Vorschläge zur Beschlussfassung den Anleihegläubigern bekannt gegeben.

(d) *Zweite Gläubigerversammlung.* Wird die Beschlussfähigkeit bei der Abstimmung ohne Versammlung nach § 13(c)(ii) nicht festgestellt, kann der Abstimmungsleiter eine Gläubigerversammlung einberufen, welche als zweite Gläubigerversammlung im Sinne des § 15 Absatz 3 Satz 3 SchVG gilt.

(e) *Anmeldung*. Die Stimmrechtsausübung ist von einer vorherigen Anmeldung der Anleihegläubiger abhängig. Die Anmeldung muss bis zum dritten Tag vor der Gläubigerversammlung im Falle einer Gläubigerversammlung (wie in § 13(c)(i) oder § 13(d) beschrieben) bzw. vor dem Beginn des Abstimmungszeitraums im Falle einer Abstimmung ohne Versammlung (wie in § 13(c)(ii) beschrieben) unter der in der Aufforderung zur Stimmabgabe angegebenen Anschrift zugehen. Zusammen mit der Anmeldung müssen Anleihegläubiger den Nachweis ihrer Berechtigung zur Teilnahme an der Abstimmung durch eine besondere Bescheinigung ihrer Depotbank in Textform und die Vorlage eines Sperrvermerks der Depotbank erbringen, aus dem hervorgeht, dass die relevanten Schuldverschreibungen für den Zeitraum vom Tag der Absendung der Anmeldung (einschließlich) bis zu dem angegebenen Ende der Versammlung (einschließlich) bzw. dem Ende des Abstimmungszeitraums (einschließlich) nicht übertragen werden können.

(ii) Resolutions of the Noteholders by means of a voting not requiring a physical meeting (*Abstimmung ohne Versammlung*) will be made in accordance § 18 of the SchVG. The request for voting as submitted by the chairman (*Abstimmungsleiter*) will provide the further details relating to the resolutions and the voting procedure. The subject matter of the vote as well as the proposed resolutions will be notified to Noteholders together with the request for voting.

(d) *Second noteholders' meeting*. If it is ascertained that no quorum exists for the vote without meeting pursuant to § 13(c)(ii), the chairman (*Abstimmungsleiter*) may convene a meeting, which shall be deemed to be a second meeting within the meaning of § 15(3) sentence 3 of the SchVG.

(e) *Registration*. The exercise of voting rights is subject to the registration of the Noteholders. The registration must be received at the address stated in the request for voting no later than the third day prior to the meeting in the case of a Noteholders' meeting (as described in § 13(c)(i) or § 13(d)) or the beginning of the voting period in the case of voting not requiring a physical meeting (as described in § 13(c)(ii)), as the case may be. As part of the registration, Noteholders must demonstrate their eligibility to participate in the vote by means of a special confirmation of their respective custodian bank hereof in text form and by submission of a blocking instruction by the custodian bank stating that the relevant Notes are not transferable from and including the day such registration has been sent until and including the stated end of the meeting or day the voting period ends, as the case may be.

(f) *Gemeinsamer Vertreter*. Die Anleihegläubiger können durch Mehrheitsbeschluss die Bestellung und Abberufung eines gemeinsamen Vertreters, die Aufgaben und Befugnisse des gemeinsamen Vertreters, die Übertragung von Rechten der Anleihegläubiger auf den gemeinsamen Vertreter und eine Beschränkung der Haftung des gemeinsamen Vertreters bestimmen. Die Bestellung eines gemeinsamen Vertreters bedarf einer Qualifizierten Mehrheit, wenn er ermächtigt wird, wesentlichen Änderungen der Anleihebedingungen gemäß § 13(a) zuzustimmen.

(g) *Bekanntmachungen*. Bekanntmachungen betreffend diesen § 13 erfolgen gemäß den §§ 5ff. SchVG sowie nach § 11.

(h) *Änderung der Garantie*. Die oben aufgeführten auf die Änderung der Anleihebedingungen anwendbaren Bestimmungen finden sinngemäß auf die Bestimmungen der Garantie und einer etwaigen Ersetzungsgarantie.

§ 14 Anwendbares Recht, Erfüllungsort und Gerichtsstand

(a) *Geltendes Recht; Erfüllungsort*. Form und Inhalt der Schuldverschreibungen sowie alle sich daraus ergebenden Rechte und Pflichten bestimmen sich ausschließlich nach dem Recht der Bundesrepublik Deutschland. Erfüllungsort ist Frankfurt am Main.

(b) *Gerichtsstand*. Vorbehaltlich eines zwingend vorgeschriebenen Gerichtsstands für bestimmte Verfahren nach dem SchVG ist nicht-ausschließlicher Gerichtsstand für alle sich aus den in diesen Anleihebedingungen geregelten Rechtsverhältnissen ergebenden Rechtsstreitigkeiten mit der Emittentin Frankfurt am Main.

(f) *Joint representative*. The Noteholders may by majority resolution provide for the appointment or dismissal of a joint representative, the duties and responsibilities and the powers of such joint representative, the transfer of the rights of the Noteholders to the joint representative and a limitation of liability of the joint representative. Appointment of a joint representative may only be passed by a Qualified Majority if such joint representative is to be authorised to consent to a material change in the substance of the Terms and Conditions in accordance with § 13(a) hereof.

(g) *Notices*. Any notices concerning this § 13 will be made in accordance with § 5 et seq. of the SchVG and § 11.

(h) *Amendments to the Guarantee*. The provisions set out above applicable to the amendment of the Terms and Conditions shall apply *mutatis mutandis* to the Guarantee and to any Substitution Guarantee.

§ 14 Applicable Law, Place of Performance and Jurisdiction

(a) *Applicable law; place of performance*. The form and content of the Notes as well as all the rights and duties arising therefrom are governed exclusively by the laws of the Federal Republic of Germany. Place of performance is Frankfurt am Main.

(b) *Jurisdiction*. Subject to any mandatory jurisdiction for specific proceedings under the SchVG, the non-exclusive court of venue for all litigation with the Issuer arising from the legal relations established in these Terms and Conditions is Frankfurt am Main.

(c) *Gerichtliche Geltendmachung*. Jeder Anleihegläubiger kann in Rechtsstreitigkeiten gegen die Emittentin im eigenen Namen seine Rechte aus den ihm zustehenden Schuldverschreibungen geltend machen unter Vorlage der folgenden Dokumente: (i) einer Bescheinigung seiner Depotbank, die (A) den vollen Namen und die volle Anschrift des Anleihegläubigers bezeichnet, (B) den Gesamtnennbetrag der Schuldverschreibungen angibt, die am Ausstellungstag dieser Bescheinigung dem bei dieser Depotbank bestehenden Depot dieses Anleihegläubigers gutgeschrieben sind, und (C) bestätigt, dass die Depotbank dem Clearingsystem und der Hauptzahlstelle eine schriftliche Mitteilung zugeleitet hat, die die Angaben gemäß (A) und (B) enthält und Bestätigungsvermerke des Clearingsystems sowie des jeweiligen Clearingsystem-Kontoinhabers trägt, sowie (ii) einer von einem Vertretungsberechtigten des Clearingsystems oder der Hauptzahlstelle bestätigten Ablichtung der Globalurkunde.

§ 15 Sprache

Diese Anleihebedingungen sind in deutscher Sprache abgefasst. Eine Übersetzung in die englische Sprache ist beigefügt. Der deutsche Text ist bindend und maßgeblich. Die Übersetzung in die englische Sprache ist unverbindlich.

(c) *Enforcement*. Any Noteholder may in any proceedings against the Issuer protect and enforce in its own name its rights arising under its Notes by submitting the following documents: (i) a certificate issued by its Custodian (A) stating the full name and address of the Noteholder, (B) specifying an aggregate principal amount of Notes credited on the date of such certificate to such Noteholder's securities account maintained with such Custodian and (C) confirming that the Custodian has given a written notice to the Clearing System as well as to the Principal Paying Agent containing the information pursuant to (A) and (B) and bearing acknowledgements of the Clearing System and the relevant Clearing System accountholder as well as (ii) a copy of the Global Note certified by a duly authorised officer of the Clearing System or the Principal Paying Agent as being a true copy.

§ 15 Language

These Terms and Conditions are written in the German language and provided with an English language translation. The German text shall be controlling and binding. The English language translation is non-binding.

ANLEIHEBEDINGUNGEN („Anleihebedingungen")

Diese Anleihebedingungen sind in deutscher Sprache abgefasst. Eine Übersetzung in die englische Sprache ist beigefügt. Der deutsche Text ist bindend und maßgeblich. Die Übersetzung in die englische Sprache ist unverbindlich.

§ 1 Währung, Stückelung, Form

(a) *Währung; Stückelung*. Die Wintershall Dea Finance B.V. (die „**Emittentin**") begibt am 25. September 2019 (der „**Begebungstag**") Schuldverschreibungen (die „**Schuldverschreibungen**") in Euro (die „**Festgelegte Währung**") im Gesamtnennbetrag von EUR 1.000.000.000 eingeteilt in Schuldverschreibungen im festgelegten Nennbetrag von je EUR 100.000 (der „**Nennbetrag**").

Die Schuldverschreibungen werden von der Wintershall Dea GmbH (die „**Garantin**") garantiert.

(b) *Form*. Die Schuldverschreibungen lauten auf den Inhaber.

(c) *Vorläufige Globalurkunde, Austausch*. Die Schuldverschreibungen sind zunächst in einer vorläufigen Globalurkunde (die „**Vorläufige Globalurkunde**") ohne Zinsscheine verbrieft.

Die Vorläufige Globalurkunde wird insgesamt oder teilweise und unentgeltlich am oder nach dem Tag, der 40 Tage nach dem Beginn des Angebots bzw. dem Begebungstag liegt, je nachdem, welcher Tage später ist, gegen Nachweis über das Nichtbestehen wirtschaftlichen U.S.-Eigentums im Sinne des U.S.-Rechts (non-U.S. beneficial ownership) in der in der Vorläufigen Globalurkunde vorgesehenen Form, für den Inhaber von Schuldverschreibungen gegen eine dauerhafte Globalurkunde (die „**Dauer-Globalurkunde**") (die Vorläufige Globalurkunde und die Dauer-Globalurkunde jeweils auch eine „**Globalurkunde**") ohne Zinsscheine eingetauscht. Ein Recht der Anleihegläubiger auf Ausgabe und Lieferung von Einzelurkunden oder Zinsscheinen besteht nicht.

(d) *Clearingsystem*. Die Vorläufige Globalurkunde und die Dauer-Globalurkunde werden solange von einem Clearingsystem oder im Auftrag eines Clearingsystems verwahrt, bis sämtliche Verpflichtungen der Emittentin aus den Schuldverschreibungen erfüllt sind.

TERMS AND CONDITIONS ("Terms and Conditions")

These Terms and Conditions are written in the German language and provided with an English language translation. The German text shall be controlling and binding. The English language translation is non-binding.

§ 1 Currency, Denomination, Form

(a) *Currency; Denomination*. The Notes are issued on 25 September 2019 (the "**Issue Date**") by Wintershall Dea Finance B.V. (the "**Issuer**") in Euro (the "**Specified Currency**"), in the aggregate principal amount of EUR 1,000,000,000 divided into notes in the specified denomination of EUR 100,000 (the "**Principal Amount**") each (the "**Notes**").

The Notes are guaranteed by Wintershall Dea GmbH (the "**Guarantor**").

(b) *Form*. The Notes are issued in bearer form.

(c) *Temporary Global Note, Exchange*. The Notes are initially represented by a temporary global Note (the "**Temporary Global Note**") without interest coupons.

The Temporary Global Note shall be exchanged, in whole or in part and free of charge to the holder of Notes, on or after the day that is 40 days after the later of the commencement of the offering and the Issue Date for a permanent global Note (the "**Permanent Global Note**") (the Temporary Global Note and the Permanent Global Note, each a "**Global Note**") without interest coupons upon certification as to non-U.S. beneficial ownership in the form set out in the Temporary Global Note. The right of the Noteholders to require the issue and delivery of definitive notes or interest coupons is excluded.

(d) *Clearing System*. Each of the Temporary Global Note and the Permanent Global Note will be held in custody by or on behalf of a Clearing System until all obligations of the Issuer under the Notes have been satisfied.

„**Clearingsystem**" bedeutet jeweils Folgendes: Clearstream Banking S.A., Luxemburg („**CBL**") und Euroclear Bank SA/NV, Brüssel („**Euroclear**") (CBL und Euroclear jeweils ein internationaler Zentralverwahrer von Wertpapieren (international central securities depositary) („**ICSD**" und zusammen die „**ICSDs**")) sowie jeden Funktionsnachfolger eines ICSD.

Die Schuldverschreibungen werden in Form einer New Global Note („**NGN**") ausgegeben und von einem gemeinsamen Wertpapierverwahrer (common safekeeper) im Namen beider ICSDs verwahrt.

Der Gesamtnennbetrag der durch die Globalurkunde verbrieften Schuldverschreibungen entspricht dem jeweils in den Registern beider ICSDs eingetragenen Gesamtbetrag. Die Register der ICSDs (unter denen man die Register versteht, die jeder ICSD für seine Kunden über den Betrag ihres Anteils an den Schuldverschreibungen führt) sind schlüssiger Nachweis über den Gesamtnennbetrag der durch die Globalurkunde verbrieften Schuldverschreibungen, und eine zu diesen Zwecken von einem ICSD jeweils ausgestellte Bestätigung mit dem Nennbetrag der so verbrieften Schuldverschreibungen ist ein schlüssiger Nachweis über den Inhalt des Registers des jeweiligen ICSD zu diesem Zeitpunkt.

Bei Rückzahlung oder einer Zinszahlung bezüglich der durch die Globalurkunde verbrieften Schuldverschreibungen bzw. bei Kauf und Entwertung der durch die Globalurkunde verbrieften Schuldverschreibungen stellt die Emittentin sicher, dass die Einzelheiten über Rückzahlung, Zahlung bzw. Kauf und Entwertung bezüglich der Globalurkunde *pro rata* in die Register der ICSDs eingetragen werden und dass nach dieser Eintragung vom Gesamtnennbetrag der in die Register der ICSDs aufgenommenen und durch die Globalurkunde verbrieften Schuldverschreibungen der Gesamtnennbetrag der zurückgezahlten bzw. gekauften und entwerteten Schuldverschreibungen abgezogen wird.

"**Clearing System**" means Clearstream Banking S.A., Luxembourg ("**CBL**") and Euroclear Bank SA/NV, Brussels ("**Euroclear**") (CBL and Euroclear each an international central securities depositary ("**ICSD**" and together the "**ICSDs**")) as well as any successor in respect of the functions performed by each ICSD.

The Notes are issued in new global note ("**NGN**") form and are kept in custody by a common safekeeper on behalf of both ICSDs.

The aggregate principal amount of Notes represented by the Global Note shall be the aggregate amount from time to time entered in the records of both ICSDs. The records of the ICSDs (which expression means the records that each ICSD holds for its customers which reflect the amount of such customers' interest in the Notes) shall be conclusive evidence of the aggregate principal amount of Notes represented by the Global Note and, for these purposes, a statement issued by an ICSD stating the principal amount of Notes so represented at any time shall be conclusive evidence of the records of the relevant ICSD at that time.

On any redemption or interest being made in respect of, or purchase and cancellation of, any of the Notes represented by the Global Note the Issuer shall procure that details of such redemption, payment or purchase and cancellation (as the case may be) in respect of the Global Note shall be entered *pro rata* in the records of the ICSDs and, upon any such entry being made, the aggregate principal amount of the Notes recorded in the records of the ICSDs and represented by the Global Note shall be reduced by the aggregate principal amount of the Notes so redeemed or purchased and cancelled.

Bei Austausch eines Anteils von ausschließlich durch eine vorläufige Globalurkunde verbrieften Schuldverschreibungen wird die Emittentin sicherstellen, dass die Einzelheiten dieses Austauschs *pro rata* in die Aufzeichnungen der ICSDs aufgenommen werden.

Die Vorläufige Globalurkunde und die Dauer-Globalurkunde tragen jeweils die eigenhändige Unterschrift von einem Vertretungsberechtigten der Emittentin sowie die eigenhändige Unterschrift eines Kontrollbeauftragten der Hauptzahlstelle.

(e) *Anleihegläubiger*. Den Inhabern von Schuldverschreibungen („**Anleihegläubiger**") stehen Miteigentumsanteile oder vergleichbare andere Rechte an der Globalurkunde zu, die gemäß anwendbarem Recht und den Bestimmungen und Regeln des Clearingsystems übertragen werden können.

§ 2 **Status, Negativerklärung und Garantie**

(a) *Status*. Die Schuldverschreibungen begründen nicht nachrangige und, vorbehaltlich der Garantie, nicht besicherte Verbindlichkeiten der Emittentin, die im gleichen Rang untereinander und, im Falle der Insolvenz, der Auflösung oder der Liquidation der Emittentin oder eines der Abwendung der Insolvenz der Emittentin dienenden Verfahrens, im gleichen Rang mit allen anderen gegenwärtigen und zukünftigen nicht besicherten und nicht nachrangigen Verbindlichkeiten der Emittentin stehen, mit Ausnahme von Verbindlichkeiten, die nach geltenden Rechtsvorschriften vorrangig sind.

On an exchange of a portion only of the Notes represented by a Temporary Global Note, the Issuer shall procure that details of such exchange shall be entered *pro rata* in the records of the ICSDs.

The Temporary Global Note and the Permanent Global Note shall each bear the manual signature of one duly authorised officer of the Issuer as well as the manual signature of an authentication officer of the Principal Paying Agent.

(e) *Noteholders*. The holders of Notes ("**Noteholders**") are entitled to co-ownership participations or other comparable rights in the Global Note, which are transferable in accordance with applicable laws and the rules and regulations of the Clearing System.

§ 2 **Status, Negative Pledge and Guarantee**

(a) *Status*. The Notes constitute *unsubordinated* and, subject to the Guarantee, unsecured obligations of the Issuer ranking *pari passu* among themselves and, in the event of the insolvency, dissolution or liquidation of the Issuer or any proceeding to avoid insolvency of the Issuer, *pari passu* with all other present and future unsubordinated and unsecured obligations of the Issuer, save for such obligations which may be preferred by applicable law.

(b) *Negativerklärung der Emittentin*. Solange noch Kapital- oder Zinsbeträge aus den Schuldverschreibungen ausstehen, jedoch nur bis zu dem Zeitpunkt, an dem alle auf die Schuldverschreibungen gemäß diesen Anleihebedingungen zu zahlenden Beträge an Kapital und Zinsen dem Clearingsystem zur Verfügung gestellt worden sind, verpflichtet sich die Emittentin, kein Grundpfandrecht, Mobiliarpfandrecht, Pfandrecht oder sonstiges dingliches Sicherungsrecht (jedes ein „**Sicherungsrecht**") an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder Teilen davon zur Besicherung einer Maßgeblichen Fremdkapitalverbindlichkeit zu gewähren oder bestehen zu lassen, ohne zuvor oder gleichzeitig entweder die Anleihegläubiger gleichrangig und anteilig an einem solchen Sicherungsrecht zu beteiligen oder zu Gunsten der Anleihegläubiger ein anderes, gleichwertiges Sicherungsrecht zu bestellen, welches von einem unabhängigen Sachverständigen als gleichwertige Sicherheit beurteilt wird.

Die Verpflichtung nach Satz 1 dieses § 2(b) findet keine Anwendung auf ein Sicherungsrecht, das

(i) von der Emittentin an gegenwärtigen oder zukünftigen, tatsächlichen oder bedingten Forderungen bestellt wird, die der Emittentin gegen die Garantin oder eine andere Tochtergesellschaft der Garantin aufgrund der darlehensweisen Weiterleitung des Emissionserlöses aus der Begebung von Wertpapieren zustehen, sofern ein solches Sicherungsrecht der Besicherung der Verpflichtungen der Emittentin aus den jeweiligen Wertpapieren dient;

(ii) gesetzlich vorgeschrieben ist oder kraft Gesetzes entsteht;

(iii) eine Maßgebliche Fremdkapitalverbindlichkeit besichert, die infolge einer zukünftigen Akquisition zu einer Verbindlichkeit der Emittentin wird; oder

(iv) der vollständigen oder teilweisen Verlängerung, Erneuerung oder Ersetzung (oder wiederholte Verlängerungen, Erneuerungen oder Ersetzungen) eines der vorstehend in den Klauseln (i) bis (iii) aufgeführten Sicherungsrechte dient.

(b) *Negative pledge of the Issuer.* So long as any amounts of interest or principal remain outstanding under the Notes, but only up to the time all amounts payable to Noteholders under the Notes in accordance with these Terms and Conditions have been placed at the disposal of the Clearing System, the Issuer undertakes not to create or permit to subsist any mortgage, charge, pledge or other form of encumbrance *in rem* (each a "**Security Interest**") over the whole or any part of its present or future assets or revenues to secure any Relevant Indebtedness, without prior thereto or at the same time letting the Noteholders either share equally and rateably in such Security Interest or benefit from an equivalent other Security Interest which will be approved by an independent expert as being equivalent security.

The undertaking pursuant to sentence 1 of this § 2(b) will not apply to any Security Interest which

(i) is provided by the Issuer over any present or future, actual or contingent claims of the Issuer against the Guarantor or another Subsidiary of the Guarantor arising from the on-lending of the proceeds from the issuance by the Issuer of any securities, provided that any such Security Interest secures the obligations of the Issuer under any such securities;

(ii) is mandatory according to, or created by operation of, applicable laws;

(iii) secures a Relevant Indebtedness that becomes an obligation of the Issuer as a consequence of a future acquisition; or

(iv) is provided for any extension, renewal or replacement (or successive extensions, renewals or replacements) in whole or in part of any Security Interest referred to in clauses (i) through (iii) above.

Ein nach § 2(b) zu leistendes Sicherungsrecht kann auch zu Gunsten eines für die Anleihegläubiger handelnden Treuhänders bestellt werden.

„**Maßgebliche Fremdkapitalverbindlichkeiten**" bezeichnet jegliche Fremdkapitalverbindlichkeiten in Form von (oder verbrieft durch) Anleihen, Schuldverschreibungen, Schuldtitel oder sonstige Wertpapiere, soweit sie an einer Börse oder im Freiverkehr oder in einem anderen Wertpapiermarkt notiert, zugelassen oder gehandelt werden oder notiert, zugelassen oder gehandelt werden können sowie Schuldscheine.

(c) *Garantie*. Die Garantin hat die unbedingte und unwiderrufliche Garantie für die fristgerechte Zahlung von Kapital, Zinsen und sonstigen aus den Schuldverschreibungen zu zahlenden Beträgen gemäß einer Garantie datiert September 2019 (die „**Garantie**") übernommen. Die Garantie ist ein Vertrag zugunsten jedes Anleihegläubigers als begünstigtem Dritten gem. § 328 Absatz 1 BGB, der das Recht begründet, die Garantin unmittelbar aus der Garantie auf Erfüllung in Anspruch zu nehmen und Ansprüche aus der Garantie gegen die Garantin unmittelbar durchzusetzen.

(d) *Negativerklärung der Garantin*. In der Garantie hat sich die Garantin verpflichtet, solange noch Kapital- oder Zinsbeträge aus den Schuldverschreibungen ausstehen, jedoch nur bis zu dem Zeitpunkt, an dem alle auf die Schuldverschreibungen gemäß diesen Anleihebedingungen zu zahlenden Beträgen an Kapital und Zinsen dem Clearingsystem zur Verfügung gestellt worden sind,

(i) kein Sicherungsrecht an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder Teilen davon zur Besicherung einer Maßgeblichen Fremdkapitalverbindlichkeit zu gewähren oder bestehen zu lassen; und

Any Security Interest which is to be provided pursuant to § 2(b) may also be provided to a person acting as trustee for the Noteholders.

"**Relevant Indebtedness**" means any indebtedness which is in the form of, or represented or evidenced by, bonds, notes, debentures, loan stock or other securities which for the time being are capable of being, quoted, listed or dealt in or traded on any stock exchange or over-the-counter or other securities market, as well as loan notes (*Schuldscheine*).

(c) *Guarantee.* The Guarantor has given an unconditional and irrevocable guarantee pursuant to a guarantee dated September 2019 (the "**Guarantee**") for the due payment of principal of, and interest on, and any other amounts expressed to be payable under the Notes. The Guarantee constitutes a contract for the benefit of the Noteholders from time to time as third-party beneficiaries in accordance with § 328 paragraph 1 of the German Civil Code (*Bürgerliches Gesetzbuch*), giving rise to the right of each Noteholder to require performance under the Guarantee directly from the Guarantor and to enforce the Guarantee directly against the Guarantor.

(d) *Negative Pledge of the Guarantor*. In the Guarantee the Guarantor has undertaken, so long as any amounts of interest or principal remain outstanding under the Notes, but only up to the time all amounts payable to Noteholders under the Notes in accordance with these Terms and Conditions have been placed at the disposal of the Clearing System,

(i) not to create or permit to subsist any Security Interest over the whole or any part of its present or future assets or revenues to secure any Relevant Indebtedness; and

(ii) zu veranlassen (soweit rechtlich möglich und zulässig), dass keine Tochtergesellschaft ein Sicherungsrecht an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder jeweiligen Teilen davon zur Besicherung einer Maßgeblichen Fremdkapitalverbindlichkeit gewährt oder bestehen lässt,

ohne zuvor oder gleichzeitig entweder die Anleihegläubiger gleichrangig und anteilig an einem solchen Sicherungsrecht zu beteiligen oder zu Gunsten der Anleihegläubiger ein anderes, gleichwertiges Sicherungsrecht zu bestellen, welches von einem unabhängigen Sachverständigen als gleichwertige Sicherheit beurteilt wird.

Die in Satz 1 dieses § 2(d) beschriebene Verpflichtung findet keine Anwendung auf ein Sicherungsrecht, das

(i) von einer Tochtergesellschaft an gegenwärtigen oder zukünftigen, tatsächlichen oder bedingten Forderungen bestellt wird, die der Tochtergesellschaft gegen die Garantin oder eine andere Tochtergesellschaft der Garantin aufgrund der darlehensweisen Weiterleitung des Emissionserlöses aus der Begebung von Wertpapieren zustehen, sofern ein solches Sicherungsrecht der Besicherung der Verpflichtungen der Tochtergesellschaft aus den jeweiligen Wertpapieren dient;

(ii) gesetzlich vorgeschrieben ist oder kraft Gesetzes entsteht;

(iii) eine Maßgebliche Fremdkapitalverbindlichkeit besichert, die infolge einer zukünftigen Akquisition zu einer Verbindlichkeit der Garantin oder einer Tochtergesellschaft wird;

(iv) der vollständigen oder teilweisen Verlängerung, Erneuerung oder Ersetzung (oder wiederholte Verlängerungen, Erneuerungen oder Ersetzungen) eines der vorstehend in den Klauseln (i) bis (iii) aufgeführten Sicherungsrechte dient.

Ein nach § 2(d) zu leistendes Sicherungsrecht kann auch zu Gunsten eines für die Anleihegläubiger handelnden Treuhänders bestellt werden.

(ii) to procure (to the extent legally possible and permissible) that no Subsidiary will create or permit to subsist any present or future Security Interest over the whole or any part of its assets or revenues to secure any Relevant Indebtedness,

without prior thereto or at the same time letting the Noteholders either share equally and rateably in such Security Interest or benefit from an equivalent other Security Interest which will be approved by an independent expert as being equivalent security.

The undertaking described in sentence 1 of this § 2(d) will not apply to any Security Interest which

(i) is provided by any Subsidiary over any present or future, actual or contingent claims of the Subsidiary against the Guarantor or another Subsidiary of the Guarantor arising from the on-lending of the proceeds from the issuance by the Subsidiary of any securities, provided that any such Security Interest secures the obligations of the Subsidiary under any such securities;

(ii) is mandatory according to, or created by operation of, applicable laws;

(iii) secures a Relevant Indebtedness that becomes an obligation of the Guarantor or any Subsidiary as a consequence of a future acquisition;

(iv) is provided for any extension, renewal or replacement (or successive extensions, renewals or replacements) in whole or in part of any Security Interest referred to in clauses (i) through (iii) above.

Any Security Interest which is to be provided pursuant to § 2(d) may also be provided to a person acting as trustee for the Noteholders.

„**Tochtergesellschaft**" bezeichnet eine Rechtsträger, dessen Abschluss aufgrund gesetzlicher Vorgaben oder nach Maßgabe allgemein anerkannter Rechnungslegungsgrundsätze zu einem beliebigen Zeitpunkt mit dem der Garantin zu konsolidieren ist (Vollkonsolidierung).

§ 3 Zinsen

(a) *Zinssatz und Zinszahlungstage*. Die Schuldverschreibungen werden bezogen auf ihren ausstehenden Nennbetrag ab dem 25. September 2019 (der „**Verzinsungsbeginn**") (einschließlich) bis zum Endfälligkeitstag (ausschließlich) verzinst.

Die Schuldverschreibungen werden mit jährlich 1,823% verzinst. Die Zinsen sind nachträglich an jedem Zinszahlungstag zahlbar.

„**Zinszahlungstag**" bezeichnet den 25. September eines jeden Jahres, erstmals den 25. September 2020.

(b) *Zinstagequotient*. Zinsen für einen beliebigen Zeitraum (ausgenommen ist ein etwaiger Zeitraum, für den ein Bruchteilzinsbetrag festgelegt ist) werden auf der Grundlage des Zinstagequotienten berechnet.

„**Zinstagequotient**" bezeichnet bei der Berechnung des Zinsbetrages für einen beliebigen Zeitraum (ab dem ersten Tag dieses Zeitraums (einschließlich) bis zum letzten Tag dieses Zeitraums (ausschließlich)) (der „**Zinsberechnungszeitraum**"):

(i) wenn der Zinsberechnungszeitraum der Feststellungsperiode entspricht, in die er fällt, oder kürzer als diese ist, die Anzahl von Tagen in dem Zinsberechnungszeitraum dividiert durch die Anzahl von Tagen in der betreffenden Feststellungsperiode; und

(ii) wenn der Zinsberechnungszeitraum länger als eine Feststellungsperiode ist, die Summe aus:

(A) der Anzahl der Tage in dem betreffenden Zinsberechnungszeitraum, die in die Feststellungsperiode fallen, in der der Zinsberechnungszeitraum beginnt, dividiert durch die Anzahl der Tage in der betreffenden Feststellungsperiode; und

"**Subsidiary**" means any entity whose financial statements at any time are required by law or in accordance with generally accepted accounting principles to be fully consolidated with those of the Guarantor.

§ 3 Interest

(a) *Rate of interest and Interest Payment Dates*. The Notes bear interest on their outstanding principal amount from and including 25 September 2019 (the "**Interest Commencement Date**") to but excluding the Maturity Date.

The Notes bear interest at the rate of 1.823 per cent. per annum, such interest being payable in arrear on each Interest Payment Date.

"**Interest Payment Date**" means 25 September in each year, commencing on 25 September 2020.

(b) *Day Count Fraction*. If interest is required to be calculated for any period of time (other than any period of time for which a broken interest amount has been fixed), such interest shall be calculated on the basis of the Day Count Fraction.

"**Day Count Fraction**" means, in respect of the calculation of an amount of interest on any Note for any period of time (from and including the first day of such period to but excluding the last day of such period) (the "**Calculation Period**"):

(i) if the Calculation Period is equal to or shorter than the Determination Period during which it falls, the number of days in the Calculation Period divided by the number of days in such Determination Period; and

(ii) if the Calculation Period is longer than one Determination Period, the sum of:

(A) the number of days in such Calculation Period falling in the Determination Period in which the Calculation Period begins divided by the number of days in such Determination Period; and

(B) die Anzahl der Tage in dem betreffenden Zinsberechnungszeitraum, die in die nachfolgende Feststellungsperiode fallen, dividiert durch die Anzahl der Tage in der betreffenden Feststellungsperiode.

Dabei gilt Folgendes:

„**Feststellungstermin**" bezeichnet den 25. September eines jeden Jahres;

„**Feststellungsperiode**" bezeichnet jeden Zeitraum ab einem Feststellungstermin (einschließlich), der in ein beliebiges Jahr fällt, bis zum nächsten Feststellungstermin (ausschließlich).

(c) *Ende des Zinslaufs*. Der Zinslauf der Schuldverschreibungen endet an dem Ende des Tages, der dem Tag vorausgeht, an dem sie zur Rückzahlung fällig werden. Falls die Emittentin die *Schuldverschreibungen* bei Fälligkeit nicht einlöst, wird der ausstehende Betrag ab dem Tag der Fälligkeit (einschließlich) bis zum Tag der vollständigen Zahlung an die Anleihegläubiger (ausschließlich) mit dem gesetzlich bestimmten Verzugszins verzinst.[7].

§ 4 Rückzahlung

(a) *Rückzahlung bei Endfälligkeit*. Soweit nicht zuvor bereits insgesamt oder teilweise zurückgezahlt oder angekauft und eingezogen, werden die Schuldverschreibungen zu ihrem Nennbetrag am 25. September 2031 (der „**Endfälligkeitstag**") zurückgezahlt.

(b) *Rückkauf.* Die Emittentin kann jederzeit im Markt oder auf andere Weise Schuldverschreibungen ankaufen und verkaufen. Sofern solche Käufe durch öffentliches Angebot erfolgen, muss dieses Angebot allen Anleihegläubigern gemacht werden.

(B) the number of days in such Calculation Period falling in the next Determination Period divided by the number of days in such Determination Period.

Where:

"**Determination Date**" means 25 September in each year;

"**Determination Period**" means each period from and including a Determination Date in any year to but excluding the next Determination Date.

(c) *Cessation of Interest Accrual*. The Notes shall cease to bear interest from the end of the day preceding their due date for redemption. If the Issuer fails to redeem the Notes when due, interest shall continue to accrue on the outstanding amount from (and including) the due date to (but excluding) the day on which such payment is received by or on behalf of the Noteholders at the default rate of interest established by statutory law.[8]

§ 4 Redemption

(a) *Redemption at maturity*. To the extent not previously redeemed in whole or in part or purchased and cancelled the Notes shall be redeemed at their Principal Amount on 25 September 2031 (the "**Maturity Date**").

(b) *Purchases*. The Issuer is entitled to purchase and resell Notes at any time in the market or otherwise. If such purchases are made by tender, tenders for such Notes must be made available to all Noteholders of such Notes alike.

---

7 Der gesetzliche Verzugszinssatz entspricht dem von der Deutschen Bundesbank von Zeit zu Zeit veröffentlichten Basiszinssatz zuzüglich fünf Prozentpunkten, §§ 288 Abs. 1, 247 Abs. 1 BGB.

8 The default rate of interest established by statutory law is five percentage points above the basis rate of interest published by Deutsche Bundesbank from time to time, §§ 288 paragraph 1, 247 paragraph 1 of the German Civil Code (*Bürgerliches Gesetzbuch*).

(c) *Vorzeitige Rückzahlung nach Wahl der Emittentin*.

(i) Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) mit Wirkung zu jedem Tag während des Zeitraums ab dem Begebungstag der Schuldverschreibungen (einschließlich) bis zum 25. Juni 2031 (ausschließlich) durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen zum Wahl-Rückzahlungsbetrag (wie nachstehend definiert) zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin (der „**Wahl-Rückzahlungstag**") in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

Definitionen:

Der „**Wahl-Rückzahlungsbetrag**" je Schuldverschreibung entspricht dem höheren von:

(i) dem Nennbetrag; oder

(ii) dem Abgezinsten Marktwert.

Der Wahl-Rückzahlungsbetrag wird von der Berechnungsstelle berechnet.

Der „**Abgezinste Marktwert**" ist die Summe aus

(a) dem auf den Wahl-Rückzahlungstag abgezinsten Wert des Nennbetrags der zurückzuzahlenden Schuldverschreibung, der ansonsten am Endfälligkeitstag fällig werden würde; und

(b) den jeweils auf den Wahl-Rückzahlungstag abgezinsten Werten der verbleibenden Zinszahlungen, die ansonsten an jedem *Zinszahlungstag* nach dem Wahl-Rückzahlungstag bis zum Endfälligkeitstag (einschließlich) fällig werden würden (ausschließlich etwaiger, bis zum Wahl-Rückzahlungstag (ausschließlich) aufgelaufener Zinsen).

Die Berechnungsstelle errechnet den Abgezinsten Marktwert gemäß der Marktkonvention auf einer Grundlage, die der Berechnung von Zinsen gemäß § 3 entspricht, wobei sie die Benchmark-Rendite zuzüglich 0,35% zugrunde legt.

(c) *Early redemption at the option of the Issuer*.

(i) The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) with effect as of any date during the period from and including the Issue Date to but excluding 25 June 2031. In the case such notice is given, the Issuer will redeem the remaining Notes at the Call Redemption Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice (the "**Call Redemption Date**").

Definitions:

The "**Call Redemption Amount**" per Note shall be the higher of:

(i) the Principal Amount; or

(ii) the Present Value.

The Call Redemption Amount shall be calculated by the Calculation Agent.

The "**Present Value**" will be the sum of

(a) the principal amount of the Note to be redeemed which would otherwise become due on the Maturity Date, discounted to the Call Redemption Date; and

(b) the remaining interest payments which would otherwise become due on each Interest Payment Date falling after the Call Redemption Date to and including the Maturity Date (excluding any interest accrued to but excluding the Call Redemption Date), each discounted to the Call Redemption Date.

The Calculation Agent will calculate the Present Value in accordance with market convention on a basis which is consistent with the calculation of interest as set out in § 4, using the Benchmark Yield plus 0.35%.

Die „**Benchmark-Rendite**" bezeichnet die am Rückzahlungs-Berechnungstag bestehende Rendite der 0,00% Bundesanleihe 2019 (2029), basierend auf dem Referenzpreis für diese Referenz-Anleihe an diesem Tag, wie um oder gegen 12:00 Uhr mittags (Frankfurter Zeit) an diesem Tag auf der Bloomberg Seite DE0001102473 Govt HP (unter Nutzung der Einstellung „Fixing Price" und der Preisquelle „FRNK") abgelesen, oder wie von einer anderen, durch die Berechnungsstelle festgelegten, Quelle hergeleitet oder veröffentlicht oder sollte die Rendite zu diesem Zeitpunkt nicht verfügbar sein, bezeichnet die Benchmark-Rendite eine ersetzende Referenzanleihe, die von der Berechnungsstelle festgesetzt wird, die jeweils mit einer Laufzeit, die mit der verbleibenden Restlaufzeit der Schuldverschreibung bis zum Endfälligkeitstag vergleichbar ist, und die im Zeitpunkt der Auswahlentscheidung und entsprechend der üblichen Finanzmarktpraxis zur Preisbestimmung bei Neuemissionen von Unternehmensanleihen mit einer bis zum Endfälligkeitstag der Schuldverschreibung vergleichbaren Laufzeit verwendet werden würde.

„**Rückzahlungs-Berechnungstag**" ist der sechste Geschäftstag vor dem Tag, an dem die Schuldverschreibungen gemäß § 5(c)(i) zurückgezahlt werden.

(ii) Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) mit Wirkung zu jedem Tag während des Zeitraums ab dem 25. Juni 2031 (einschließlich) bis zum Endfälligkeitstag (ausschließlich) durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin zum Nennbetrag zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

The "**Benchmark Yield**" means the yield at the Redemption Calculation Date of the 0.00% Bundesanleihe 2019 (2029), based on the reference price for such benchmark security on such day, as observed at or about noon (Frankfurt time) on such date on Bloomberg page DE0001102473 Govt HP (using the setting "Fixing Price" and the pricing source "FRNK"), or as derived or published by such other source as determined by the Calculation Agent, and if such yield is not available at that time the Benchmark Yield shall be the yield of a substitute benchmark security chosen by the Calculation Agent, in each case as having a maturity comparable to the remaining term of the Note to the Maturity Date, that would be used at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the Maturity Date.

"**Redemption Calculation Date**" means the sixth Business Day prior to the date on which the Notes are redeemed in accordance with this § 5(c)(i).

(ii) The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) with effect as of any date during the period from and including 25 June 2031 to but excluding the Maturity Date. In the case such notice is given, the Issuer will redeem the remaining Notes at the Principal Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice.

(d) *Vorzeitige Rückzahlung durch die Emittentin bei geringem ausstehenden Gesamtnennbetrag*. Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) jederzeit durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen, wenn 80% oder mehr des *Gesamtnennbetrags* der ursprünglich begebenen Schuldverschreibungen zurückgezahlt oder zurückgekauft und entwertet wurden. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin zum Nennbetrag zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

(e) *Vorzeitige Rückzahlung durch die Emittentin aus steuerlichen Gründen*. Die Emittentin ist berechtigt, die Schuldverschreibungen (insgesamt und nicht nur teilweise) jederzeit durch Erklärung gemäß § 4(f) vorzeitig zurückzuzahlen, wenn ein Gross-up-Ereignis eingetreten ist. Im Falle einer solchen Erklärung hat die Emittentin die Schuldverschreibungen an dem von der Emittentin in der Mitteilung festgelegten Rückzahlungstermin zum Nennbetrag zuzüglich der bis zum Tag der Rückzahlung (ausschließlich) in Bezug auf die Schuldverschreibungen aufgelaufenen, aber noch nicht bezahlten Zinsen zurückzuzahlen.

Eine solche Rückzahlung darf nicht früher als 90 Tage vor dem Tag erfolgen, an dem die Emittentin oder die Garantin erstmals verpflichtet wäre, Zusätzliche Beträge (wie in § 6 definiert) zu zahlen bzw. wenn eine ordnungsgemäße Zahlungsaufforderung unter der Garantie erfolgen würde.

(d) *Clean-up Call*. The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) at any time if 80 per cent. or more of the aggregate principal amount of the Notes initially issued have been redeemed or repurchased and cancelled. In the case such notice is given, the Issuer will redeem the remaining Notes at the Principal Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice.

(e) *Early Redemption by the Issuer for Reasons of Taxation*. The Issuer may, upon giving notice of redemption in accordance with § 4(f), call the Notes for early redemption (in whole but not in part) at any time if a Gross-up Event has occurred. In the case such notice is given, the Issuer will redeem the remaining Notes at the Principal Amount plus any accrued and unpaid interest on the Notes to but excluding the date of redemption on the redemption date specified by the Issuer in the notice.

No such redemption may be made earlier than 90 days prior to the earliest date on which the Issuer or the Guarantor would be obliged to pay the Additional Amounts (as defined in § 6) or (as the case may be) in respect of a demand for payment duly made under the Guarantee, for the first time.

Ein „**Gross-up-Ereignis**" tritt ein, wenn, der Emittentin oder der Garantin ein Gutachten einer anerkannten Anwaltskanzlei vorliegt (und die Emittentin oder die Garantin der Hauptzahlstelle eine Kopie davon gibt) aus dem hervorgeht, dass die Emittentin oder die Garantin aufgrund einer an oder nach dem Begebungstag der Schuldverschreibungen in Kraft tretenden Gesetzesänderung (oder einer Änderung von darunter erlassenen Bestimmungen und Vorschriften) der Niederlande oder der Bundesrepublik Deutschland oder einer zur Erhebung von Steuern berechtigten Gebietskörperschaft oder Behörde der Niederlande oder der Bundesrepublik Deutschland, oder als Folge einer Änderung der offiziellen Auslegung oder Anwendung dieser Gesetze, Bestimmungen oder Vorschriften durch eine gesetzgebende Körperschaft, ein Gericht, eine Regierungsstelle oder eine Aufsichtsbehörde (einschließlich des Erlasses von Gesetzen sowie der Bekanntmachung gerichtlicher oder aufsichtsrechtlicher Entscheidungen), verpflichtet ist oder verpflichtet sein wird, Zusätzliche Beträge gemäß § 6 auf die Schuldverschreibungen zu zahlen, oder die Garantin verpflichtet ist oder verpflichtet sein wird, Zusätzliche Beträge auf fällige Beträge aus der Garantie zu zahlen, und die Emittentin bzw. die Garantin diese Verpflichtung nicht abwenden kann, indem sie Maßnahmen ergreift, die sie nach Treu und Glauben für zumutbar und angemessen hält.

(f) *Erklärung der vorzeitigen Rückzahlung*. Die Emittentin kann die Erklärung der vorzeitigen Rückzahlung der Schuldverschreibungen gemäß § 4(c), § 4(d) oder § 4(e) durch Veröffentlichung einer Mitteilung an die Anleihegläubiger gemäß § 11 unter Einhaltung einer Frist von nicht weniger als 30 und nicht mehr als 60 Tagen vor dem Rückzahlungstag erklären.

Diese Mitteilung hat den Rückzahlungstermin festzulegen sowie die Tatsachen anzugeben, die das Kündigungsrecht der Emittentin begründen.

Die Emittentin wird jeder Börse, an der die Schuldverschreibungen notiert sind und deren Regeln eine Mitteilung an die Börse verlangen, umgehend Mitteilung über die Kündigung machen.

A "**Gross up Event**" will occur if an opinion of a recognised law firm has been delivered to the Issuer or the Guarantor (and the Issuer or the Guarantor has provided the Principal Paying Agent with a copy thereof) stating that, the Issuer or the Guarantor, as a result of any change in, or amendment to, the laws (or any rules or regulations thereunder) of the Netherlands or the Federal Republic of Germany or any political subdivision or any authority of or in the Netherlands or the Federal Republic of Germany having power to tax, or as a result of any change in, or amendment to, the official interpretation or application of any such laws, rules or regulations by any legislative body, court, governmental agency or regulatory authority (including the enactment of any legislation and the publication of any judicial decision or regulatory determination), which change or amendment becomes effective on or after the Issue Date has or will become obliged to pay Additional Amounts pursuant to § 6 on the Notes or the Guarantor has or will become obliged to pay Additional Amounts in respect of payments due under the Guarantee, and that obligation cannot be avoided by the Issuer and the Guarantor, respectively, taking such measures it (acting in good faith) deems reasonable and appropriate.

(f) *Notice of early redemption*. The Issuer may call the Notes for early redemption pursuant to § 4(c), § 4(d) or § 4(e) by publishing a notice to the Noteholders in accordance with § 11 subject to observing a notice period of not less than 30 nor more than 60 days prior to the specified redemption date.

This notice must specify the redemption date and state the facts which establish the right of the Issuer to redeem the Notes.

The Issuer will inform, if required by such stock exchange on which the Notes are listed, such stock exchange as soon as possible of such redemption.

(g) *Kontrollwechsel*.

(i) Wenn ein Rückzahlungsereignis (wie nachstehend definiert) eintritt, wird die Emittentin innerhalb von 30 Tagen nach Ablauf des jeweiligen Kontrollwechselzeitraums (wie nachstehend definiert) das Rückzahlungsereignis und den Rückzahlungsstichtag unter Angabe der Umstände des Rückzahlungsereignisses gemäß § 11 bekannt machen.

„**Rückzahlungsstichtag**" bezeichnet den von der Emittentin gemäß § 4(g)(i) festgelegten Geschäftstag, der nicht weniger als 15 und nicht mehr als 30 Tage nach dem Tag der Bekanntmachung des Rückzahlungsereignisses gemäß § 11 liegen darf.

(ii) Falls die Emittentin gemäß § 4(g)(i) ein Rückzahlungsereignis bekannt gemacht hat, ist jeder Anleihegläubiger nach seiner Wahl berechtigt, mit einer Frist von mindestens 10 Tagen mit Wirkung zum Rückzahlungsstichtag alle oder einzelne seiner Schuldverschreibungen, die noch nicht zurückgezahlt wurden, vorzeitig fällig zu stellen. In einem solchen Fall hat die Emittentin die betreffenden Schuldverschreibungen am Rückzahlungsstichtag zu 101% des Nennbetrags zuzüglich etwaiger bis zu dem Rückzahlungsstichtag (ausschließlich) aufgelaufener Zinsen zurückzuzahlen.

Eine Fälligstellung gemäß diesem § 4(g)(ii) hat durch Übergabe einer Erklärung in Textform gegenüber der Hauptzahlstelle zu erfolgen und ist unwiderruflich. Der betreffende Anleihegläubiger hat dabei durch eine Bescheinigung seiner Depotbank nachzuweisen, dass er zu dem Zeitpunkt der Erklärung Inhaber der betreffenden Schuldverschreibung(en) ist, und seine Schuldverschreibung(en), für die das Recht ausgeübt werden soll, an die Hauptzahlstelle zu liefern.

(iii) Ein „**Rückzahlungsereignis**" tritt ein, wenn

(A) die Emittentin einen Kontrollwechsel (wie nachstehend definiert) bekannt macht; und

(g) *Change of Control*.

(i) If a Put Event (as defined below) occurs, the Issuer will give notice in accordance with § 11 of the Put Event and the Put Record Date specifying the nature of the Put Event within 30 days of the end of the respective Change of Control Period (as defined below).

"**Put Record Date**" means the Business Day fixed by the Issuer pursuant to § 4(g)(i) which will be not less than 15 nor more than 30 days after the notice of the Put Event and which is published in accordance with § 11.

(ii) If the Issuer gives notice in accordance with § 4(g)(i) of a Put Event, each Noteholder may at his option on giving not less than 10 days' notice declare all or some only of his Notes not previously redeemed due which notice shall take effect on the Put Record Date. In such case the Issuer will redeem such Notes on the Put Record Date at 101 per cent. of the Principal Amount plus interest accrued to but excluding the Put Record Date.

A notice pursuant to this § 4(g)(ii) has to be effected by delivering a notice in text form to the Principal Paying Agent and is irrevocable. The respective Noteholder must demonstrate with a certificate from his Custodian that he is the holder of the respective Note(s) at the time of the declaration and deliver to the Principal Paying Agent the Note(s) for which the right shall be exercised.

(iii) A "**Put Event**" will occur if

(A) the Issuer announces a Change of Control (as defined below); and

(B) nach Eintritt des Kontrollwechsels und, in den Fällen gemäß § (4)(g)(v)(A)(y) und § (4)(g)(v)(A)(z) unten, aufgrund dessen ein Negatives Ratingereignis (wie nachstehend definiert) eintritt.

(iv) Ein „**Kontrollwechsel**" gilt jedes Mal als eingetreten, wenn ein Kontrollwechselereignis (wie nachstehend definiert) eingetreten ist.

(A) „**Kontrollwechselereignis**" bedeutet, dass

(x) an oder nach dem Begebungstag, aber vor dem Zeitpunkt eines Qualifizierten IPO die BASF SE, Ludwigshafen am Rhein, Deutschland („**BASF**") und die Letterone Holdings S.A., Luxemburg („**Letterone Holdings**") (ob unmittelbar oder mittelbar über irgendeine Person) zusammen nicht mehr wirtschaftliche Eigentümer von mindestens 51% der Stammgeschäftsanteile der Garantin sind; dies gilt mit der Maßgabe, dass kein Kontrollwechsel eintritt, wenn BASF alleine mindestens 51% der Stammgeschäftsanteile der Garantin hält; oder

(y) zum oder nach dem Zeitpunkt eines Qualifizierten IPO ein Ereignis eintritt, durch das eine oder mehrere Person(en) (außer einer börsennotierten Holdinggesellschaft der Garantin und außer BASF (oder eines ihrer Tochterunternehmen)), die entweder alleine oder gemeinsam im Sinne von § 2 Abs. 5 des Wertpapiererwerbs- und Übernahmegesetzes handeln, unmittelbar oder mittelbar einen Stimmrechtsanteil von mehr als 50% an der Garantin erwerben, wobei der Stimmrechtsanteil nach § 34 Abs. 1 und 2 WpHG berechnet wird.

(B) a Negative Rating Event (as defined below) occurs after the occurrence and, in the cases of § 4(g)(v)(A)(y) and § 4(g)(v)(A)(z) below, as a result of the Change of Control.

(iv) A "**Change of Control**" shall be deemed to have occurred at each time that a Change of Control Event (as defined below) has occurred.

(A) "**Change of Control Event**" means

(x) on or after the Issue Date but prior to the date of a Qualified IPO, BASF SE, Ludwigshafen am Rhein, Germany ("**BASF**") and Letterone Holdings S.A., Luxembourg ("**Letterone Holdings**") (whether directly or indirectly through any person) together cease to hold beneficially a minimum of 51 per cent. of the ordinary shares of the Guarantor, provided that no change of control shall occur if BASF individually holds a minimum of 51 per cent. of the ordinary shares in the Guarantor; or

(y) on or after the date of a Qualified IPO, the occurrence of any event pursuant to which one or more person(s) (other than any listed Holding Company of the Guarantor and other than BASF (or any of its subsidiaries)) acting either individually or acting in concert within the meaning of §2(5) of the German Securities Acquisition and Take Over Act (*Wertpapiererwerbs- und Übernahmegesetz*) acquire(s) directly or indirectly more than 50 per cent. of the voting rights of the Guarantor, provided that the share of voting rights shall be calculated pursuant to section 34 paras. (l) and (2) WpHG.

„**Holdinggesellschaft**" bedeutet in Bezug auf eine Gesellschaft oder ein Unternehmen, jede andere Gesellschaft oder jedes andere Unternehmen, dessen Tochtergesellschaft es ist.

„**WpHG**" bezeichnet das Wertpapierhandelsgesetz in seiner jeweils gültigen Fassung.

„**Qualifizierter IPO**" bezeichnet eine erstmalige Börsenzulassung der Gesamtheit oder eines Teils der Aktien der Garantin oder einer Holdinggesellschaft der Garantin (deren einziger wesentliche Vermögensgegenstand die unmittelbare oder mittelbare Beteiligung an der Garantin ist) an einer international anerkannten Wertpapierbörse oder eine andere Emission im Wege eines Börsengangs oder eines öffentlichen Angebots oder unter entsprechenden Umständen in Bezug auf die Garantin oder eine Holdinggesellschaft der Garantin.

(B) Wenn ein Kontrollwechsel eintritt, wird die Emittentin sobald wie möglich, nachdem sie Kenntnis davon erhalten hat, den Kontrollwechsel und den Tag, an dem die Transaktion, die den Kontrollwechsel bewirkt, vollzogen worden ist (der „**Stichtag**"), gemäß § 11 bekannt machen.

(v) Ein „**Negatives Ratingereignis**" gilt im Hinblick auf einen zuvor eingetretenen Kontrollwechsel als eingetreten, wenn innerhalb des Kontrollwechselzeitraums (wie nachstehend definiert):

(A)

(x) für den Fall, dass die Schuldverschreibungen am Stichtag über kein Rating von einer Ratingagentur (wie nachstehend definiert) verfügen, keine einzige Ratingagentur ein Investment Grade Rating (d.h. mindestens „BBB−" durch S&P oder Fitch oder „Baa3" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur) für die Schuldverschreibungen vergibt; oder

"**Holding Company**" means in relation to a company or corporation, any other company or corporation in respect of which it is a subsidiary.

"**WpHG**" means the German Securities Trading Act (*Wertpapierhandelsgesetz*) as amended from time to time.

"**Qualified IPO**" means an initial listing of all or part of the share capital of the Guarantor or any Holding Company of the Guarantor (whose only principal asset is the direct or indirect ownership in the Guarantor) on any internationally recognized stock exchange or any other issue by way of flotation or public offering or any equivalent circumstances in relation to the Guarantor or any Holding Company of the Guarantor.

(B) If a Change of Control occurs, the Issuer will give notice in accordance with § 11 of the Change of Control and the date on which the transaction that constitutes the Change of Control has taken effect (the "**Record Date**") as soon as practicable after becoming aware thereof.

(v) A "**Negative Rating Event**" shall be deemed to have occurred in respect of a Change of Control if within the Change of Control Period (as defined below):

(A)

(x) in case, on the Record Date, no credit rating from any Rating Agency (as defined below) is assigned to the Notes and no single Rating Agency assigns an investment grade credit rating (i.e. at least "BBB−" by S&P or Fitch or "Baa3" by Moody's or such other equivalent rating as may be assigned by any other rating agency) to the Notes; or

(y) für den Fall, dass die Schuldverschreibungen am Stichtag zwar über kein Investment Grade Rating aber über ein oder mehrere (mit Zustimmung der Emittentin erteilte) Non-Investment Grade Ratings („BB+" durch S&P oder Fitch oder "Ba1" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur oder gleichwertig oder schlechter) verfügen, eine der Ratingagenturen ihr jeweiliges Rating um einen oder mehrere Punkte (zur Erläuterung: „BB+" nach „BB" bzw. „Ba1" nach „Ba2" entspricht einem Punkt) absenkt, wobei kein Negatives Ratingereignis eintritt, wenn dieses Rating anschließend durch diese Ratingagentur auf das ursprüngliche oder ein besseres Rating angehoben wird; oder

(y) in case, on the Record Date, no investment grade credit rating is assigned to the Notes but one or more non-investment grade credit ratings ("BB+" by S&P or Fitch or "Ba1" by Moody's or such other equivalent rating as may be assigned by any other rating agency, or equivalent, or worse) are assigned to the Notes (with the consent of the Issuer), any of the Rating Agencies downgrades its respective credit rating by one or more notches (for illustration, "BB+" to "BB" or "Ba1" to "Ba2" being one notch), provided that no Negative Rating Event occurs if such credit rating is subsequently reinstated to its earlier or a better credit rating by such Rating Agency; or

(z) für den Fall, dass die Schuldverschreibungen am Stichtag über ein oder mehrere Investment Grade Ratings verfügen, eine der Ratingagenturen ihr Investment Grade Rating (d.h. mindestens „BBB−" durch S&P oder Fitch oder „Baa3" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur) (i) zurückzieht oder (ii) von einem Investment Grade Rating auf ein non-Investment Grade Rating („BB+" durch S&P oder Fitch oder „Ba1" durch Moody's oder ein korrespondierendes Rating einer anderen Ratingagentur oder gleichwertig oder schlechter) herabstuft, wobei kein Negatives Ratingereignis eintritt, wenn dieses Rating anschließend durch die jeweilige Ratingagentur auf das ursprüngliche oder ein besseres Investment Grade Rating angehoben wird oder (im Falle einer Zurückziehung) das betreffende Rating durch das Investment Grade Rating einer anderen Ratingagentur ersetzt wird; und

(B) die jeweilige Ratingagentur bei ihrer Entscheidung zur Herabstufung oder Zurücknahme eines Kreditratings gemäß den obigen Ziffern (v)(A)(y) und (v)(A)(z) öffentlich bekannt gibt oder schriftlich bestätigt, dass diese Entscheidung(en) ganz oder teilweise aufgrund des Eintritts des Kontrollwechsels erfolgte(n).

Falls die Schuldverschreibungen zum Stichtag über ein Rating von mehr als einer Rating Agentur verfügen, von denen mindestens eines ein Investment Grade Rating ist, findet § 4(g)(v)(A)(z) Anwendung.

„**Ratingagentur**" bezeichnet jeweils Moody's Investors Services Limited („**Moody's**") oder S&P Global Ratings Europe Limited („**S&P**"), oder Fitch Ratings Ltd („**Fitch**") oder eine jeweilige Nachfolgegesellschaft.

(z) in case, on the Record Date, one or more investment grade credit ratings are assigned to the Notes, any of the Rating Agencies (i) withdraws or (ii) downgrades such its investment grade credit rating (i.e. at least "BBB−" by S&P or Fitch or "Baa3" by Moody's or such other equivalent rating as may be assigned by any other rating agency) to a non-investment grade credit rating ("BB+" by S&P or Fitch or "Ba1" by Moody's or such other equivalent rating as may be assigned by any other rating agency, or equivalent, or worse), provided that no Negative Rating Event occurs if such credit rating is subsequently reinstated to its earlier or a better investment grade credit rating by such Rating Agency or (in the case of a withdrawal) replaced by an investment grade credit rating from any other Rating Agency; and

(B) in making any decision to downgrade or withdraw a credit rating pursuant to paragraphs (v)(A)(y) and (v)(A)(z) above, the relevant Rating Agency announces publicly or confirms in writing that such decision(s) resulted, in whole or in part, from the occurrence of the Change of Control.

If on the Record Date the Notes carry a rating from more than one Rating Agency, at least one of which is investment grade, then § 4(g)(v)(A)(z) will apply.

"**Rating Agency**" means each of Moody's Investors Services Limited ("**Moody's**") or S&P Global Ratings Europe Limited ("**S&P**") or Fitch Ratings Ltd ("**Fitch**"), or any of their respective successors.

„**Kontrollwechselzeitraum**" bezeichnet den Zeitraum von 120 Tagen ab dem Stichtag (ausschließlich).

Falls sich die von Moody's, S&P oder Fitch verwendeten Rating Kategorien gegenüber denen, die in § 4(g)(v) angegeben wurde, ändern sollten, wird die Emittentin diejenigen Rating Kategorien von Moody's, S&P bzw. Fitch bestimmen, die den früheren Rating Kategorien von Moody's, S&P bzw. Fitch möglichst nahekommen. § 4(g)(v) ist dann entsprechend auszulegen.

§ 5 Zahlungen

(a) *Zahlungen*.

(i) Die Zahlung von Kapital und Zinsen auf die Schuldverschreibungen erfolgt an das Clearingsystem oder an dessen Order zur Gutschrift auf den Konten der jeweiligen Kontoinhaber des Clearingsystems außerhalb der Vereinigten Staaten von Amerika. Die Zahlung von Zinsen auf Schuldverschreibungen, die durch eine Vorläufige Globalurkunde verbrieft sind, erfolgt nach ordnungsgemäßem Nachweis gemäß § 1(c).

(ii) Sämtliche Zahlungen stehen in allen Fällen unter dem Vorbehalt geltender steuerlicher und sonstiger gesetzlicher Vorschriften, Richtlinien und/oder Verordnungen. Die Emittentin, die Garantin, die Hauptzahlstelle bzw. Zahlstelle sind nicht für irgendwelche Steuern oder Abgaben gleich welcher Art verantwortlich, die aufgrund solcher gesetzlichen Vorschriften, Richtlinien oder Verordnungen oder Verträgen auferlegt oder erhoben werden. Dies berührt jedoch nicht die Bestimmungen von § 6. Den Anleihegläubigern werden keine Kosten oder Gebühren in Bezug auf diese Zahlungen auferlegt.

(iii) Eine Bezugnahme in diesen Anleihebedingungen auf Kapital oder Zinsen der Schuldverschreibungen schließt jegliche Zusätzlichen Beträge gemäß § 6 ein.

(b) *Zahlungsweise*. Zu leistende Zahlungen auf die Schuldverschreibungen erfolgen in der Festgelegten Währung.

"**Change of Control Period**" means the period ending 120 days from but excluding the Record Date.

If the rating designations employed by any of Moody's, S&P or Fitch are changed from those which are described in § 4(g)(v) above, the Issuer shall determine the rating designations of Moody's or S&P or Fitch (as appropriate) as are most equivalent to the prior rating designations of Moody's or S&P or Fitch and § 4(g)(v) shall be read accordingly.

§ 5 Payments

(a) *Payments*.

(i) Payment of principal and interest on the Notes shall be made to the Clearing System or to its order for credit to the relevant account holders of the Clearing System outside the United States of America. Payment of interest on Notes represented by a Temporary Global Note shall be made, upon due certification as provided in § 1(c).

(ii) All payments will be subject in all cases to any applicable fiscal and other laws, directives and/or regulations. The Issuer, the Guarantor or, as the case may be, the Principal Paying Agent or Paying Agent, as the case may be, will not be liable for any taxes or duties of whatever nature imposed or levied by such laws, regulations, directives or agreements, but without prejudice to the provisions of § 6. No commission or expenses shall be charged to the Noteholders in respect of such payments.

(iii) Any reference in these Terms and Conditions of the Notes to principal or interest will be deemed to include any Additional Amounts as set forth in § 6.

(b) *Manner of payment*. Payments of amounts due in respect of the Notes shall be made in the Specified Currency.

(c) *Erfüllung*. Die Emittentin bzw. die Garantin wird durch Leistung der Zahlung an das Clearingsystem oder an dessen Order von ihrer Zahlungspflicht befreit.

(d) *Zahltag*. Fällt der Fälligkeitstag einer Zahlung in Bezug auf eine Schuldverschreibung auf einen Tag, der kein Geschäftstag ist, dann hat der Anleihegläubiger keinen Anspruch auf Zahlung vor dem nächstfolgenden Geschäftstag. Der Anleihegläubiger ist nicht berechtigt, weitere Zinsen oder sonstige Zahlungen aufgrund dieser Verspätung zu verlangen.

„**Geschäftstag**" bezeichnet einen Tag (außer einem Samstag oder Sonntag), an dem Banken in Frankfurt am Main für den allgemeinen Geschäftsverkehr geöffnet sind und an dem das Clearingsystem sowie alle maßgeblichen Bereiche des Trans-European Automated Real-time Gross Settlement Express Transfer System (TARGET2) betriebsbereit sind, um Zahlungen vorzunehmen.

§ 6 Besteuerung

Sämtliche auf die Schuldverschreibungen zu zahlenden Beträge (einschließlich sämtlicher von der Garantin auf die Garantie zu zahlender Beträge) werden ohne Einbehalt oder Abzug von Steuern, Abgaben, Festsetzungen oder behördlicher Gebühren jedweder Art geleistet („**Steuern**"), die von den Niederlanden bzw. der Bundesrepublik Deutschland oder einer ihrer Gebietskörperschaften oder Behörden oder sonstigen Stellen in den Niederlanden bzw. der Bundesrepublik Deutschland mit der Befugnis zur Erhebung von Steuern auferlegt, erhoben, eingezogen, einbehalten oder festgesetzt werden, sofern nicht kraft Gesetzes oder einer sonstigen Rechtsvorschrift einem solcher Einbehalt oder Abzug vorgeschrieben ist. Sofern die Emittentin oder die Garantin zu einem solchen Einbehalt oder Abzug verpflichtet ist, wird die Emittentin bzw. die Garantin zusätzliche Beträge (die „**Zusätzlichen Beträge**") an die Anleihegläubiger zahlen, so dass die Anleihegläubiger die Beträge erhalten, die sie ohne den betreffenden Einbehalt oder Abzug erhalten hätten. Solche Zusätzlichen Beträge sind jedoch nicht zahlbar wegen solcher Steuern in Bezug auf Schuldverschreibungen,

(a) die auf andere Weise als durch Einbehalt oder Abzug von zahlbaren Beträgen zu entrichten sind; oder

(c) *Discharge*. The Issuer or, as the case may be, the Guarantor shall be discharged by payment to, or to the order of, the Clearing System.

(d) *Payment Business Day*. If the due date for payment of any amount in respect of any Note is not a Business Day then the Noteholder shall not be entitled to payment until the next Business Day and shall not be entitled to further interest or other payment in respect of such delay.

"**Business Day**" means a day (other than a Saturday or a Sunday) on which banks are open for general business in Frankfurt am Main and on which the Clearing System as well as all relevant parts of the Trans-European Automated Real-time Gross Settlement Express Transfer system (TARGET2) are operational to effect payments.

§ 6 Taxation

All amounts to be paid in respect of the Notes (including all amounts to be paid by the Guarantor under the Guarantee) will be paid free and clear of, and without withholding or deduction for, any taxes, duties, assessments or governmental charges of whatever nature ("**Taxes**") imposed, levied, collected, withheld or assessed by the Netherlands or the Federal Republic of Germany (as the case may be) or any political subdivision or any authority or any other agency of or in the Netherlands or the Federal Republic of Germany (as the case may be) that has power to tax, unless such withholding or deduction is required to be made by law. If the Issuer or the Guarantor is required to make such withholding or deduction, the Issuer or the Guarantor (as the case may be) will pay such additional amounts (the "**Additional Amounts**") to the Noteholders as the Noteholders would have received if no such withholding or deduction had been required, except that no such Additional Amounts will be payable for any such Taxes in respect of any Note,

(a) which are payable otherwise than by withholding or deduction from amounts payable; or

(b) die wegen einer Verbindung des betreffenden Anleihegläubigers zu den Niederlanden bzw. der Bundesrepublik Deutschland, die nicht nur aus der bloßen Inhaberschaft der Schuldverschreibungen besteht, einzubehalten oder abzuziehen sind; oder

(b) which are to be withheld or deducted by reason of the relevant Noteholder having some connection with the Netherlands or the Federal Republic of Germany other than the mere holding of that Note; or

(c) die aufgrund (i) einer Richtlinie oder Verordnung der Europäischen Union betreffend die Besteuerung von Zinserträgen oder (ii) einer zwischenstaatlichen Vereinbarung, eines zwischenstaatlichen Abkommens oder einer zwischenstaatlichen Verständigung über deren Besteuerung, an der die Niederlande, die Bundesrepublik Deutschland oder die Europäische Union beteiligt ist, oder (iii) einer gesetzlichen Vorschrift, die diese Richtlinie, Verordnung, Vereinbarung, Abkommen oder Verständigung umsetzt oder befolgt, abzuziehen oder einzubehalten sind.

(c) which are to be withheld or deducted pursuant to (i) any European Union Directive or Regulation concerning the taxation of interest income, or (ii) any international treaty, agreement or understanding relating to such taxation and to which the Netherlands or the Federal Republic of Germany or the European Union is a party, or (iii) any provision of law implementing, or complying with, or introduced to conform with, such Directive, Regulation, treaty, agreement or understanding.

Die Emittentin und die Garantin sind keinesfalls verpflichtet, zusätzliche Beträge in Bezug auf einen Einbehalt oder Abzug von Beträgen zu zahlen, die gemäß Sections 1471 bis 1474 des U.S. Internal Revenue Code (in der jeweils geltenden Fassung oder gemäß Nachfolgebestimmungen), gemäß zwischenstaatlicher Abkommen, gemäß den in einer anderen Rechtsordnung in Zusammenhang mit diesen Bestimmungen erlassenen Durchführungsvorschriften oder gemäß mit dem Internal Revenue Service geschlossenen Verträgen von der Emittentin, der jeweiligen Zahlstelle oder einem anderen Beteiligten abgezogen oder einbehalten wurden („**FATCA-Steuerabzug**") oder Anleger in Bezug auf einen FATCA-Steuerabzug schadlos zu halten.

In any event, the Issuer and the Guarantor will have no obligation to pay additional amounts deducted or withheld by the Issuer, the relevant Paying Agent or any other party ("**FATCA Withholding**") in relation to any withholding or deduction of any amounts required by the rules of U.S. Internal Revenue Code Sections 1471 through 1474 (or any amended or successor provisions), pursuant to any inter-governmental agreement, or implementing legislation adopted by another jurisdiction in connection with these provisions, or pursuant to any agreement with the U.S. Internal Revenue Service or indemnify any investor in relation to any FATCA Withholding.

§ 7 Vorlegung, Verjährung

(a) *Vorlegungsfrist*. Die Vorlegungsfrist gemäß § 801 Absatz 1 Satz 1 BGB für fällige Schuldverschreibungen wird auf zehn Jahre verkürzt.

(b) *Verjährungsfrist*. Die Verjährungsfrist für innerhalb der Vorlegungsfrist zur Zahlung vorgelegte Schuldverschreibungen beträgt zwei Jahre von dem Ende der betreffenden Vorlegungsfrist an.

§ 7 Presentation, Prescription

(a) *Presentation*. The period for presentation of Notes due, as established in § 801 paragraph 1 sentence 1 of the German Civil Code (*Bürgerliches Gesetzbuch*), is reduced to ten years.

(b) *Prescription*. The period for prescription for Notes presented for payment during the presentation period shall be two years beginning at the end of the relevant presentation period.

§ 8 Kündigungsgründe für die Anleihegläubiger

(a) *Kündigungsgründe*. Jeder Anleihegläubiger ist berechtigt, alle oder einzelne seiner Schuldverschreibungen zu kündigen und deren sofortige Rückzahlung zu ihrem Nennbetrag zuzüglich etwaiger bis zu dem Tag der Rückzahlung (ausschließlich) aufgelaufener Zinsen zu verlangen, falls eines der folgenden Ereignisse (jeweils ein „**Kündigungsgrund**") eintritt und fortbesteht:

(i) die Emittentin Kapital oder Zinsen oder eine andere Zahlung auf die Schuldverschreibungen oder die Garantin eine Zahlung auf die Garantie nicht innerhalb von 15 Tagen nach dem betreffenden Fälligkeitstag zahlt;

(ii) die Emittentin oder die Garantin irgendeine andere Verpflichtung aus den Schuldverschreibungen oder der Garantie nicht ordnungsgemäß erfüllt und die Unterlassung, sofern sie nicht unheilbar ist, länger als 45 Tage fortdauert, nachdem die Emittentin oder die Garantin (über die Hauptzahlstelle) hierüber eine Benachrichtigung von einem Anleihegläubiger erhalten hat;

(iii) eine andere Finanzverbindlichkeit (wie nachstehend definiert) der Emittentin, der Garantin oder einer Tochtergesellschaft bei Fälligkeit oder innerhalb der zutreffenden Nachfrist nicht erfüllt wird, wobei kein Anleihegläubiger berechtigt ist, seine Schuldverschreibungen gemäß diesem § 8(a)(iii) zu kündigen, falls der Gesamtbetrag aller solcher Finanzverbindlichkeiten nicht EUR 75.000.000 (oder den entsprechenden Gegenwert in einer oder mehreren anderen Währung(en)) übersteigt;

(iv) die Emittentin, die Garantin oder eine Wesentliche Tochtergesellschaft zahlungsunfähig ist oder ihre Zahlungsunfähigkeit einräumt;

(v) ein zuständiges Gericht gegen die Emittentin, die Garantin oder eine Wesentliche Tochtergesellschaft ein Insolvenzverfahren eröffnet, das nicht innerhalb von 60 Tagen nach dessen Eröffnung aufgehoben oder ausgesetzt worden ist;

§ 8 Events of Default

(a) *Events of Default*. Each Noteholder will be entitled to declare all or some only of its Notes due and demand immediate redemption of such Notes at the Principal Amount plus accrued interest to but excluding the date of redemption as provided hereinafter, if any of the following events (each an "**Event of Default**") occurs and is continuing:

(i) the Issuer fails to pay principal or interest or any other amount in respect of the Notes or the Guarantor fails to pay any amount in respect of the Guarantee within 15 days from the relevant due date;

(ii) the Issuer or the Guarantor fails to duly perform any other obligation arising from the Notes or the Guarantee and such default, except where such default is incapable of remedy, continues unremedied for more than 45 days after the Issuer or the Guarantor (through the Principal Paying Agent) has received notice thereof from a Noteholder;

(iii) any other Financial Indebtedness (as defined below) of the Issuer, the Guarantor or any Subsidiary is not paid when due or within any applicable grace period, as the case may be, provided that no Noteholder will be entitled to declare its Notes due in accordance with this § 8(a)(iii) if the aggregate amount of such Financial Indebtedness does not exceed EUR 75,000,000 (or its equivalent in any other currency or currencies);

(iv) the Issuer, the Guarantor or any Material Subsidiary is unable or admits its inability to pay its debts as they fall due;

(v) a competent court opens insolvency proceedings against the Issuer, the Guarantor or any Material Subsidiary which has not been dismissed or stayed within 60 days after the commencement thereof;

(vi) die Emittentin oder die Garantin in Liquidation tritt, es sei denn, dies geschieht im Zusammenhang mit einer Verschmelzung oder einer anderen Form des Zusammenschlusses mit einer anderen Gesellschaft oder im Zusammenhang mit einer Umwandlung und die andere oder neue Gesellschaft übernimmt alle Verpflichtungen, die die Emittentin aus den Schuldverschreibungen bzw. die Garantin aus der Garantie eingegangen ist;

(vi) the Issuer or the Guarantor is liquidated, unless this is effected in connection with a merger or another form of amalgamation with another company or in connection with a restructuring, and the other or the new company assumes all obligations of the Issuer arising under the Notes or the Guarantor arising under the Guarantee, as the case may be;

(vii) in den Niederlanden oder in der Bundesrepublik Deutschland ein Gesetz, eine Verordnung oder behördliche Anordnung Geltung erlangt, durch welche die Emittentin oder die Garantin rechtlich gehindert ist, Verpflichtungen aus den Schuldverschreibungen bzw. der Garantie zu erfüllen, und diese Lage nicht binnen 60 Tagen behoben ist; oder

(vii) any law, governmental order, decree or enactment will gain recognition in The Netherlands or in the Federal Republic of Germany whereby the Issuer or the Guarantor is legally prevented from performing its obligations under the Notes or under the Guarantee and this situation is not cured within 60 days; or

(viii) die Garantie mit rechtskräftiger Entscheidung eines zuständigen Gerichts für nicht vollumfänglich wirksam erklärt wird oder die Garantin einen Mangel der Wirksamkeit behauptet.

(viii) the Guarantee is determined by the final decision of a competent court or is claimed by the Guarantor not to be in full force.

Das Kündigungsrecht erlischt, falls der Kündigungsgrund vor Ausübung des Kündigungsrechts geheilt wurde. Vorbehaltlich anwendbaren zwingenden Rechts berechtigen andere Ereignisse oder Umstände als die in § 8(a) genannten die Anleihegläubiger nicht dazu, ihre Schuldverschreibungen vorzeitig zur Rückzahlung fällig zu stellen, es sei denn, dies ist ausdrücklich in diesen Anleihebedingungen bestimmt.

The right to declare Notes due will terminate if the situation giving rise to it has been resolved before such right is exercised. No event or circumstance other than an event specified in § 8(a) shall entitle Noteholders to declare their Notes due and payable prior to their stated maturity, save as expressly provided for in these Terms and Conditions and subject to applicable mandatory law.

(b) *Quorum*. In den Fällen gemäß § 8(a)(ii) und/oder § 8(a)(iii) wird eine Kündigungserklärung, sofern nicht bei deren Eingang zugleich einer der in Absatz § 8(a)(i) oder § 8(a)(iv) bis (viii) bezeichneten Kündigungsgründe vorliegt, erst wirksam, wenn bei der Hauptzahlstelle Kündigungserklärungen von Anleihegläubigern im Nennbetrag von mindestens 15% des Gesamtnennbetrages der zu diesem Zeitpunkt noch insgesamt ausstehenden Schuldverschreibungen eingegangen sind.

(b) *Quorum*. In the events specified in § 8(a)(ii) and/or § 8(a)(iii), any notice declaring any Note due shall, unless at the time such notice is received any of the events specified in § 8(a)(i) or § 8(a)(iv) through (viii) entitling Noteholders to declare their Notes due has occurred, become effective only when the Principal Paying Agent has received such default notices from the Noteholders representing at least 15 per cent. of the aggregate principal amount of Notes then outstanding.

(c) *Kündigungserklärung*. Eine Kündigung der Schuldverschreibungen gemäß § 8(a) ist schriftlich in deutscher oder englischer Sprache gegenüber der Hauptzahlstelle zu erklären und persönlich oder per Einschreiben an deren bezeichnete Geschäftsstelle zu übermitteln. Der Benachrichtigung ist ein Nachweis beizufügen, aus dem sich ergibt, dass der betreffende Anleihegläubiger zum Zeitpunkt der Abgabe der Benachrichtigung Inhaber der betreffenden Schuldverschreibung ist. Der Nachweis kann durch eine Bescheinigung der Depotbank oder auf andere geeignete Weise erbracht werden.

„**Depotbank**" bezeichnet ein Bank- oder sonstiges Finanzinstitut, bei dem der Anleihegläubiger Schuldverschreibungen in seinem Wertpapierdepotkonto verwahren lässt und das ein Konto bei dem Clearingsystem hat, und schließt das Clearingsystem ein.

„**Finanzverbindlichkeit**" bezeichnet jede gegenwärtige oder zukünftige Zahlungsverpflichtung im Zusammenhang mit einer Kredit- oder sonstigen Kapitalaufnahme.

„**Gruppe**" bezeichnet die Garantin und ihre Tochtergesellschaften.

„**Wesentliche Tochtergesellschaft**" bezeichnet jede Tochtergesellschaft, deren Nettoumsatz, wie anhand der Gewinn- und Verlustrechnung für das letzte Geschäftsjahr dieser Tochtergesellschaft ermittelt (auf nicht konsolidierter Basis und ohne konzerninterne Umsätze), mindestens 7,5% des Konzern-Nettoumsatzes der Gruppe, wie anhand der geprüften Konzern-Gewinn- und Verlustrechnung der Gruppe für dasselbe Geschäftsjahr ermittelt, ausmacht. Wurde eine Tochtergesellschaft nach Ablauf des Berichtszeitraums erworben, auf den sich der zu diesem Zeitpunkt aktuellste geprüfte Konzernabschluss der Gruppe bezieht, so gilt (für die Anwendung der vorstehend beschriebenen Überprüfung) die Bezugnahme auf den aktuellsten geprüften Konzernabschluss der Gruppe als Bezugnahme auf diesen Konzernabschluss so, als wäre die entsprechende Tochtergesellschaft unter Zugrundelegung ihres zu diesem Zeitpunkt aktuellsten Abschlusses darin ausgewiesen (nach Anpassung durch den jeweils aktuellen Abschlussprüfer der Gruppe nach dessen Ermessen in Absprache mit der Garantin).

(c) *Notice*. Any notice declaring Notes due in accordance with § 8(a) will be made by means of a written declaration in German or English delivered by hand or registered mail to the specified office of the Principal Paying Agent together with proof that such Noteholder at the time of such notice is a holder of the relevant Notes by means of a certificate of its Custodian or in any other appropriate manner.

"**Custodian**" means any bank or other financial institution with which the Noteholder maintains a securities account in respect of any Notes and having an account maintained with the Clearing System and includes the Clearing System.

"**Financial Indebtedness**" means any present or future indebtedness for or in respect of monies borrowed or raised.

"**Group**" means the Guarantor and its Subsidiaries.

"**Material Subsidiary**" means any Subsidiary that has, as determined on the basis of the profit and loss statement for such Subsidiary's latest financial year, net revenues (sales) (on an unconsolidated basis and excluding intercompany sales) representing 7.5 per cent. or more of the consolidated net revenues (sales) of the Group, as determined by the audited annual consolidated profit and loss statement of the Group for the same financial year, provided that in the case of a Subsidiary acquired after the end of the financial period to which the then latest audited annual consolidated financial statements of the Group relate, for the purposes of applying the foregoing test, the reference to the Group's most recent audited consolidated financial statements shall be deemed to be a reference to such consolidated financial statements as if such Subsidiary had been shown in such consolidated financial statements by reference to its then latest relevant financial statements, adjusted as deemed appropriate by the auditors for the time being of the Group after consultation with the Guarantor.

§ 9 Zahlstellen, Berechnungsstelle

(a) *Bestellung*. Die Emittentin hat Deutsche Bank Aktiengesellschaft als Hauptzahlstelle in Bezug auf die Schuldverschreibungen (die „**Hauptzahlstelle**" und gemeinsam mit jeder etwaigen von der Emittentin nach § 9(2) bestellten zusätzlichen Zahlstelle, die „**Zahlstellen**") bestellt.

Die Emittentin hat Conv-Ex Advisors Limited als Berechnungsstelle in Bezug auf die Schuldverschreibungen (die „**Berechnungsstelle**" und, gemeinsam mit den Zahlstellen, die „**Verwaltungsstellen**") bestellt.

Die Geschäftsräume der Verwaltungsstellen befinden sich unter den folgenden Adressen:

Hauptzahlstelle:
Deutsche Bank Aktiengesellschaft
Taunusanlage 12
60325 Frankfurt am Main
Deutschland

Berechnungsstelle:
Conv-Ex Advisors Limited
30 Crown Place
London, EC2A 4EB
Vereinigtes Königreich

(b) *Änderung oder Beendigung der Bestellung*. Die Emittentin behält sich das Recht vor, jederzeit die Benennung einer Zahlstelle oder Berechnungsstelle zu verändern oder zu beenden und Nachfolger bzw. zusätzliche Zahlstellen bzw. Berechnungsstellen zu ernennen. Den Anleihegläubigern werden Änderungen in Bezug auf die Zahlstellen bzw. Berechnungsstelle oder deren angegebenen Geschäftsstellen umgehend gemäß § 11 bekannt gemacht.

Auf keinen Fall dürfen sich die Geschäftsräume einer Zahlstelle innerhalb der Vereinigten Staaten von Amerika befinden.

(c) *Erfüllungsgehilfen der Emittentin*. Die Hauptzahlstelle, die Zahlstellen und die Berechnungsstelle handeln ausschließlich als Beauftragte der Emittentin und übernehmen keinerlei Verpflichtungen gegenüber dem Anleihegläubiger; es wird kein Auftrags- oder Treuhandverhältnis zwischen ihnen und dem Anleihegläubiger begründet.

§ 9 Paying Agents, Calculation Agent

(a) *Appointment*. The Issuer has appointed Deutsche Bank Aktiengesellschaft as principal paying agent with respect to the Notes (the "**Principal Paying Agent**" and, together with any additional paying agent appointed by the Issuer in accordance with § 9(2), the "**Paying Agents**").

The Issuer has appointed Conv-Ex Advisors Limited as calculation agent with respect to the Notes (the "**Calculation Agent**" and, together with the Paying Agents, the "**Agents**").

The addresses of the specified offices of the Agents are:

Principal Paying Agent:
Deutsche Bank Aktiengesellschaft
Taunusanlage 12
60325 Frankfurt am Main
Federal Republic of Germany

Calculation Agent:
Conv-Ex Advisors Limited
30 Crown Place
London, EC2A 4EB
United Kingdom

(b) *Variation or Termination of Appointment*. The Issuer reserves the right at any time to vary or terminate the appointment of any Paying Agent or Calculation Agent and to appoint successor or additional Paying Agents or Calculation Agent, as the case may be. Notice of any change in the Paying Agents or Calculation Agent, as the case may be, or in the specified office of any Paying Agent or Calculation Agent, as the case may be, will promptly be given to the Noteholders pursuant to § 11.

In no event will the specified office of any Paying Agent be within the United States of America.

(c) *Agents of the Issuer*. The Principal Paying Agent, the Paying Agents and the Calculation Agent act solely as agents of the Issuer and do not assume any obligations towards or relationship of agency or trust for the Noteholder.

§ 10 Schuldnerersetzung

(a) *Ersetzung*.

Die Emittentin ist jederzeit berechtigt, ohne Zustimmung der Anleihegläubiger, die Garantin oder eine andere Gesellschaft, die direkt oder indirekt von der Garantin kontrolliert wird, als neue Emittentin für alle sich aus oder im Zusammenhang mit den Schuldverschreibungen ergebenden Verpflichtungen mit schuldbefreiender Wirkung für die Emittentin an die Stelle der Emittentin zu setzen (die „**Neue Emittentin**"), sofern

(i) die Neue Emittentin sämtliche Verpflichtungen der Emittentin aus oder im Zusammenhang mit den Schuldverschreibungen rechtswirksam übernimmt und, sofern eine Zustellung an die Neue Emittentin außerhalb der Bundesrepublik Deutschland erfolgen müsste, einen Zustellungsbevollmächtigten in der Bundesrepublik Deutschland bestellt;

(ii) die Neue Emittentin in der Lage ist, sämtliche zur Erfüllung der aufgrund der Schuldverschreibungen bestehenden Zahlungsverpflichtungen erforderlichen Beträge in Euro an das Clearingsystem oder die Hauptzahlstelle zu zahlen, und zwar ohne Abzug oder Einbehalt von Steuern oder sonstigen Abgaben jedweder Art, die von dem Land (oder den Ländern), in dem (in denen) die Neue Emittentin ihren Sitz oder Steuersitz hat, auferlegt, erhoben oder eingezogen werden;

(iii) die Garantin (außer in dem Fall, dass sie selbst die Neue Emittentin ist) unbedingt und unwiderruflich die Verpflichtungen der Neuen Emittentin aus den Schuldverschreibungen zu Bedingungen garantiert, die sicherstellen, dass jeder Anleihegläubiger wirtschaftlich mindestens so gestellt wird, wie er ohne die Ersetzung stehen würde (jede solche Erklärung eine „**Ersetzungsgarantie**");

§ 10 Substitution

(a) *Substitution*.

The Issuer may at any time, without the consent of the Noteholders, substitute for the Issuer either the Guarantor or any other company which is directly or indirectly controlled by the Guarantor as new issuer (the "**New Issuer**") in respect of all obligations arising under or in connection with the Notes with the effect of releasing the Issuer of all such obligations, if:

(i) the New Issuer validly assumes any and all obligations of the Issuer arising under or in connection with the Notes and, if service of process *vis-à-vis* the New Issuer would have to be effected outside the Federal Republic of Germany, appoints a process agent within the Federal Republic of Germany;

(ii) the New Issuer is in the position to pay to the Clearing System or to the Principal Paying Agent in Euro and without deducting or withholding any taxes or other duties of whatever nature imposed, levied or deducted by the country (or countries) in which the New Issuer has its domicile or tax residence all amounts required for the performance of the payment obligations arising from or in connection with the Notes;

(iii) the Guarantor (except in the case that the Guarantor itself is the New Issuer) irrevocably and unconditionally guarantees such obligations of the New Issuer under the Notes on terms which ensure that each Noteholder will be put in an economic position that is at least as favourable as that which would have existed if the substitution had not taken place (each such declaration a "**Substitution Guarantee**");

(iv) die Neue Emittentin und die Emittentin alle für die Ersetzung notwendigen Genehmigungen und Einverständniserklärungen von Regierungsstellen und Aufsichtsbehörden erhalten haben, und die Garantin (falls sie nicht selbst Neue Emittentin ist) alle für die Abgabe der Ersetzungsgarantie notwendigen Genehmigungen und Einverständniserklärungen von Regierungsstellen und Aufsichtsbehörden erhalten hat, die Neue Emittentin alle für die Erfüllung ihrer Verpflichtungen aus den Schuldverschreibungen notwendigen Genehmigungen und Einverständniserklärungen von Regierungsstellen und Aufsichtsbehörden erhalten hat und weiterhin sämtliche dieser Genehmigungen und Einverständniserklärungen in vollem Umfang gültig und wirksam sind und zudem die Verpflichtungen der Neuen Emittentin und die von der Garantin, (falls sie nicht selbst Neue Emittentin ist) begebene Ersetzungsgarantie jeweils gemäß ihren Bestimmungen wirksam und rechtsverbindlich und durch jeden Anleihegläubiger durchsetzbar sind;

(v) die Neue Emittentin sich verpflichtet, jedem Anleihegläubiger alle Steuern, Gebühren oder Abgaben zu erstatten, die ihm im Zusammenhang mit Zahlungen auf die Schuldverschreibungen (einschließlich Steuern und Abgaben, die von der Neuen Emittentin an der Quelle abgeführt oder einbehalten wurden) infolge der Schuldübernahme durch die Neue Emittentin auferlegt werden, vorausgesetzt, dass sich die Verpflichtung auf Beträge beschränkt, die der Anleihegläubiger ohne die Ersetzung der Emittentin nicht hätte tragen müssen;

(vi) unmittelbar nach Wirksamwerden dieser Ersetzung kein Kündigungsgrund und kein Ereignis, das nach Mitteilung oder Fristablauf oder beidem einen Kündigungsgrund darstellen würde, eingetreten ist und fortbesteht; und

(vii) der Hauptzahlstelle bezüglich der betroffenen Rechtsordnungen jeweils ein Rechtsgutachten von anerkannten Rechtsanwälten vorgelegt wurde, das bestätigt, dass die Bestimmungen in § 10(a)(i) bis (vi) erfüllt wurden

(iv) the New Issuer and the Issuer have obtained all necessary governmental and regulatory approvals and consents for such substitution and the Guarantor (if it is not itself the New Issuer) has obtained all such approvals and consents for the giving of the Substitution Guarantee, that the New Issuer has obtained all necessary governmental and regulatory approvals and consents for the performance of its obligations under the Notes, and that all such approvals and consents are in full force and effect and that the obligations assumed by the New Issuer and the Substitution Guarantee given by the Guarantor (if it is not itself the New Issuer) are each valid and binding in accordance with their respective terms and enforceable by each Noteholder;

(v) the New Issuer undertakes to reimburse any Noteholder for such taxes, fees or duties which may be imposed upon such Noteholder in connection with any payments on the Notes (including taxes or duties being deducted or withheld at source by the New Issuer) as a consequence of the assumption of the Issuer's obligations by the New Issuer, provided that such undertaking shall be limited to amounts that would not have been imposed upon the Noteholder had such substitution not occurred;

(vi) immediately after giving effect to such substitution, no Event of Default, and no event which, after notice or lapse of time or both, would become an Event of Default, shall have occurred and be continuing; and

(vii) there shall have been delivered to the Principal Paying Agent for each jurisdiction affected one opinion of lawyers of recognized standing to the effect that § 10(a)(i) through (vi) above have been satisfied.

(b) *Bezugnahmen*.

Im Fall einer Schuldnerersetzung gemäß § 10(a) gilt jede Bezugnahme in diesen Anleihebedingungen auf die Emittentin als eine solche auf die Neue Emittentin.

Im Fall einer Schuldnerersetzung gilt jede Bezugnahme auf die Niederlande als eine solche auf den Staat, in welchem die Neue Emittentin steuerlich ansässig ist.

(c) *Bekanntmachung und Wirksamwerden der Ersetzung.* Die Ersetzung der Emittentin ist gemäß § 11 bekanntzumachen. Mit der Bekanntmachung der Ersetzung wird die Ersetzung wirksam und die Emittentin und im Fall einer wiederholten Anwendung dieses § 10 jede frühere Neue Emittentin von ihren sämtlichen Verpflichtungen aus den Schuldverschreibungen frei. Im Fall einer solchen Schuldnerersetzung wird (werden) die Wertpapierbörse(n) informiert, an der (denen) die Schuldverschreibungen dann notiert sind.

§ 11 Bekanntmachungen

(a) *Veröffentlichungen*. Alle Bekanntmachungen, die die Schuldverschreibungen betreffen, werden (solange die Schuldverschreibungen an der Luxemburger Wertpapierbörse notiert sind) auf der Internet-Seite der Luxemburger Börse unter www.bourse.lu veröffentlicht. Jede Mitteilung gilt am Tag der ersten Veröffentlichung als wirksam erfolgt.

(b) *Mitteilungen an das Clearingsystem*. Solange Schuldverschreibungen an der Luxemburger Börse notiert sind, findet § 11(a) Anwendung. Soweit die Regeln der Luxemburger Börse dies zulassen, kann die Emittentin eine Veröffentlichung nach § 11(a) durch eine Mitteilung an das Clearingsystem zur Weiterleitung an die Anleihegläubiger ersetzen; jede derartige Mitteilung gilt am fünften Tag nach dem Tag der Mitteilung an das Clearingsystem als den Anleihegläubigern mitgeteilt.

(c) *Mitteilungen des Anleihegläubigers.* Mitteilungen, die von einem Anleihegläubiger gemacht werden, müssen schriftlich erfolgen und zusammen mit dem Nachweis seiner Inhaberschaft gemäß § 14(c)(i) an die Hauptzahlstelle geleitet werden. Eine solche Mitteilung kann über das Clearingsystem in der von der Hauptzahlstelle und dem Clearingsystem dafür vorgesehenen Weise erfolgen.

(b) *References*.

In the event of a substitution pursuant to § 10(a), any reference in these Terms and Conditions to the Issuer shall be a reference to the New Issuer.

In the event of a substitution any reference to the Netherlands shall be a reference to the New Issuer's country of domicile for tax purposes.

(c) *Notice and effectiveness of substitution.* Notice of any substitution of the Issuer shall be given by notice in accordance with § 11. Upon such publication, the substitution shall become effective, and the Issuer and in the event of a repeated application of this § 10, any previous New Issuer shall be discharged from any and all obligations under the Notes. In the case of such substitution, the stock exchange(s), if any, on which the Notes are then listed will be notified.

§ 11 Notices

(a) *Publications*. All notices regarding the Notes will be published (so long as the Notes are listed on the Luxembourg Stock Exchange) on the website of the Luxembourg Stock Exchange on www.bourse.lu. Any notice will become effective for all purposes on the date of the first such publication.

(b) *Notification to Clearing System*. So long as any Notes are listed on the Luxembourg Stock Exchange, § 11(a) shall apply. If the Rules of the Luxembourg Stock Exchange so permit, the Issuer may deliver the relevant notice to the Clearing System for communication by the Clearing System to the Noteholders, in lieu of publication as set forth in § 11(a) above; any such notice shall be deemed to have been validly given on the fifth day after the day on which the said notice was given to the Clearing System.

(c) *Notices by a Noteholder*. Notices to be given by any Noteholder shall be made in written form together with an evidence of the Noteholder's entitlement in accordance with § 14 (c)(i) to the Principal Paying Agent. Such notice may be given through the Clearing System in such manner as the Principal Paying Agent and the Clearing System may approve for such purpose.

§ 12 Begebung weiterer Schuldverschreibungen

Die Emittentin behält sich das Recht vor, ohne Zustimmung der Anleihegläubiger weitere Schuldverschreibungen mit gleicher Ausstattung (gegebenenfalls mit Ausnahme des Begebungstags, des Verzinsungsbeginns und/oder des Ausgabepreises) wie die vorliegenden Schuldverschreibungen zu begeben, so dass sie mit diesen eine einheitliche Gesamtemission bilden. Der Begriff „Schuldverschreibungen" umfasst im Fall einer solchen weiteren Begebung auch solche zusätzlich begebenen Schuldverschreibungen.

§ 13 Änderung der Anleihebedingungen; Gemeinsamer Vertreter, Änderung der Garantie

(a) *Änderung der Anleihebedingungen*. Die Emittentin kann die Anleihebedingungen mit Zustimmung aufgrund Mehrheitsbeschlusses der Anleihegläubiger nach Maßgabe der §§ 5 ff. des Gesetzes über Schuldverschreibungen aus Gesamtemissionen („**SchVG**") ändern. Eine Änderung der Anleihebedingungen ohne Zustimmung der Emittentin scheidet aus.

Die Anleihegläubiger können insbesondere einer Änderung wesentlicher Inhalte der Anleihebedingungen, einschließlich der in § 5 Absatz 3 SchVG vorgesehenen Maßnahmen mit Ausnahme der Ersetzung der Emittentin, die in § 10 abschließend geregelt ist, mit den in dem nachstehenden § 13(b) genannten Mehrheiten zustimmen. Ein ordnungsgemäß gefasster Mehrheitsbeschluss ist für alle Anleihegläubiger verbindlich.

§ 12 Further Issues

The Issuer reserves the right from time to time, without the consent of the Noteholders to issue additional notes with identical terms and conditions as the Notes in all respects (or in all respects except for the Issue Date, the interest commencement date and/or the issue price) so as to be consolidated and form a single series with such Notes. The term "Notes" shall, in the event of such further issue, also comprise such further notes.

§ 13 Amendments to the Terms and Conditions; Joint Representative, Amendments to the Guarantee

(a) *Amendment of the Terms and Conditions*. The Issuer may amend the Terms and Conditions with the consent of a majority resolution of the Noteholders pursuant to §§ 5 et seq. of the German Act on Issues of Debt Securities (*Gesetz über Schuldverschreibungen aus Gesamtemissionen*—"**SchVG**"). There will be no amendment of the Terms and Conditions without the Issuer's consent.

In particular, the Noteholders may consent to amendments which materially change the substance of the Terms and Conditions, including such measures as provided for under § 5(3) of the SchVG, but excluding a substitution of the Issuer, which is exclusively subject to the provisions in § 10, by resolutions passed by such majority of the votes of the Noteholders as stated under § 13(b) below. A duly passed majority resolution will be binding upon all Noteholders.

(b) *Mehrheitserfordernisse*. Vorbehaltlich des nachstehenden Satzes und der Erreichung der erforderlichen Beschlussfähigkeit, beschließen die Anleihegläubiger mit der einfachen Mehrheit der an der Abstimmung teilnehmenden Stimmrechte. Beschlüsse, durch welche der wesentliche Inhalt der Anleihebedingungen, insbesondere in den Fällen des § 5 Absatz 3 Nummer 1 bis 9 SchVG, geändert wird, bedürfen zu ihrer Wirksamkeit einer Mehrheit von mindestens 75% der an der Abstimmung teilnehmenden Stimmrechte (eine „**Qualifizierte Mehrheit**"). Das Stimmrecht ruht, solange die Schuldverschreibungen der Emittentin oder einem mit ihr verbundenen Unternehmen (§ 271 Absatz 2 HGB) zustehen oder für Rechnung der Emittentin oder eines mit ihr verbundenen Unternehmens gehalten werden.

(c) *Beschlüsse.* Beschlüsse der Anleihegläubiger werden entweder in einer Gläubigerversammlung nach § 13(c)(i) oder im Wege der Abstimmung ohne Versammlung nach § 13(c)(ii) getroffen, die von der Emittentin oder einem gemeinsamen Vertreter einberufen wird. Anleihegläubiger, deren Schuldverschreibungen zusammen 5% des jeweils ausstehenden Gesamtnennbetrags der Schuldverschreibungen erreichen, können gemäß § 9 Absatz 1 S. 2 SchVG schriftlich die Einberufung einer Anleihegläubigerversammlung oder Abstimmung ohne Versammlung mit einer gemäß § 9 Absatz 1 S. 2 SchVG zulässigen Begründung verlangen.

(i) Beschlüsse der Anleihegläubiger im Rahmen einer Gläubigerversammlung werden nach §§ 9 ff. SchVG getroffen. Die Einberufung der Gläubigerversammlung regelt die weiteren Einzelheiten der Beschlussfassung und der Abstimmung. Mit der Einberufung der Gläubigerversammlung werden in der Tagesordnung die Beschlussgegenstände sowie die Vorschläge zur Beschlussfassung den Anleihegläubigern bekannt gegeben.

(b) *Majority requirements.* Except as provided by the following sentence and provided that the quorum requirements are being met, the Noteholders may pass resolutions by simple majority of the voting rights participating in the vote. Resolutions which materially change the substance of the Terms and Conditions, in particular in the cases of § 5(3) numbers 1 through 9 of the SchVG, may only be passed by a majority of at least 75 per cent. of the voting rights participating in the vote (a "**Qualified Majority**"). The voting right is suspended as long as any Notes are attributable to the Issuer or any of its affiliates (within the meaning of § 271(2) of the German Commercial Code (*Handelsgesetzbuch*)) or are being held for the account of the Issuer or any of its affiliates.

(c) *Resolutions*. Resolutions of the Noteholders will be made either in a Noteholders' meeting in accordance with § 13(c)(i) or by means of a vote without a meeting (*Abstimmung ohne Versammlung*) in accordance with § 13(c)(ii), in either case convened by the Issuer or a joint representative, if any. Pursuant to § 9(1) sentence 2 of the SchVG, Noteholders holding Notes in the total amount of 5 per cent. of the outstanding principal amount of the Notes may in writing request to convene a Noteholders' meeting or vote without a meeting for any of the reasons permitted pursuant to § 9(1) sentence 2 of the SchVG.

(i) Resolutions of the Noteholders in a Noteholders' meeting will be made in accordance with § 9 et seq. of the SchVG. The convening notice of a Noteholders' meeting will provide the further details relating to the resolutions and the voting procedure. The subject matter of the vote as well as the proposed resolutions will be notified to Noteholders in the agenda of the meeting.

(ii) Beschlüsse der Anleihegläubiger im Wege der Abstimmung ohne Versammlung werden nach § 18 SchVG getroffen. Die Aufforderung zur Stimmabgabe durch den Abstimmungsleiter regelt die weiteren Einzelheiten der Beschlussfassung und der Abstimmung. Mit der Aufforderung zur Stimmabgabe werden die Beschlussgegenstände sowie die Vorschläge zur Beschlussfassung den Anleihegläubigern bekannt gegeben.

(d) *Zweite Gläubigerversammlung.* Wird die Beschlussfähigkeit bei der Abstimmung ohne Versammlung nach § 13(c)(ii) nicht festgestellt, kann der Abstimmungsleiter eine Gläubigerversammlung einberufen, welche als zweite Gläubigerversammlung im Sinne des § 15 Absatz 3 Satz 3 SchVG gilt.

(e) *Anmeldung*. Die Stimmrechtsausübung ist von einer vorherigen Anmeldung der Anleihegläubiger abhängig. Die Anmeldung muss bis zum dritten Tag vor der Gläubigerversammlung im Falle einer Gläubigerversammlung (wie in § 13(c)(i) oder § 13(d) beschrieben) bzw. vor dem Beginn des Abstimmungszeitraums im Falle einer Abstimmung ohne Versammlung (wie in § 13(c)(ii) beschrieben) unter der in der Aufforderung zur Stimmabgabe angegebenen Anschrift zugehen. Zusammen mit der Anmeldung müssen Anleihegläubiger den Nachweis ihrer Berechtigung zur Teilnahme an der Abstimmung durch eine besondere Bescheinigung ihrer Depotbank in Textform und die Vorlage eines Sperrvermerks der Depotbank erbringen, aus dem hervorgeht, dass die relevanten Schuldverschreibungen für den Zeitraum vom Tag der Absendung der Anmeldung (einschließlich) bis zu dem angegebenen Ende der Versammlung (einschließlich) bzw. dem Ende des Abstimmungszeitraums (einschließlich) nicht übertragen werden können.

(ii) Resolutions of the Noteholders by means of a voting not requiring a physical meeting (*Abstimmung ohne Versammlung*) will be made in accordance § 18 of the SchVG. The request for voting as submitted by the chairman (*Abstimmungsleiter*) will provide the further details relating to the resolutions and the voting procedure. The subject matter of the vote as well as the proposed resolutions will be notified to Noteholders together with the request for voting.

(d) *Second noteholders' meeting*. If it is ascertained that no quorum exists for the vote without meeting pursuant to § 13(c)(ii), the chairman (*Abstimmungsleiter*) may convene a meeting, which shall be deemed to be a second meeting within the meaning of § 15(3) sentence 3 of the SchVG.

(e) *Registration*. The exercise of voting rights is subject to the registration of the Noteholders. The registration must be received at the address stated in the request for voting no later than the third day prior to the meeting in the case of a Noteholders' meeting (as described in § 13(c)(i) or § 13(d)) or the beginning of the voting period in the case of voting not requiring a physical meeting (as described in § 13(c)(ii)), as the case may be. As part of the registration, Noteholders must demonstrate their eligibility to participate in the vote by means of a special confirmation of their respective custodian bank hereof in text form and by submission of a blocking instruction by the custodian bank stating that the relevant Notes are not transferable from and including the day such registration has been sent until and including the stated end of the meeting or day the voting period ends, as the case may be.

(f) *Gemeinsamer Vertreter*. Die Anleihegläubiger können durch Mehrheitsbeschluss die Bestellung und Abberufung eines gemeinsamen Vertreters, die Aufgaben und Befugnisse des gemeinsamen Vertreters, die Übertragung von Rechten der Anleihegläubiger auf den gemeinsamen Vertreter und eine Beschränkung der Haftung des gemeinsamen Vertreters bestimmen. Die Bestellung eines gemeinsamen Vertreters bedarf einer Qualifizierten Mehrheit, wenn er ermächtigt wird, wesentlichen Änderungen der Anleihebedingungen gemäß § 13(a) zuzustimmen.

(g) *Bekanntmachungen*. Bekanntmachungen betreffend diesen § 13 erfolgen gemäß den §§ 5ff. SchVG sowie nach § 11.

(h) *Änderung der Garantie*. Die oben aufgeführten auf die Änderung der Anleihebedingungen anwendbaren Bestimmungen finden sinngemäß auf die Bestimmungen der Garantie und einer etwaigen Ersetzungsgarantie.

§ 14 Anwendbares Recht, Erfüllungsort und Gerichtsstand

(a) *Geltendes Recht; Erfüllungsort*. Form und Inhalt der Schuldverschreibungen sowie alle sich daraus ergebenden Rechte und Pflichten bestimmen sich ausschließlich nach dem Recht der Bundesrepublik Deutschland. Erfüllungsort ist Frankfurt am Main.

(b) *Gerichtsstand*. Vorbehaltlich eines zwingend vorgeschriebenen Gerichtsstands für bestimmte Verfahren nach dem SchVG ist nicht-ausschließlicher Gerichtsstand für alle sich aus den in diesen Anleihebedingungen geregelten Rechtsverhältnissen ergebenden Rechtsstreitigkeiten mit der Emittentin Frankfurt am Main.

(f) *Joint representative*. The Noteholders may by majority resolution provide for the appointment or dismissal of a joint representative, the duties and responsibilities and the powers of such joint representative, the transfer of the rights of the Noteholders to the joint representative and a limitation of liability of the joint representative. Appointment of a joint representative may only be passed by a Qualified Majority if such joint representative is to be authorised to consent to a material change in the substance of the Terms and Conditions in accordance with § 13(a) hereof.

(g) *Notices*. Any notices concerning this § 13 will be made in accordance with § 5 et seq. of the SchVG and § 11.

(h) *Amendments to the Guarantee*. The provisions set out above applicable to the amendment of the Terms and Conditions shall apply *mutatis mutandis* to the Guarantee and to any Substitution Guarantee.

§ 14 Applicable Law, Place of Performance and Jurisdiction

(a) *Applicable law; place of performance*. The form and content of the Notes as well as all the rights and duties arising therefrom are governed exclusively by the laws of the Federal Republic of Germany. Place of performance is Frankfurt am Main.

(b) *Jurisdiction*. Subject to any mandatory jurisdiction for specific proceedings under the SchVG, the non-exclusive court of venue for all litigation with the Issuer arising from the legal relations established in these Terms and Conditions is Frankfurt am Main.

(c) *Gerichtliche Geltendmachung*. Jeder Anleihegläubiger kann in Rechtsstreitigkeiten gegen die Emittentin im eigenen Namen seine Rechte aus den ihm zustehenden Schuldverschreibungen geltend machen unter Vorlage der folgenden Dokumente: (i) einer Bescheinigung seiner Depotbank, die (A) den vollen Namen und die volle Anschrift des Anleihegläubigers bezeichnet, (B) den Gesamtnennbetrag der Schuldverschreibungen angibt, die am Ausstellungstag dieser Bescheinigung dem bei dieser Depotbank bestehenden Depot dieses Anleihegläubigers gutgeschrieben sind, und (C) bestätigt, dass die Depotbank dem Clearingsystem und der Hauptzahlstelle eine schriftliche Mitteilung zugeleitet hat, die die Angaben gemäß (A) und (B) enthält und Bestätigungsvermerke des Clearingsystems sowie des jeweiligen Clearingsystem-Kontoinhabers trägt, sowie (ii) einer von einem Vertretungsberechtigten des Clearingsystems oder der Hauptzahlstelle bestätigten Ablichtung der Globalurkunde.

§ 15 Sprache

Diese Anleihebedingungen sind in deutscher Sprache abgefasst. Eine Übersetzung in die englische Sprache ist beigefügt. Der deutsche Text ist bindend und maßgeblich. Die Übersetzung in die englische Sprache ist unverbindlich.

(c) *Enforcement*. Any Noteholder may in any proceedings against the Issuer protect and enforce in its own name its rights arising under its Notes by submitting the following documents: (i) a certificate issued by its Custodian (A) stating the full name and address of the Noteholder, (B) specifying an aggregate principal amount of Notes credited on the date of such certificate to such Noteholder's securities account maintained with such Custodian and (C) confirming that the Custodian has given a written notice to the Clearing System as well as to the Principal Paying Agent containing the information pursuant to (A) and (B) and bearing acknowledgements of the Clearing System and the relevant Clearing System accountholder as well as (ii) a copy of the Global Note certified by a duly authorised officer of the Clearing System or the Principal Paying Agent as being a true copy.

§ 15 Language

These Terms and Conditions are written in the German language and provided with an English language translation. The German text shall be controlling and binding. The English language translation is non-binding.

Diese Garantie ist in deutscher Sprache abgefasst. Eine Übersetzung in die englische Sprache ist beigefügt. Der deutsche Text ist bindend und maßgeblich. Die Übersetzung in die englische Sprache ist unverbindlich.

Garantie

der Wintershall Dea GmbH, einer Gesellschaft mit beschränkter Haftung nach dem Recht der Bundesrepublik Deutschland mit Sitz in der Friedrich-Ebert-Straße 160, 34119 Kassel, Bundesrepublik Deutschland, eingetragen im Handelsregister des Amtsgerichts Lüneburg unter Registernummer HRB 200519 zugunsten der Inhaber der durch die Wintershall Dea Finance B.V., Bogaardplein 47, 2284DP Rijswijk, Niederlande, begebenen EUR [●] [●]% Schuldverschreibungen mit einer Endfälligkeit am [●], ISIN [●] (die "**Schuldverschreibungen**")

1

1.1 Die Wintershall Dea GmbH (die "**Garantin**") übernimmt hiermit gegenüber den jeweiligen Inhabern (die "**Anleihegläubiger**") der von der Wintershall Dea Finance B.V. als Emittentin (die "**Emittentin**") begebenen Schuldverschreibungen, die unbedingte und unwiderrufliche Garantie (die "**Garantie**") für die ordnungsgemäße Zahlung von Kapital und Zinsen auf die Schuldverschreibungen in Euro sowie aller sonstigen auf die Schuldverschreibungen fälligen Beträge nach Maßgabe der Anleihebedingungen der Schuldverschreibungen (die "**Anleihebedingungen**"). Zahlungen im Zusammenhang mit dieser Garantie erfolgen ausschließlich gemäß den Anleihebedingungen. Bei Erfüllung von Verpflichtungen der Emittentin aus den Schuldverschreibungen oder der Garantin aus dieser Garantie zugunsten eines Anleihegläubigers erlischt das betreffende garantierte Recht dieses Anleihegläubigers aus den Schuldverschreibungen bzw. dessen Rechte aus der Garantie.

1.2 Sinn und Zweck dieser Garantie ist es, sicherzustellen, dass die Anleihegläubiger unter allen tatsächlichen und rechtlichen Umständen und unabhängig von Wirksamkeit und Durchsetzbarkeit der Verpflichtungen der Emittentin und unabhängig von sonstigen Gründen, aufgrund derer die Emittentin ihre Verpflichtungen nicht erfüllt, alle gemäß den Anleihebedingungen zahlbaren Beträge fristgerecht erhalten.

This Guarantee is written in the German language and provided with an English language translation. The German text shall be controlling and binding. The English language translation is provided for convenience only.

Guarantee

of Wintershall Dea GmbH, a private limited liability company (*Gesellschaft mit beschränkter Haftung*), incorporated under the laws of the Federal Republic of Germany, having its registered office at Friedrich-Ebert-Straße 160, 34119 Kassel, Federal Republic of Germany, registered with the Commercial Register (*Handelsregister*) of the Local Court (*Amtsgericht*) of Lüneburg under docket number HRB 200519 in favour of the holders of the EUR [●] [●] per cent. Notes due [●], ISIN [●] (the "**Notes**") issued by Wintershall Dea Finance B.V., Bogaardplein 47, 2284DP Rijswijk, The Netherlands

1

1.1 Wintershall Dea GmbH (the "**Guarantor**") hereby unconditionally and irrevocably guarantees (the "**Guarantee**") to the holders (the "**Noteholders**") of the Notes issued by Wintershall Dea Finance B.V., as issuer (the "**Issuer**") the due payment in Euro of the amounts corresponding to the principal of and interest on, as well as any other amounts due on, the Notes in accordance with the terms and conditions of the Notes (the "**Terms and Conditions**"). Payments under this Guarantee are subject to (without limitation) the Terms and Conditions. Upon discharge of any obligations of the Issuer or the Guarantor subsisting under the Notes or under this Guarantee in favour of any Noteholder, the relevant guaranteed right of such Noteholder under the Notes or the Guarantee, respectively, shall cease to exist.

1.2 The intent and purpose of this Guarantee is to ensure that the Noteholders under any and all circumstances, whether factual or legal, and irrespective of validity or enforceability of the obligations of the Issuer, or any other reasons on the basis of which the Issuer may fail to fulfil its obligations, receive on the respective due date any and all sums payable in accordance with the Terms and Conditions.

1.3 Die Garantie begründet unmittelbare, unbedingte, nicht nachrangige und nicht besicherte Verbindlichkeiten der Garantin, die im Falle der Auflösung, der Liquidation oder der Insolvenz der Garantin oder eines der Abwendung der Insolvenz der Garantin dienenden Verfahrens im gleichen Rang mit allen anderen gegenwärtigen und zukünftigen nicht besicherten und nicht nachrangigen Verbindlichkeiten der Garantin stehen, mit Ausnahme von Verbindlichkeiten, die nach geltenden Rechtsvorschriften vorrangig sind.

1.4 Negativerklärung der Garantin

Die Garantin verpflichtet sich hiermit, solange noch Kapital- oder Zinsbeträge aus den Schuldverschreibungen ausstehen, jedoch nur bis zu dem Zeitpunkt, an dem alle auf die Schuldverschreibungen gemäß den Anleihebedingungen zu zahlenden Beträge an Kapital und Zinsen dem Clearingsystem zur Verfügung gestellt worden sind,

(i) kein Grundpfandrecht, Mobiliarpfandrecht, Pfandrecht oder sonstiges dingliches Sicherungsrecht (jedes ein "**Sicherungsrecht**") an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder Teilen davon zur Besicherung einer Maßgeblichen Fremdkapitalverbindlichkeit zu gewähren oder bestehen zu lassen; und

(ii) zu veranlassen (soweit rechtlich möglich und zulässig), dass keine Tochtergesellschaft ein Sicherungsrecht an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder jeweiligen Teilen davon zur Besicherung einer Maßgeblichen Fremdkapitalverbindlichkeit gewährt oder bestehen lässt,

ohne zuvor oder gleichzeitig entweder die Anleihegläubiger gleichrangig und anteilig an einem solchen Sicherungsrecht zu beteiligen oder zu Gunsten der Anleihegläubiger ein anderes, gleichwertiges Sicherungsrecht zu bestellen, welches von einem unabhängigen Sachverständigen als gleichwertige Sicherheit beurteilt wird.

1.3 The Guarantee constitutes direct, unconditional, unsubordinated and unsecured obligations of the Guarantor ranking, in the event of the dissolution, liquidation or insolvency of the Guarantor or any proceeding to avoid insolvency of the Guarantor, *pari passu* with all other present and future unsubordinated and unsecured obligations of the Guarantor, save for such obligations which may be preferred by applicable law.

1.4 Negative Pledge of the Guarantor

The Guarantor hereby undertakes, so long as any amounts of interest or principal remain outstanding under the Notes, but only up to the time all amounts payable to Noteholders under the Notes in accordance with the Terms and Conditions have been placed at the disposal of the Clearing System,

(i) not to create or permit to subsist any any mortgage, charge, pledge or other form of encumbrance *in rem* (each a "**Security Interest**") over the whole or any part of its present or future assets or revenues to secure any Relevant Indebtedness; and

(ii) to procure (to the extent legally possible and permissible) that no Subsidiary will create or permit to subsist any present or future Security Interest over the whole or any part of its assets or revenues to secure any Relevant Indebtedness,

without prior thereto or at the same time letting the Noteholders either share equally and rateably in such Security Interest or benefit from an equivalent other Security Interest which will be approved by an independent expert as being equivalent security.

Die vorgenannte Verpflichtung findet keine Anwendung auf ein Sicherungsrecht, das

(i) von einer Tochtergesellschaft an gegenwärtigen oder zukünftigen, tatsächlichen oder bedingten Forderungen bestellt wird, die der Tochtergesellschaft gegen die Garantin oder eine andere Tochtergesellschaft der Garantin aufgrund der darlehensweisen Weiterleitung des Emissionserlöses aus der Begebung von Wertpapieren zustehen, sofern ein solches Sicherungsrecht der Besicherung der Verpflichtungen der Tochtergesellschaft aus den jeweiligen Wertpapieren dient;

(ii) gesetzlich vorgeschrieben ist oder kraft Gesetzes entsteht;

(iii) eine Maßgebliche Fremdkapitalverbindlichkeit besichert, die infolge einer zukünftigen Akquisition zu einer Verbindlichkeit der Garantin oder einer Tochtergesellschaft wird

(iv) der vollständigen oder teilweisen Verlängerung, Erneuerung oder Ersetzung (oder wiederholte Verlängerungen, Erneuerungen oder Ersetzungen) eines der vorstehend in den Klauseln (i) bis (iii) aufgeführten Sicherungsrechte dient.

Ein nach der Garantie zu leistendes Sicherungsrecht kann auch zu Gunsten eines für die Anleihegläubiger handelnden Treuhänders bestellt werden.

1.5 Im Fall einer Ersetzung der Emittentin durch eine Tochtergesellschaft der Garantin gemäß § 10 der Anleihebedingungen erstreckt sich diese Garantie auf sämtliche von der Neuen Emittentin gemäß den Anleihebedingungen zu zahlenden fälligen Beträge.

2 Die Garantie stellt einen Vertrag zugunsten der jeweiligen Anleihegläubiger als begünstigte Dritte gemäß § 328 Absatz 1 BGB dar, die jedem Anleihegläubiger das Recht gibt, Erfüllung der hierin übernommenen Verpflichtungen unmittelbar von der Garantin zu verlangen und diese Verpflichtungen unmittelbar gegen die Garantin durchzusetzen.

3 Ansprüche des Anleihegläubigers nach dieser Garantie verjähren mit Ablauf von zwei Jahren nach dem jeweiligen Zinszahlungstag bzw. Rückzahlungstag gemäß den Anleihebedingungen.

The above undertaking will not apply to a Security Interest which is

(i) is provided by any Subsidiary over any present or future, actual or contingent claims of the Subsidiary against the Guarantor or another Subsidiary of the Guarantor arising from the on-lending of the proceeds from the issuance by the Subsidiary of any securities, provided that any such Security Interest secures the obligations of the Subsidiary under any such securities;;

(ii) is mandatory according to, or created by operation of, applicable laws;

(iii) secures a Relevant Indebtedness that becomes an obligation of the Guarantor or any Subsidiary as a consequence of a future acquisition;

(iv) is provided for any extension, renewal or replacement (or successive extensions, renewals or replacements) in whole or in part of any Security Interest referred to in clauses (i) through (iii) above.

Any Security Interest which is to be provided pursuant to the Guarantee may also be provided to a person acting as trustee for the Noteholders.

1.5 In the event of a substitution of the Issuer by a subsidiary of the Guarantor pursuant to § 10 of the Terms and Conditions, this Guarantee shall extend to any and all amounts due and payable by the New Issuer pursuant to the Terms and Conditions.

2 This Guarantee constitutes a contract in favour of the respective Noteholders as third party beneficiaries pursuant to § 328(1) of the German Civil Code (*Bürgerliches Gesetzbuch*) giving rise to the right of each such Noteholder to require performance of the obligations assumed hereby directly from the Guarantor and to enforce such obligations directly against the Guarantor.

3 The period of limitation for any claim by a Noteholder under this Guarantee shall be two years calculated from the relevant interest payment date and the relevant redemption date pursuant to the Terms and Conditions.

4

4.1 Form und Inhalt der Garantie sowie alle sich daraus ergebenden Rechte und Pflichten bestimmen sich ausschließlich nach dem Recht der Bundesrepublik Deutschland.

4.2 Nicht-ausschließlicher Gerichtsstand für alle Rechtsstreitigkeiten mit der Garantin, die sich aus in dieser Garantie ergeben, ist Frankfurt am Main.

4.3 Die Begriffe, die in dieser Garantie verwendet werden und in den Anleihebedingungen definiert sind, haben die gleiche Bedeutung in dieser Garantie wie in den Anleihebedingungen, soweit sie in dieser Garantie nicht anderweitig definiert sind.

5 Die in den Anleihebedingungen vorgesehenen Regelungen zur Änderungen der Anleihebedingungen gelten für Änderungen der Bedingungen der Garantie mit Zustimmung durch Beschluss der Anleihegläubiger und mit Zustimmung der Garantin entsprechend.

6 Die Garantin und die Deutsche Bank Aktiengesellschaft vereinbaren, dass die Deutsche Bank Aktiengesellschaft nicht als Treuhänderin oder in ähnlicher Eigenschaft für die Anleihegläubiger handelt. Die Deutsche Bank Aktiengesellschaft verpflichtet sich das Original dieser Garantie bis zur Erfüllung aller Verpflichtungen aus den Schuldverschreibungen und dieser Garantie in Verwahrung zu halten.

7 Jeder Anleihegläubiger kann auf Grundlage einer Kopie dieser Garantie, die von einem ordnungsgemäß bevollmächtigten Vertreter der Hauptzahlstelle beglaubigt wurde, in jedem Rechtsstreit gegen die Garantin und in jedem Rechtsstreit, in dem er und die Garantin Partei sind, seine Rechte aus dieser Garantie im eigenen Namen wahrnehmen und durchsetzen ohne das Original dieser Garantie vorlegen zu müssen.

8 Diese Garantie ist in deutscher Sprache abgefasst. Eine Übersetzung in die englische Sprache ist beigefügt. Der deutsche Text ist bindend und maßgeblich. Die Übersetzung in die englische Sprache ist unverbindlich.

Kassel, im September 2019

Wintershall Dea GmbH

Wir nehmen die obenstehenden Erklärungen zugunsten der Anleihegläubiger ohne Obligo, Haftung oder Rückgriffsrechte auf uns an.

Deutsche Bank Aktiengesellschaft

4

4.1 The form and content of this Guarantee as well as all the rights and duties arising therefrom are governed exclusively by the laws of the Federal Republic of Germany.

4.2 Non-exclusive court of venue for all litigation with the Guarantor arising from the legal relations established under this Guarantee is Frankfurt am Main.

4.3 Terms used in this Guarantee and defined in the Terms and Conditions shall have the same meaning in this Guarantee as in the Terms and Conditions unless they are otherwise defined in this Guarantee.

5 The provisions contained in the Terms and Conditions allowing to amend the Terms and Conditions apply in relation to amendments of the terms of the Guarantee with the consent by resolution of the Noteholders and with the consent of the Guarantor *mutatis mutandis*.

6 The Guarantor and Deutsche Bank Aktiengesellschaft agree that Deutsche Bank Aktiengesellschaft is not acting as trustee or in a similar capacity for the Noteholders. Deutsche Bank Aktiengesellschaft undertakes to hold the original copy of this Guarantee in custody until all obligations under the Notes and the Guarantee have been fulfilled.

7 On the basis of a copy of this Guarantee certified as being a true copy by a duly authorised officer of the Principal Paying Agent, each Noteholder may protect and enforce in his own name his rights arising under this Guarantee in any legal proceedings against the Guarantor or to which such Noteholder and the Guarantor are parties, without the need for production of this Guarantee in such proceedings.

8 This Guarantee is written in the German language and provided with an English language translation. The German text shall be controlling and binding. The English language translation is provided for convenience only.

Kassel, in September 2019

Wintershall Dea GmbH

We hereby accept all of the above declarations in favour of the Noteholders without recourse, warranty or liability on us.

Deutsche Bank Aktiengesellschaft

TAXATION

Neither the Issuer nor the Guarantor assume any responsibility for the withholding of taxes at the source. The following is a general discussion of certain tax consequences under the tax laws of Germany and the Netherlands of the acquisition, ownership and disposal of Notes. This discussion does not purport to be a comprehensive description of all tax considerations which may be relevant to a decision to purchase Notes. The following section only provides some very general information on the possible tax treatment of the Notes. In particular, this discussion does not consider any specific facts or circumstances that may apply to a particular investor. This overview is based on the laws of Germany and the Netherlands currently in force and as applied on the date of this Offering Memorandum, which are subject to change, possibly with retroactive effect. Potential investors of the Notes should be aware that (i) the tax treatment of payments in respect of the Notes may be different (and in some cases significantly different) from that set out below, and (ii) tax regulations and their application by the relevant taxation authorities may change from time to time. Accordingly, it is not possible to predict the precise tax treatment of the Notes which will apply at any given time. As a result, potential investors of the Notes who are in any doubt as to their tax position should consult their own independent tax advisers.

PROSPECTIVE INVESTORS OF NOTES ARE ADVISED TO CONSULT THEIR OWN TAX ADVISORS AS TO THE TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSAL OF THE NOTES INCLUDING THE EFFECT OF ANY TAXES, UNDER THE TAX LAWS APPLICABLE IN GERMANY AND THE NETHERLANDS AND EACH COUNTRY OF WHICH THEY ARE RESIDENTS OR WHOSE TAX LAWS APPLY TO THEM FOR OTHER REASONS.

Germany

Withholding Tax

For German tax residents (e.g., persons whose residence, habitual abode, statutory seat or place of management is located in Germany), interest payments on the Notes are generally subject to withholding tax, provided that the Notes are held in custody with a German custodian, who is required to deduct the withholding tax from such interest payments (the "Disbursing Agent", *auszahlende Stelle*). Disbursing Agents are German resident credit institutions, financial services institutions (including German permanent establishments of foreign institutions but excluding foreign permanent establishments of German resident institutions), securities trading companies or securities trading banks. The applicable withholding tax rate is 25 per cent. (plus 5.5 per cent. solidarity surcharge thereon and, if applicable, church tax). For individuals subject to church tax the Disbursing Agent has to collect the church tax by way of withholding unless the investor has filed a blocking notice (*Sperrvermerk*) with the German Federal Central Tax Office (*Bundeszentralamt für Steuern*) in which case the investor has to file a tax return specifying its investment income and will then be assessed to church tax.

The withholding tax regime should also apply to any capital gains from the disposition or redemption of Notes realised by private investors holding the Notes as private (and not as business) assets in custody with a Disbursing Agent. Subject to exceptions, the amount of capital gains on which the withholding tax charge is applied is generally levied on the difference between the proceeds received upon the disposition or redemption of the Notes and (after the deduction of actual expenses directly related thereto) the acquisition costs. If Notes kept or administered in the same custodial account have been acquired at different points in time, the Notes first acquired will be deemed to have been sold first for the purpose of determining the capital gains. Where Notes are acquired and/or sold or redeemed in a currency other than Euro, the sales/redemption price and the acquisition costs have to be converted into Euro on the basis of the foreign exchange rates prevailing on the sale or redemption date and the acquisition date respectively with the result that any currency gains or losses are part of the capital gains. If interest claims are disposed of separately (i.e. without the Notes), the proceeds from the disposition are subject to withholding tax. The same applies to proceeds from the payment of interest claims if the Notes have been disposed of separately. Where custody has changed since the acquisition and the acquisition data is not proved or not permitted to be proved to the Disbursing Agent, the tax at a rate of 25 per cent. (plus 5.5 per cent. solidarity surcharge and, if applicable, church tax) will be imposed on an amount equal to 30 per cent. of the proceeds from the disposal or redemption of the Notes. In this case, an investor who is an individual tax resident may, and if the actual gain is higher than 30 per cent. of the respective proceeds must, apply for an assessment on the basis of the actual acquisition costs of the Notes.

Accrued interest (*Stückzinsen*) received by the investor upon disposal of the Notes between two interest payment dates is considered as part of the sales proceeds thus increasing a capital gain or reducing a capital loss from the Notes. Accrued interest paid by the investor upon an acquisition of the Notes after the

Issue Date qualifies as negative investment income either to be deducted from positive investment income generated in the same assessment period or to be carried forward to future assessment periods.

Pursuant to a tax decree issued by the Federal Ministry of Finance dated 18 January 2016, as amended from time to time, neither a bad debt loss (*Forderungsausfall*), i.e. should the Issuer become insolvent, nor a waiver of a receivable (*Forderungsverzicht*), to the extent the waiver does not qualify as a hidden contribution, shall be treated like a sale. Accordingly, losses suffered upon such bad debt loss or waiver shall not be tax-deductible. With respect to a bad debt loss, the German Federal Fiscal Court (*Bundesfinanzhof*) has objected the view expressed by the Federal Ministry of Finance; the question of whether this also applies to a waiver of a receivable has been left open by the court. However, the Federal Ministry of Finance has not yet updated the aforementioned tax decree in this respect.

The tax authorities have confirmed in 2019 in the aforementioned tax decree that deviating from their former view, losses from a sale or redemption qualify, subject to the aforementioned loss ring-fencing rules, as tax deductible even where the transaction costs exceed the sales or redemption proceeds. However, pursuant to the tax decree, Disbursing Agents may apply the former view of the tax authorities until the end of 2019 with respect to German withholding tax.

According to the recently published draft bill of the Federal Government (*Gesetzentwurf der Bundesregierung*) for an annual Tax Act 2019 (*Jahressteuergesetz 2019*) dated 31 July 2019 the view of the Federal Ministry of Finance on the non-deductibility of capital losses for tax purposes in the scenarios described above shall largely be codified in the German Income Tax Act.

German withholding tax should generally not be levied if the investor filed a withholding tax exemption certificate (*Freistellungsauftrag*) with the Disbursing Agent, but only to the extent the annual aggregate investment income does not exceed the maximum lump sum deduction amount (*Sparer-Pauschbetrag*) shown on the withholding tax exemption certificate. Currently, the maximum lump sum deduction amount (*Sparer-Pauschbetrag*) is EUR 801 (EUR 1,602 in the case of individuals filing jointly). Expenses actually incurred are not deductible. Similarly, no withholding tax is levied if the investor has submitted to the Disbursing Agent a certificate of non-assessment (*Nichtveranlagungs-Bescheinigung*) issued by the competent local tax office of the investor.

German tax resident corporate investors and, upon application, other German tax resident business investors holding the Notes as assets of a domestic business should in essence not be subject to withholding tax on capital gains from the disposition, sale or redemption of the Notes, subject to certain formal requirements (i.e. for these investors only interest payments, but no capital gains from the sale or redemption of the Notes are subject to the withholding tax regime).

The Issuer of the Notes should under German law not be required to deduct withholding tax from the proceeds from the investment in the Notes. The Issuer does not assume any responsibility for the deduction of German withholding tax at the source (including solidarity surcharge and, where applicable, church tax thereon).

Private Investors

For German tax-resident private investors, the withholding tax is—without prejudice to certain exceptions—definitive under a special flat tax regime (*Abgeltungsteuer*). Under the flat tax regime, expenses actually incurred in connection with the investment into the Notes are not tax-deductible. Private investors can apply to have their income from the investment into the Notes assessed in accordance with the general rules on determining an individual's tax bracket if this results in a lower tax burden. Also in this case, expenses actually incurred are not deductible. An assessment is mandatory for income from the investment into the Notes where the Notes are held in custody outside of Germany. Losses resulting from the sale or redemption of the Notes can only be offset against other investment income. In the event that a set-off is not possible in the assessment period in which the losses have been realised, such losses can be carried forward into future assessment periods only and can be offset against investment income generated in future assessment periods.

Business Investors

Interest payments and capital gains from the disposition or redemption of the Notes held as business assets (*Betriebsvermögen*) by German tax resident business investors are generally subject to German income tax or corporate income tax (plus 5.5 per cent. solidarity surcharge thereon and, if applicable in the case of an individual holding the Notes as business assets, church tax). Any withholding tax deducted from interest

payments is—subject to certain requirements—creditable to the extent the amount withheld exceeds the (corporate) income tax liability; the withholding tax is—as a rule—refundable. The interest payments and capital gains are also subject to trade tax if the Notes are attributable to a trade or business.

Foreign Tax Residents

Investors not tax resident in Germany should, in essence, not be taxable in Germany with the proceeds from the investment in the Notes, and no German withholding tax should be withheld from such income, even if the Notes are held in custody with a German credit (or comparable) institution. Exceptions apply, e.g., where the Notes are held as business assets in a German permanent establishment or by a German permanent representative of the investor.

Substitution of the Issuer

If the Issuer exercises the right to substitute the debtor of the Notes, the substitution might, for German tax purposes, be treated as an exchange of the Notes for new notes issued by the Substitute Debtor and subject to similar taxation rules like the Notes. In particular, such a substitution might result in the recognition of a taxable gain or loss for any Noteholder.

Inheritance and Gift Tax

No inheritance or gift taxes with respect to any Notes will arise under the laws of Germany, if, in the case of inheritance tax, neither the deceased nor the beneficiary, or, in the case of gift tax, neither the donor nor the donee, is a resident of Germany and such Note is not attributable to a German trade or business for which a permanent establishment is maintained, or a permanent representative has been appointed, in Germany. Exceptions from this rule apply to certain German expatriates.

Other taxes

At present, the purchase, sale or other disposal of Notes does not give rise to capital transfer tax, value added tax, stamp duties or similar taxes or charges in Germany. However, under certain circumstances entrepreneurs may opt for a liability to value added tax with regard to the sales of Notes which would otherwise be tax exempt. Net wealth tax (*Vermögensteuer*) is, at present, not levied in Germany.

Proposed Tax Law Changes under the 2018 – 2021 Agenda of the Grand Coalition

The German government for the legislative period 2018 – 2021 formed by the coalition of the Christian Democratic Union (*CDU*), the Christian Social Union (*CSU*) and the Social Democratic Party (*SPD*) concluded a coalition agreement providing, *inter alia*, for an abolishment of the flat tax rate of 26.375 per cent. with the definitive taxation of interest income as soon as the automatic information exchange on tax matters (*Automatischer Informationsaustausch in Steuerfragen*) is established. Instead, interest income shall be taxed by way of assessment on the basis of the investor's marginal tax rate of up to 47.475 per cent. (plus church tax, if any). According to a recently published draft bill of the German federal ministry of finance (*Referentenentwurf des Bundesministeriums der Finanzen*) for the amendment of the solidarity surcharge act dated August 6, 2019, the solidarity surcharge shall only be levied for wage tax and income tax purposes from the assessment period 2021 onwards if the individual income tax of the holder exceeds the threshold of EUR 16,956 (EUR 33,912 for jointly assessed investors). Pursuant to the draft bill, the solidarity surcharge shall remain in place for purposes of the withholding tax, the flat tax regime and the corporate income tax.

The Netherlands

General

The following is a general summary of certain Netherlands tax consequences of the acquisition, holding and disposal of the Notes. This summary does not purport to describe all possible tax considerations or consequences that may be relevant to a holder or prospective holder of Notes and does not purport to deal with the tax consequences applicable to all categories of investors, some of which (such as trusts or similar arrangements) may be subject to special rules. In view of its general nature, it should be treated with corresponding caution. Noteholders or prospective Noteholders should consult with their tax advisers with regard to the tax consequences of investing in the Notes in their particular circumstances. The discussion below is included for general information purposes only.

Where this summary refers to a holder of a Note, an individual holding a Note or an entity holding a Note, such reference is restricted to an individual or entity holding legal title to as well as an economic interest in such Note or otherwise being regarded as owning a Note for Netherlands tax purposes. It is noted that for purposes of Netherlands income, corporate, gift and inheritance tax, assets legally owned by a third-party, such as a trustee, foundation or similar entity, may be treated as assets owned by the (deemed) settlor, grantor or similar originator or the beneficiaries in proportion to their interest in such arrangement.

Except as otherwise indicated, this summary only addresses the Netherlands national tax legislation and published regulations, whereby the Netherlands means the European part of the Kingdom of the Netherlands, as in effect on the date of this Offering Memorandum and as interpreted in published case law until this date, without prejudice to developments or amendments introduced at a later date and implemented with or without retroactive effect.

Withholding tax

All payments of principal and/or interest made by the Issuer under the Notes may be made free of withholding or deduction of, for or on account of any taxes of whatever nature imposed, levied, withheld or assessed by the Netherlands or any political subdivision or taxing authority thereof or therein.

Taxes on income and capital gains

Please note that the summary in this section does not describe the Netherlands tax consequences for:

(i) Noteholders if such Noteholders, and in the case of individuals, his/her partner or certain of their relatives by blood or marriage in the direct line (including foster children), have a substantial interest (*aanmerkelijk belang*) or deemed substantial interest (*fictief aanmerkelijk belang*) in the Issuer under the Netherlands Income Tax Act 2001 (*Wet inkomstenbelasting 2001*). Generally speaking, a holder of securities in a company is considered to hold a substantial interest in such company, if such holder alone or, in the case of individuals, together with his/her partner (as defined in the Netherlands Income Tax Act 2001), directly or indirectly, holds (i) an interest of 5 per cent. or more of the total issued and outstanding capital of that company or of 5 per cent. or more of the issued and outstanding capital of a certain class of shares of that company; or (ii) rights to acquire, directly or indirectly, such interest; or (iii) certain profit sharing rights in that company that relate to 5 per cent. or more of the company's annual profits and/or to 5 per cent. or more of the company's liquidation proceeds. A deemed substantial interest arises if a substantial interest (or part thereof) in a company has been disposed of, or is deemed to have been disposed of, on a non-recognition basis;

(ii) pension funds, investment institutions (*fiscale beleggingsinstellingen*), exempt investment institutions (*vrijgestelde beleggingsinstellingen*) (as defined in the Netherlands Corporate Income Tax Act 1969; *Wet op de vennootschapsbelasting 1969*) and other entities that are exempt from Netherlands corporate income tax;

(iii) Noteholders who are individuals for whom the Notes or any benefit derived from the Notes is a remuneration or deemed to be remuneration for activities performed by such Noteholders or certain individuals related to such Noteholders (as defined in the Netherlands Income Tax Act 2001); and

(iv) Noteholders that are residents or deemed to be residents of, or have a permanent establishment or permanent representative in any non-European part of the Kingdom of the Netherlands.

Residents of the Netherlands

If a holder of Notes is an entity that is a resident or deemed to be resident of the Netherlands for Netherlands corporate income tax purposes, income or capital gains in respect of the Notes or any gain or loss realised on the disposal or deemed disposal of the Notes is subject to Netherlands corporate income tax at a rate of 19 per cent. with respect to taxable profits up to €200,000 and 25 per cent. with respect to taxable profits in excess of that amount.

If a holder of Notes is an individual, resident or deemed to be resident of the Netherlands for Netherlands income tax purposes, income or capital gains in respect of the Notes or any gain or loss realised on the disposal or deemed disposal of the Notes is taxable at the progressive income tax rates (with a maximum of 51.75 per cent.), if:

(i) the Notes are attributable to an enterprise from which the holder of Notes derives a share of the profit, whether as an entrepreneur (*ondernemer*) or as a person who has a co entitlement to the net

worth (*medegerechtigdheid tot het vermogen*) of such enterprise without being a shareholder (as defined in the Netherlands Income Tax Act 2001); or

(ii) the holder of Notes is considered to perform activities with respect to the Notes that go beyond ordinary asset management (*normaal, actief vermogensbeheer*) or derives benefits from the Notes that are taxable as benefits from other activities (*resultaat uit overige werkzaamheden*).

If the above-mentioned conditions (i) and (ii) do not apply to the individual holder of Notes, such holder will be taxed annually on a deemed income on savings and investments (*sparen en beleggen*). This deemed income on savings and investments is determined on the basis of the amount of his/her net investment assets (*rendementsgrondslag*) for the year at an income tax rate of 30 per cent., insofar as the individual's yield basis exceeds a statutory threshold (*heffingvrij vermogen*). As from January 2019 the deemed income will amount to 1.94 per cent. of the individual's net investment assets up to and including €71,650, 4.45 per cent. of the individual's net investment assets exceeding €71,650 up to and including €989,736 and 5.60 per cent. of individual's net investment assets in excess of €989,736. The percentages to determine the deemed income will be reassessed every year. The net investment assets for the year are the fair market value of the investment assets less the allowable liabilities on 1 January of the relevant calendar year. The Notes are included as investment assets. An actual gain or loss in respect of the Notes is not subject to Netherlands income tax.

Non-residents of the Netherlands

A holder of Notes that is neither resident nor deemed to be resident of the Netherlands will not be subject to Netherlands taxes on income or capital gains in respect of any payment under the Notes or in respect of any gain or loss realised on the disposal or deemed disposal of the Notes, provided that:

(i) such holder does not have an interest in an enterprise or deemed enterprise (as defined in the Netherlands Income Tax Act 2001 and the Netherlands Corporate Income Tax Act 1969) which, in whole or in part, is either effectively managed in the Netherlands or carried on through a permanent establishment, a deemed permanent establishment or a permanent representative in the Netherlands and to which enterprise or part of an enterprise the Notes are attributable; and

(ii) in the event the holder is an individual, such holder does not carry out any activities in the Netherlands with respect to the Notes that go beyond ordinary asset management and does not derive benefits from the Notes that are taxable as benefits from other activities in the Netherlands.

Gift and inheritance taxes

Residents of the Netherlands

Gift or inheritance taxes will arise in the Netherlands with respect to a transfer of the Notes by way of a gift by, or on the death of, a holder of such Notes who is resident or deemed resident of the Netherlands at the time of the gift or his/her death.

Non-residents of the Netherlands

No Netherlands gift or inheritance taxes will arise on the transfer of Notes by way of gift by, or on the death of, a holder of Notes who is neither resident nor deemed to be resident in the Netherlands, unless:

(i) in the case of a gift of a Note by an individual who at the date of the gift was neither resident nor deemed to be resident in the Netherlands, such individual dies within 180 days after the date of the gift, while being resident or deemed to be resident in the Netherlands; or

(ii) the transfer is otherwise construed as a gift or inheritance made by, or on behalf of, a person who, at the time of the gift or death, is or is deemed to be resident in the Netherlands.

For purposes of Netherlands gift and inheritance taxes, amongst others, a person that holds the Netherlands nationality will be deemed to be resident in the Netherlands if such person has been resident in the Netherlands at any time during the 10 years preceding the date of the gift or his/her death. Additionally, for purposes of Netherlands gift tax, amongst others, a person not holding the Netherlands nationality will be deemed to be resident in the Netherlands if such person has been resident in the Netherlands at any time during the 12 months preceding the date of the gift. Applicable tax treaties may override deemed residency.

For purposes of Netherlands gift and inheritance tax, a gift that is made under a condition precedent is deemed to have been made at the moment such condition precedent is satisfied. If the condition precedent is fulfilled after the death of the donor, the gift is deemed to be made upon the death of the donor.

Value added tax (VAT)

No Netherlands VAT will be payable by the Noteholders on (i) any payment in consideration for the issue of the Notes or (ii) the payment of interest or principal by the Issuer under the Notes.

Other taxes and duties

No Netherlands registration tax stamp duty or any other similar documentary tax or duty will be payable by the Noteholders in respect of (i) the issue of the Notes or (ii) the payment of interest or principal by the Issuer under the Notes.

The proposed European financial transactions tax (FTT)

On 14 February 2013, the European Commission published a proposal (the "Commission's Proposal") for a Directive for a common FTT in Belgium, Germany, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia (the "participating Member States") as well as Estonia. However, Estonia has since stated that it will not participate.

Under the Commission's Proposal, which has a very broad scope, the FTT could apply in certain circumstances to persons both within and outside of the participating Member States. Generally, it would apply to certain dealings in the Notes (including secondary market transactions) where at least one party is a financial institution, and at least one party is established in a participating Member State. A financial institution may be, or be deemed to be, "established" in a participating Member State in a broad range of circumstances, including (a) by transacting with a person established in a participating Member State or (b) where the financial instrument which is subject to the dealings is issued in a participating Member State.

However, the FTT proposal remains subject to negotiation between the participating Member States. It may therefore be altered prior to any implementation. Additional EU Member States may decide to participate and/or participating Member States may decide to discard the Commission's Proposal. Therefore, it is currently uncertain whether and when the proposed FTT will be enacted by the participating EU Member States and when it will take effect with regard to dealings in the Notes.

Prospective Noteholders are advised to seek their own professional advice in relation to the FTT.

SUBSCRIPTION AND SALE

The Issuer, the Guarantor and the Joint Bookrunners entered into a subscription agreement dated 19 September 2019 (the "Subscription Agreement"), pursuant to which the Issuer has agreed to sell to the Joint Bookrunners, and the Joint Bookrunners have agreed, subject to certain customary closing conditions, to purchase, the Notes. The Joint Bookrunners have agreed with the Issuer, subject to the satisfaction of certain conditions, to subscribe for the Notes in the following amounts:

Joint Bookrunner	Principal Amount of Notes
Barclays Bank PLC	EUR 250,000,000
Merrill Lynch International	EUR 250,000,000
J.P. Morgan Securities plc	EUR 250,000,000
Société Générale	EUR 250,000,000
Citigroup Global Markets Limited	EUR 250,000,000
Commerzbank Aktiengesellschaft	EUR 250,000,000
Crédit Agricole Corporate and Investment Bank	EUR 250,000,000
Credit Suisse Securities (Europe) Limited	EUR 250,000,000
Deutsche Bank AG	EUR 250,000,000
Goldman Sachs International	EUR 250,000,000
HSBC Bank plc	EUR 250,000,000
ING Bank N.V.	EUR 250,000,000
Mizuho Securities Europe GmbH	EUR 250,000,000
Morgan Stanley & Co. International plc	EUR 250,000,000
MUFG Securities (Europe) N.V.	EUR 250,000,000
UniCredit Bank AG	EUR 250,000,000

The Issuer has agreed to pay certain fees to the Joint Bookrunners and to reimburse the Joint Bookrunners for certain expenses incurred in connection with the issue of the Notes.

The Joint Bookrunners may terminate (*zurücktreten*), under certain circumstances, the Subscription Agreement reached. In such event, no Notes will be delivered to investors. Furthermore, the Issuer and the Guarantor have agreed to indemnify the Joint Bookrunners against certain liabilities in connection with the offer and sale of the Notes.

Interested Persons Participating in the Offering

Some of the Joint Bookrunners and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with the Issuer, the Guarantor or their respective affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

The Joint Bookrunners and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities.

Certain of the Joint Bookrunners or their affiliates may have a lending relationship with the Issuer, the Guarantor or their respective affiliates. Each of the Joint Bookrunners acts as a Lender under Facility A under the Syndicated Credit Facilities Agreement and, consequently, will receive a portion of the proceeds of the Offering. Certain of the Joint Bookrunners or their affiliates routinely hedge, and certain of the Joint Bookrunners or their affiliates may hedge, their credit exposure to the Group consistent with their customary risk management policies. A typical hedging strategy would include these Joint Bookrunners or their affiliates hedging such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in the Group's securities, including potentially any

Notes offered hereby. Any such credit default swaps or short positions could adversely affect future trading prices of the Notes offered hereby.

In addition, in the ordinary course of their business activities, the Joint Bookrunners and their affiliates may make or hold a broad array of investments (including serving as counterparties to certain derivative and hedging arrangements) and may actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities trading activities may involve securities and/or instruments of the Issuer, the Guarantor or their respective affiliates. The Joint Bookrunners and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

General

No action has been, or will be, taken in any jurisdiction by the Joint Bookrunners, the Issuer or the Guarantor that would permit a public offering of the Notes, or possession or distribution of this Offering Memorandum (in preliminary, proof or final form) or any amendment or supplement thereto or any other offering or publicity material relating to the Notes, in any country or jurisdiction where action for that purpose is required.

Selling Restrictions

United States

The Notes and the Guarantees have not been and will not be registered under the U.S. Securities Act and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except in certain transactions exempt from the registration requirements of the U.S. Securities Act. The Notes and the Guarantees are being offered and sold in "offshore transactions" outside of the United States in reliance on Regulation S. Terms used in this paragraph have the meanings given to them by Regulation S.

Each Joint Lead Manager has represented that it has not offered, sold or delivered, and agreed that, except as permitted by the Subscription Agreement, it will not offer or sell the Notes and the Guarantees (i) as part of their distribution at any time or (ii) otherwise until 40 days after the later of the commencement of the offering and the Closing Date, within the United States or to, or for the account or benefit of, U.S. persons, and it will have sent to each dealer to which it sells the Notes and the Guarantees during the distribution compliance period a confirmation or other notice setting forth the restrictions on offers and sales of the Notes and any Guarantees within the United States, or to, or for the account or benefit of, U.S. persons.

In addition, until 40 days after the commencement of the offering of the Notes and the Guarantees, an offer or sale of Notes or the Guarantees within the United States by any dealer that is not participating in the offering could violate the registration requirements of the U.S. Securities Act.

United Kingdom

Each Joint Bookrunner has severally, and not jointly nor jointly and severally, represented and agreed that:

(i) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of the Notes in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer or the Guarantor; and

(ii) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the Notes in, from or otherwise involving the United Kingdom.

Prohibition of Sales to EEA Retail Investors

Each Joint Bookrunner has severally represented, warranted and undertaken with the Issuer and the Guarantor and each other Joint Bookrunner in the Subscription Agreement that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes to any retail

investor in the European Economic Area. For these purposes, a retail investor means a person who is one (or more) of:

(i) a retail client as defined in Directive 2014/65/EU (as amended, "MiFID II"); or

(ii) a customer within the meaning of Directive 2016/97/EU (as amended, the "Insurance Distribution Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II.

Canada

The Notes may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the Notes Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the Notes must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this Offering Memorandum (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the Joint Bookrunners are not required to comply with the disclosure requirements of National Instrument 33-105 regarding underwriter conflicts of interest in connection with this offering.

Japan

The Notes and the Guarantees have not been, and will not be, registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended, the "FIEA"). Each Joint Bookrunner has represented and agreed in the Subscription Agreement that it has not offered or sold and will not offer or sell any Notes, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, a resident of Japan except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEA and any other applicable laws, regulations and ministerial guidelines of Japan.

Singapore

Each Joint Bookrunner has acknowledged that this Offering Memorandum has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each Joint Bookrunner has represented, warranted and agreed that it has not offered or sold any Notes or caused the Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Notes or cause the Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this Offering Memorandum or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the SFA) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(i) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(ii) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Notes pursuant to an offer made under Section 275 of the SFA except:

(i) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

(ii) where no consideration is or will be given for the transfer;

(iii) where the transfer is by operation of law;

(iv) as specified in Section 276(7) of the SFA; or

(v) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Hong Kong

Each Joint Bookrunner has represented and agreed in the Subscription Agreement that:

(i) it has not offered or sold and will not offer or sell in Hong Kong, by means of any document, any Notes other than (i) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (ii) in other circumstances, which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong (the "C(WUMP)O)" or which do not constitute an offer to the public within the meaning of the C(WUMP)O; and

(ii) it has not issued or had in its possession for the purposes of issue, and will not issue nor have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Notes, which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Notes, which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance.

INDEPENDENT AUDITORS

The audited consolidated financial statements of Wintershall for the financial years ended 31 December 2018 and 2017, and the short fiscal year ended 30 April 2019 (collectively the "Wintershall Historical Financial Information") included in this Offering Memorandum have been audited by KPMG AG Wirtschaftsprüfungsgesellschaft ("KPMG"), The Squaire, Am Flughafen, 60594 Frankfurt am Main, Germany, the independent auditor of Wintershall as stated in their reports appearing herein.

KPMG AG Wirtschaftsprüfungsgesellschaft is a member of the German Chamber of Public Accountants (*Wirtschaftsprüferkammer*), Rauchstraße 26, 10787 Berlin, Germany.

KPMG has conducted their audits of the German language versions of the aforementioned consolidated financial statements in accordance with section 317 German Commercial Code (*Handelsgesetzbuch*) and the German generally accepted standards for the audit of financial statements promulgated by the Institute of Public Auditors in Germany (*Institut der Wirtschaftsprüfer in Deutschland e.V., IDW*).

The audited consolidated financial statements of Dea for the financial years ended 31 December 2018 and 2017 and the short fiscal year ended 30 April 2019, in each case together with the related notes thereto (collectively, the "Dea Financial Statements" and, together with the Wintershall Historical Financial Information and the Pro Forma Financial Information, the "Financial Statements") have been audited by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft with registered seat in Frankfurt am Main, Germany (a member of PricewaterhouseCoopers International, a company limited by guarantee registered in England and Wales, United Kingdom), through its Hamburg office, Alsterufer 1, 20354 Hamburg, Germany ("PwC"), independent auditors of Dea.

KPMG and PwC are members of the German Chamber of Public Accountants (*Wirtschaftsprüferkammer*). KPMG and PwC have conducted their audits of the German language versions of the aforementioned consolidated financial statements in accordance with section 317 German Commercial Code (*Handelsgesetzbuch*) and the German generally accepted standards for the audit of financial statements promulgated by the Institute of Public Auditors in Germany (*Institut der Wirtschaftsprüfer in Deutschland e.V, IDW*).

INDEPENDENT PETROLEUM ENGINEERS

Estimates of the gas and oil commercial reserves as of 31 December 2018 included in this Offering Memorandum were based in part upon a reserves report prepared by independent petroleum engineers, RPS, Ryder Scott, Gaffney, Cline and AGR. These estimates have been included in reliance on the authority of such firm as an expert in such matters.

GENERAL INFORMATION

Authorisation and consent

The creation and issue of the Notes has been authorised by a resolution of the Board of Directors of the Issuer dated 30 August 2019 as approved by a resolution of the shareholder of the Issuer dated 30 August 2019.

The granting of the Guarantees and issue of the Notes have been authorised by resolutions of the Management Board of the Guarantor dated 20 August 2019 and 27 August 2019, as approved by a resolution of the shareholders of the Guarantor dated 28 August 2019.

Clearing and Settlement

The Notes have been accepted for clearance through Clearstream Banking S.A., Luxembourg and Euroclear Bank SA/NV.

The 2023 Notes have been assigned securities codes as follows:

ISIN: XS2054209320;
Common Code: 205420932; and
WKN: A2R75A.

The 2025 Notes have been assigned securities codes as follows:

ISIN: XS2054209833;
Common Code: 205420983; and
WKN: A2R75B.

The 2028 Notes have been assigned securities codes as follows:

ISIN: XS2054210252;
Common Code: 205421025; and
WKN: A2R75C.

The 2031 Notes have been assigned securities codes as follows:

ISIN: XS2055079904;
Common Code: 205507990; and
WKN: A2R75D.

Eurosystem Eligibility

The Notes are intended to be held in a manner which would allow Eurosystem eligibility.

This does not necessarily mean that the Notes will be recognized as eligible collateral for Eurosystem monetary policy and intraday credit operations by the Eurosystem either upon issue or at any or all times during their life. Such recognition will depend upon the European Central Bank being satisfied that the Eurosystem eligibility criteria have been met.

Notices to Noteholders

For so long as the Notes are listed on the official list of the Luxembourg Stock Exchange and admitted to trading on the Euro MTF Market of the Luxembourg Stock Exchange, all notices to the Noteholders regarding the Notes shall be published on the website of the Luxembourg Stock Exchange (*www.bourse.lu*).

Yield

On the basis of the issue price of the 2023 Notes of 100.0 per cent. of their principal amount, the yield of the 2023 Notes is 0.452 per cent. per annum.

On the basis of the issue price of the 2025 Notes of 100.0 per cent. of their principal amount, the yield of the 2025 Notes is 0.840 per cent. per annum.

On the basis of the issue price of the 2028 Notes of 100.0 per cent. of their principal amount, the yield of the 2028 Notes is 1.332 per cent. per annum.

On the basis of the issue price of the 2031 Notes of 100.0 per cent. of their principal amount, the yield of the 2031 Notes is 1.823 per cent. per annum.

Such yields are calculated in accordance with the ICMA (International Capital Markets Association) method. The ICMA method determines the effective interest rate on notes by taking into account accrued interest on a daily basis.

Listing and Admission to Trading

Application has been made to the Luxembourg Stock Exchange to list the Notes on the Official List and to admit the Notes to trading on the Euro MTF operated by the Luxembourg Stock Exchange, which is a multilateral trading facility for the purposes of MiFID II and, therefore, not a EU-regulated market.

The total expenses related to the listing and to the admission to trading of the Notes are expected to amount to approximately €15,000.

Credit Ratings

The Issuer has not been rated.

Moody's Investors Service ("Moody's") has assigned a solicited long-term credit rating of "Baa2" (outlook: stable) to the Guarantor.

Fitch Ratings ("Fitch") has assigned a solicited long-term credit rating of "BBB" (outlook: stable) to the Guarantor.

Each of these credit rating agencies is established in the European Community and is registered under Regulation (EC) No. 1060/2009 of the European Parliament and of the Council of 16 September 2009 on credit rating agencies (the "Credit Rating Agencies Regulation") and has been published by ESMA in the list of registered and certified credit rating agencies in accordance with Article 18(3) of the Credit Rating Agencies Regulation.

Noteholders should be aware that a credit rating is not a recommendation to buy, sell or hold securities and may be revised or withdrawn by the credit rating agency at any time.

Legal Entity Identifier (LEI)

Wintershall Dea Finance BV:	529900SUC9JUI6M74U66
Wintershall Dea GmbH:	529900PP4O3OCBMO9C52

Websites

For the avoidance of doubt, the content of any website referred to in this Offering Memorandum does not form part of this Offering Memorandum (unless it is explicitly incorporated by reference into this Offering Memorandum).

Documents available for inspection

For as long as the Notes are outstanding, copies of the following documents are available free of charge, during usual business hours on any weekday (Saturdays and public holidays excepted), at the offices of the Guarantor. In addition, this Offering Memorandum (together with any supplement, if any) will be available in electronic form on the website of the Luxembourg Stock Exchange (*www.bourse.lu*):

(i) the Guarantees:

(ii) the articles of association of the Issuer;

(iii) the articles of association (*Satzung*) of the Guarantor;

(iv) this Offering Memorandum.

1P Reserves or proved reserves	those quantities of petroleum, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations.
2C resources or contingent resources	those quantities of petroleum which are estimated, on a given date, to be potentially recoverable from known accumulations by application of development projects but which are not currently considered to be commercially recoverable owing to one or more contingencies.
2P reserves or proved plus probable reserves	1P reserves plus those additional reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than 1P reserves.
ADNOC	Abu Dhabi National Oil Company
AGR	AGR Petroleum Services
Achimov I	Block 1A Achimov formation of the Urengoy oil, gas and condensate field
Achimov IV & V	Block 4A and 5A Achimov formation of the Urengoy oil, gas and condensate field
Agoco	Arabian Gulf Oil Company
Articles of Association	the Guarantor's articles of association (*Satzung*) dated 2 May 2019
BASF	BASF SE, a European stock corporation (*Societas Europaea,* SE)
BASF Group	BASF and its subsidiaries
BHE	BASF *Handels- und Exportgesellschaft* mbH
CACPF	Cañadón Alfa central processing facilities
CAGTP	Cañadón Alfa gas treatment plant
COA	Contract of Affreightment
CRA Regulation	Regulation (EU) No 513/2011
CSSF	the Commission de Surveillance du Secteur Financier
Clearing System	Clearstream Banking S.A., Luxembourg and Euroclear Bank SA/NV
Company	Wintershall Dea GmbH
ConocoPhillips	ConocoPhillips Argentina Ventures S.R.L. and ConocoPhillips Argentina Holdings S.a.r.l.
Credit Facility Agreement	the credit facility agreement entered into in May 2014 and amended November 2017 by WIGA group
Credit Rating Agencies Regulation	Regulation (EC) No. 1060/2009 of the European Parliament and of the Council of 16 September 2009 on credit rating agencies
Dea	DEA Deutsche Erdoel AG

E&P	Exploration and production
ECB	European Central Bank
EEA	European Economic Area
EGAS	the Egyptian Natural Gas Holding Company
EGPC	the Egyptian General Petroleum Corporation
EOR	Enhanced oil recovery
ESP	Electric submersible pumps
ESSO	Esso Exploration and Production UK Ltd
EU	the European Union
EUR, "euro", "€" or "euro"	the currency introduced at the start of the third stage of the European economic and monetary union, and as defined in Article 2 of Council Regulation (EC) No 974/98 of 3 May 1998
EnWG	German Energy Industry Act
F&D	Finding and development
FNA	Federal Network Agency (*Bundesnetzagentur*)
FPSO	Floating production storage and offloading unit
FSRUs	Floating Storage & Regasification Units
Financial Statements	the Dea Historical Financial Statements, the Wintershall Historical Financial Information and the Pro Forma Financial Information
GANOPE	Ganoub El Wadi Petroleum Holding Company
GECF	Gas Exporting Countries Forum
Gaffney Cline	Gaffney Cline & Associates
Germany	the Federal Republic of Germany
"The Group", "Wintershall Dea", "we", "our" or "us"	Wintershall Dea GmbH together with its consolidated subsidiaries
Guarantor	Wintershall Dea GmbH
IFRS	International Financial Reporting Standards as issued by the International Accounting Standards Board and adopted by the European Union
IOC	international oil and gas company
IPO	initial public offering
ITO	Independent Transmission Operator
The Issuer	Wintershall Dea Finance B.V.
JOA	Joint Operating Agreement

Joint Bookrunners	the Joint Lead Managers and Citigroup Global Markets Limited, Commerzbank Aktiengesellschaft, Crédit Agricole Corporate and Investment Bank, Credit Suisse Securities (Europe) Limited, Deutsche Bank AG, Goldman Sachs International, HSBC Bank plc, ING Bank N.V., Mizuho Securities Europe GmbH, Morgan Stanley & Co. International plc, MUFG Securities (Europe) N.V. and UniCredit Bank AG
Joint Lead Managers	Barclays Bank PLC, J.P. Morgan Securities plc, Merrill Lynch International and Société Générale
KPMG	KPMG AG *Wirtschaftsprüfungsgesellschaft*
LPG	Liquefied petroleum gas
LTIF	Lost Time Incident Frequency Rate
LetterOne	LetterOne Holdings S.A.
MENA	Middle East & North Africa
The Majors	BP, Chevron, Equinor, Exxon Mobil, Royal Dutch Shell, and Total
MiFID II	Directive 2014/65/EU
NGL	natural gas liquids
Net RAB	net regulated asset base
Nord Stream 1	The Nord Stream 1 pipeline owned and operated by Nord Stream AG
OPEC	Organization of the Petroleum Exporting Countries
Official List	the official list of the Luxembourg Stock Exchange
participating Member States	Belgium, Germany, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia
Prospectus Regulation	Regulation (EU) No 1129/2017 of the European Parliament and of the Council of 14 June 2017
RAB	Regulated Asset Base
Regulation S	Regulation S under the U.S. Securities Act
Ryder Scott	Ryder Scott Petroleum Consultants
SAGE	Scottish Area Gas Evacuation
SC Members	the Shareholders' Committee consisting of six members of which four members are appointed by the Shareholders (two by each of LetterOne and BASF)
SEGAL	Shell and Exxon Gas and Liquids
SHELL	Shell UK LIMITED
SPE	Society of Petroleum Engineer's
SchVG	*Gesetz über Schuldverschreibungen aus Gesamtemissionen*
Shareholders	LetterOne and BASF

Shareholders' Agreement	the agreement entered into by LetterOne, L1E Acquisitions, BASF SE, BHE and the Company which governs the ongoing legal relationships between LetterOne and BASF as ultimate shareholders of the Company following the implementation of the Merger
Shareholders' Committee	the Shareholders' committee to consult on certain relevant matters and align their interests in relation to the Company prior to taking any (relevant) decisions in the Shareholders' Meeting
Shareholders' Meeting	the shareholders' meeting (*Gesellschafterversammlung*) of the Guarantor.
Subscription Agreement	the subscription agreement entered into by the Issuer, the Guarantor and the Joint Bookrunners dated 19 September 2019
TPFA	transportation, processing and fractionation
TSO	transmission system operator
TSOs	transmission system operators
"U.S. Dollar", "USD", "$" or "U.S.$"	the legal currency of the United States
The U.S. Securities Act	the United States Securities Act of 1933
United States	the United States of America
WIGA	WIGA *Transport Beteiligungs-GmbH* & Co. KG
WND	West Nile Delta
Wintershall Dea GmbH	the legal and commercial name of the Guarantor
YPF	Yacimientos Petrolíferos Fiscales
ÅTS	Åsgard Transportation System

INDEX TO FINANCIAL STATEMENTS

	Page
Audited Consolidated Financial Statements of Wintershall (prepared in accordance with IFRS as adopted by the EU) as of and for the financial year ended 31 December, 2017	
Independent Auditor's Report	F-6
Consolidated Balance Sheet	F-8
Consolidated Statement of Income	F-9
Consolidated Statement of Comprehensive Income	F-10
Consolidated Statement of Cash Flows	F-11
Consolidated Statement of Changes in Equity	F-12
Audited Consolidated Financial Statements of Dea (prepared in accordance with IFRS as adopted by the EU) as of and for the year ended 31 December, 2017	
Consolidated Income Statement	F-69
Consolidated Statement of Comprehensive Income	F-70
Consolidated Balance Sheet	F-71
Consolidated Cash Flow Statement	F-72
Consolidated Statement of Changes in Equity	F-73
Report of Independent Auditors	F-124
Audited Consolidated Financial Statements of Wintershall (prepared in accordance with IFRS as adopted by the EU) as of and for the financial year ended 31 December, 2018	
Consolidated Balance Sheet	F-130
Consolidated Statement of Income	F-131
Consolidated Statement of Comprehensive Income	F-132
Consolidated Statement of Cash Flows	F-133
Consolidated Statement of Changes in Equity	F-134
Independent Auditor's Report	F-207
Audited Consolidated Financial Statements of Dea (prepared in accordance with IFRS as adopted by the EU) as of and for the year ended 31 December, 2018	
Consolidated Income Statement	F-213
Consolidated Statement of Comprehensive Income	F-214
Consolidated Balance Sheet	F-215
Consolidated Cash Flow Statement	F-216
Consolidated Statement of Changes in Equity	F-217
Report of Independent Auditors	F-273
Audited Consolidated Financial Statements of Wintershall (prepared in accordance with IFRS as adopted by the EU) as of and for the short fiscal year ended 30 April, 2019	
Consolidated Balance Sheet	F-279
Consolidated Statement of Income	F-280
Consolidated Statement of Comprehensive Income	F-281
Consolidated Statement of Cash Flows	F-282
Consolidated Statement of Changes in Equity	F-283
Independent Auditor's Report	F-352
Audited Consolidated Financial Statements of Dea (prepared in accordance with IFRS as adopted by EU) as of and for the short fiscal year ended 30 April, 2019	
Consolidated Income Statement	F-358
Consolidated Statement of Comprehensive Income	F-359
Consolidated Balance Sheet	F-360
Consolidated Cash Flow Statement	F-361
Consolidated Statement of Changes in Equity	F-362
Report of Independent Auditors	F-417

Page

Unaudited Condensed Consolidated Interim Financial Statements of the Group (prepared in accordance with IFRS as adopted by the EU) as of and for the two months period ended 30 June, 2019

Consolidated Statement of Income F-423
Consolidated Statement of Comprehensive Income F-424
Consolidated Balance Sheet F-425
Consolidated Statement of Changes in Equity F-427
Consolidated Statement of Cash Flows F-428

The English language text below is a translation provided for information purposes only. The original German text shall prevail in the event of any discrepancies between the English translation and the German original. We do not accept any liability for the use of, or reliance on, the English translation or for any errors or misunderstandings that may arise from the translation.

Audited Consolidated Financial Statements of Wintershall (prepared in accordance with IFRS as adopted by the EU) as of and for the financial year ended 31 December, 2017

The following independent auditor's report, prepared in accordance with § 322 HGB "Handelsgesetzbuch":"German Commercial Code", refers to the complete consolidated financial statements, comprising the consolidated statement of financial position, consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows and notes to the consolidated financial statements of Wintershall for the financial year as of and for the financial year ended 31 December 2017. The above-mentioned auditor's report and consolidated financial statements are both translations of the respective German-language documents. The group management report is not part of this Offering Memorandum.

Auditor's report

We have audited the consolidated financial statements prepared by Wintershall Holding GmbH, Kassel, Germany, comprising the statement of income, statement of income and expense recognized in equity, balance sheet, statement of cash flows, statement of equity and the Notes to the Consolidated Financial Statements together with the Group Management's Report for the business year from January 1 to December 31, 2017. The preparation of the Consolidated Financial Statements and the Group Management's Report in accordance with IFRSs as adopted by the European Union, and the additional requirements of German commercial law pursuant to Section 315a(1) of the German Commercial Code (HGB) are the responsibility of the company's management. Our responsibility is to express an opinion on the Consolidated Financial Statements and on the Group Management's Report based on our audit.

We conducted our audit of the Consolidated Financial Statements in accordance with Section 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institute of Public Auditors in Germany (*Institut der Wirtschaftsprüfer*, IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the Consolidated Financial Statements in accordance with the applicable financial reporting framework and in the Group Management's Report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the Consolidated Financial Statements and the Group Management's Report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by the Board of Executive Directors, as well as evaluating the overall presentation of the consolidated financial statements and the group management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the consolidated financial statements comply with IFRSs as adopted by the E.U., the additional requirements of German commercial law pursuant to Section 315a(1) HGB and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The Group Management's Report is consistent with the Consolidated Financial Statements, conforms to legal requirements, and as a whole provides a suitable view of the Group's position and suitably presents the opportunities and risks of future development.

Frankfurt am Main, June 6, 2018

KPMG AG

Wirtschaftsprüfungsgesellschaft

[Original German version signed by]

Janz	Slawitschek
Wirtschaftsprüfer	Wirtschaftsprüfer



CONSOLIDATED FINANCIAL STATEMENTS

Wintershall Holding GmbH

Group balance sheet

€ thousand	Dec. 31, 2017	Dec. 31, 2016	Jan. 1, 2016
Intangible assets	2,307,787	2,832,792	2,689,912
Property, plant, and equipment	6,360,832	6,675,316	6,418,574
Equity-accounted investments	2,556,542	2,581,398	2,588,536
Other financial assets	73,492	71,456	9,259
Deferred tax assets	152,611	192,156	16,594
Other assets	517,926	318,300	453,499
Noncurrent assets	**11,969,190**	**12,671,418**	**12,176,374**
Inventories	84,359	76,197	88,168
Trade receivables	502,106	493,935	397,600
Other receivables and other assets	283,129	326,222	352,094
Cash and cash deposits	110,326	92,719	366,030
Current assets	**979,920**	**989,073**	**1,203,892**
Assets	**12,949,110**	**13,660,491**	**13,380,266**
Share capital	105,000	105,000	105,000
Capital surplus	415,543	15,543	15,543
Retained earnings and unappropriated net profit	3,693,020	3,796,944	3,834,713
Other comprehensive income	-1,071,791	-745,137	-1,126,261
Minority interests	71,678	-42,606	-127,954
Equity	**3,213,450**	**3,129,744**	**2,701,041**
Pension provisions	312,680	323,266	286,010
Other provisions	1,289,406	1,259,430	1,165,978
Deferred tax liabilities	1,294,782	1,626,214	1,684,162
Noncurrent financial indebtedness	501,459	1,473,799	1,574,951
Other noncurrent liabilities	1,380,363	1,431,889	1,432,764
Noncurrent liabilities	**4,778,690**	**6,114,598**	**6,143,865**
Trade payables	286,756	242,739	256,828
Provisions	131,800	109,311	184,311
Tax liabilities	133,877	181,871	66,574
Current financial indebtedness	100,150	137,832	71,078
Other current liabilities	4,304,387	3,744,396	3,956,569
Current liabilities	**4,956,970**	**4,416,149**	**4,535,360**
Equity and liabilities	**12,949,110**	**13,660,491**	**13,380,266**

Consolidated income statement

€ thousand	2017	2016
Net revenue	**3,661,704**	3,108,330
Cost of sales	**-2,715,752**	-2,512,894
Gross profit on sales	**945,952**	**595,436**
Selling expenses	**-79,537**	-116,059
General and administrative expenses	**-81,311**	-66,546
Research costs	**-44,704**	-38,392
Exploration costs	**-104,282**	-94,184
Other operating income	**387,080**	249,170
Other operating expenses	**-336,971**	-142,944
Equity-accounted income	**247,609**	104,027
Profit from continuing operations	**933,836**	**490,508**
Income from other shareholdings	**3,991**	11,709
Expenses from other shareholdings	**-2,927**	-5,286
Net income from shareholdings	**1,064**	**6,423**
Interest income	**56,787**	50,971
Interest expense	**-106,053**	-140,791
Net interest cost	**-49,266**	**-89,820**
Other finance income	**39,377**	44,046
Other finance cost	**-40,226**	-53,882
Other financial result	**-849**	**-9,836**
Net finance cost	**-49,051**	**-93,233**
Profit before tax	**884,785**	**397,275**
Income taxes (expense; previous year: credit)	**-157,885**	6,658
Net profit for the year	**726,900**	**403,933**
Minority interests	**-41,280**	-75,852
Net profit for the period after minority interests	**685,620**	**328,081**

Statement of comprehensive income

	2017			2016		
€ thousand	Total	BASF	Minority interests	Total	BASF	Minority interests
Net profit for the period	**726,900**	**685,620**	**41,280**	**403,933**	**328,081**	**75,852**
Actuarial gains/losses	7,853	7,846	7	-35,050	-35,029	-21
Gains/losses that cannot be reclassified after taxes from equity-accounted shareholdings	0	0	0	0	0	0
Deferred taxes	-2,804	-2,802	-2	11,201	11,195	6
Other comprehensive income and expenses: Items that will not be reclassified to profit or loss	**5,049**	**5,044**	**5**	**-23,849**	**-23,835**	**-14**
Unrealized gains/losses from currency translation	315,800	315,800	0	-302,509	-302,509	0
Measurement of securities at fair value	2,641	2,641	0	-2,313	-2,313	0
Gains/losses that can be reclassified after taxes from equity-accounted shareholdings	13,262	13,262	0	-100,153	-100,153	0
Deferred taxes	0	0	0	0	0	0
Other comprehensive income and expenses: Items that will be reclassified to profit or loss	**331,703**	**331,703**	**0**	**-404,975**	**-404,975**	**0**
Total comprehensive income for the year	**1,063,652**	**1,022,367**	**41,285**	**-24,891**	**-100,729**	**75,838**

Statement of changes in comprehensive income

€ thousand	**Acturial gains/ losses**	**Asset ceilings in defined benefit pension plans**	**Unrealized gains/losses from currency translation**	**Measurement of securities at fair value**	**Cash flow hedges**	**Total other comprehensive income**
As of Jan. 1, 2017	-152,565	-87	-550,120	2,313	-66,250	-766,709
Additions	7,853	0	-346,378	-2,641	17,316	-323,850
Deferred taxes	-2,804	0	0	0	0	-2,804
As of Dec. 31, 2017	-147,516	-87	-896,498	-328	-48,934	-1,093,363

€ thousand	**Acturial gains/ losses**	**Asset ceilings in defined benefit pension plans**	**Unrealized gains/ losses from currency translation**	**Measurement of securities at fair value**	**Cash flow hedges**	**Total other comprehensive income**
As of Jan. 1, 2016	-128,716	-87	-945,285	0	-73,745	-1,147,833
Additions	-35,050	0	395,165	2,313	7,495	369,923
Deferred taxes	11,201	0	0	0	0	11,201
As of Dec. 31, 2016	-152,565	-87	-550,120	2,313	66,250	-766,709

Consolidated statement of cash flows

€ thousand	2017	2016
Net profit for the period after minority interests	**685,620**	**328,081**
Depreciation and amortization of intangible assets, property, plant and equipment, and financial assets	1,024,486	1,101,411
Changes in inventories	-13,081	8,618
Changes in receivables	13,165	-246,830
Changes in operating liabilities and other provisions	-137,229	-220,414
Change in pension provisions, excess pension plan assets, and other items	131,085	223,896
Gains (-) on the disposal of noncurrent assets	-49,660	-2,286
Cash generated by operating activities	**1,654,386**	**1,192,476**
Payments made for property, plant, and equipment	-876,270	-993,887
Payments made for intangible assets	-14,834	-14,045
Payments made for financial assets	-351,786	-64,224
Payments received from the disposal of noncurrent assets	324,257	224,429
Payments received for divestitures	0	-15,887
Net cash used in investing activities	**-918,633**	**-863,614**
Payments made to shareholders	-824,685	-594,393
Payments received from shareholders	400,000	–
Additions to financing-related liabilities, BASF Group	2,317,751	1,659,445
Repayment of financing-related liabilities, BASF Group	-1,568,227	-1,658,092
Additions to financial indebtedness	123,288	122,669
Repayment of financial indebtedness	-1,158,224	-157,067
Net cash generated by/used in (-) financing activities	**-710,097**	**-627,438**
Change in cash and cash equivalents	**25,655**	**-298,576**
Change in cash and cash equivalents		
From foreign exchange rates	-7,228	25,265
From changes in scope of consolidation	-820	0
Cash and cash equivalents at beginning of period	**92,719**	**366,030**
Cash and cash equivalents at end of period	**110,326**	**92,719**
Composition of cash and cash equivalents		
Cash and cash equivalents	**110,326**	**92,719**

Consolidated statement of changes in equity

€ thousand	Subscribed capital	Capital surplus	Retained earnings and unappropriated net profit	Other comprehensive income	Minority interests	Total
Jan 1, 2017	**105,000**	**15,543**	**3,796,944**	**-745,137**	**-42,606**	**3,129,744**
Changes in scope of consolidation	–	–	11,670	–	–	**11,670**
Corporate action, W & G Infrastruktur Finanzierungsgruppe, Kassel	–	–	–	–	69,960	**69,960**
Profit for the year before profit transfer	–	–	685,620	–	41,280	**726,900**
Profit transfer	–	–	-401,546	–	-59,639	**-461,185**
Withdrawal	–	–	-400,000	–	–	**-400,000**
Contribution	–	400,000	–	–	–	**400,000**
Actuarial gains/losses	–	–	–	5,049	–	**5,049**
Cash flow fair value measurement	–	–	–	14,675	–	**14,675**
Translation adjustment	–	–	–	-346,378	–	**-346,378**
Other	–	–	332	–	62,683	**63,015**
Dec. 31, 2017	**105,000**	**415,543**	**3,693,020**	**-1,071,791**	**71,678**	**3,213,450**
Jan 1, 2016	**105,000**	**15,543**	**3,834,712**	**-1,126,261**	**-127,954**	**2,701,040**
Profit for the year before profit transfer	–	–	328,081	–	75,852	**403,933**
Profit transfer	–	–	-365,046	–	-66,630	**-431,676**
Actuarial gains/losses	–	–	–	-23,849	–	**-23,849**
Cash flow fair value measurement	–	–	–	9,808	–	**9,808**
Translation adjustment	–	–	–	395,165	–	**395,165**
Other	–	–	-803	–	76,126	**75,323**
Dec. 31, 2016	**105,000**	**15,543**	**3,796,944**	**-745,137**	**-42,606**	**3,129,744**

Notes to the consolidated financial statements

Policies and scope of consolidation

1. Summary of accounting policies

1.1 General disclosures

Wintershall Holding GmbH (registry court: local court of Lüneburg; registration number: HRB 200519) has its registered office in Celle, Lower Saxony. Its official address is Friedrich-Ebert-Straße 160, 34119 Kassel, Germany.

The Consolidated Financial Statements of Wintershall Holding GmbH as of December 31, 2017 have been prepared in accordance with the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB) and section 315a(1) of the German Commercial Code (HGB). IFRSs are only applied once they have been adopted by the European Union. For the 2017 fiscal year, all of the binding IFRSs and pronouncements of the International Financial Reporting Interpretations Committee (IFRIC) were applied.

These are the Group's first consolidated financial statements prepared in accordance with the applicable IFRSs.

IFRS 1 First-time adoption of International Financial Reporting Standards has been applied.

In addition, the expedients offered by IFRS 1.D16 (a) have been applied. Accordingly, the carrying amounts for the financial statements of BASF have been used and consolidated, as appropriate, for the purposes of the consolidated financial statements of the Wintershall Group.

The Consolidated Financial Statements are presented in euros. Generally, all amounts, including prior-year amounts, are reported in thousands of euros (€ thousand). Any exceptions are specifically indicated (some figures are presented in millions of euros; € million).

The individual financial statements of the consolidated companies are prepared as of the balance sheet date of the Consolidated Financial Statements.

1.2 Principles of consolidated financial reporting

Scope of consolidation: The scope of consolidation is based on the application of the standards IFRS 10 and 11.

According to IFRS 10, a group consists of a parent entity and the subsidiaries controlled by the parent. "Control" of an investee assumes the simultaneous fulfillment of the following three criteria:

- The parent company holds decision-making power over the relevant activities of the investee
- The parent company has rights to variable returns from the investee
- The parent company can use its decision-making power to affect the variable returns

Based on corporate governance and potential supplementary agreements, companies are analyzed for their relevant activities and variable returns, and the link between the variable returns and the extent to which their relevant activities could be influenced.

According to IFRS 11, which regulates the accounting of joint arrangements, a distinction must be made between joint ventures and joint operations. In the case of a joint venture, the parties that have joint control of a legally independent company have rights to the net assets of that arrangement. In joint operations, the parties that have joint control have direct rights to the assets and obligations for the liabilities relating to the arrangement. This requirement is particularly fulfilled if the production output of the joint arrangement is almost entirely transferred to the partners, through which the partners guarantee the joint arrangements' ongoing financing.

Companies whose corporate governance structures classify them as joint arrangements are analyzed to determine if they meet the criteria for joint ventures or joint operations as per IFRS 11. Should the arrangement be structured through a separate vehicle, its legal form, contractual arrangements and all other facts and circumstances are reviewed.

In addition to Wintershall Holding GmbH, the Consolidated Financial Statements include all material subsidiaries on a fully consolidated and one joint operation on a proportionally consolidated basis. Companies whose business is dormant or of low volume, and are of minor importance for the presentation of a true and fair view of the net assets, financial position and results of operations, are not consolidated, but rather are reported under other shareholdings. These companies are carried at amortized cost and are written down in the case of an impairment. The aggregate assets and equity of these companies amount to less than 2.5 % of the corresponding value at the

Group level.

Joint ventures and associated companies are accounted for using the **equity method** in the Consolidated Financial Statements. Associated companies are entities in which significant influence can be exercised over their operating and financial policies and which are not subsidiaries, joint ventures or joint operations. In general, this applies to companies in which Wintershall has an investment of between 20% and 50%. Equity-accounted income is reported as part of income from operations (EBIT).

Consolidation methods: Assets and liabilities of consolidated companies are uniformly recognized and measured in accordance with the principles described herein. For equity-accounted companies, material deviations in measurement resulting from the application of other accounting principles are adjusted for.

Transactions between consolidated companies as well as intercompany profits resulting from trade between consolidated companies are eliminated in full; for joint operations, they are proportionally eliminated. For sales revenue, they are eliminated in full. Material intercompany profits related to companies accounted for using the equity method are eliminated.

Capital consolidation is conducted at the acquisition date according to the purchase method. Initially, all assets, liabilities and additional intangible assets that are to be capitalized are measured at fair value. Finally, the acquisition cost is compared with the proportional share of the net assets acquired at fair value. The resulting positive differences are capitalized as goodwill. Negative differences are reviewed once more, then recognized directly in the income statement.

The incidental acquisition costs of a business combination are recognized in the income statement under other operating expenses.

Profit and loss transfer agreement: Wintershall Holding GmbH is both a direct (10.29%) and an indirect (89.71% as subsidiary of BASF Handels- und Exportgesellschaft mbH) subsidiary of BASF SE, Ludwigshafen am Rhein. However, Wintershall has only entered into a profit and loss transfer agreement with BASF Handels- und Exportgesellschaft mbH. The agreement was signed in 2006 and can be terminated after a five-year term by giving one month's notice to the end of the fiscal year.

For the minority interests in WIGA Transport Beteiligungs-GmbH & Co. KG, profits are transferred to the shareholders as withdrawals.

Foreign currency translations: The cost of assets acquired in foreign currencies and revenue from sales in foreign currencies are determined by the exchange rate on the date of the transaction. Foreign currency receivables and liabilities are valued at the exchange rates on the balance sheet date. Translation gains or losses resulting from the translation of assets and liabilities are recognized in profit or loss and generally reported under other operating expenses or other operating income. The other financial result is only used to report the effects of micro hedges on profit or loss.

Translation of foreign currency financial statements: The translation of foreign currency financial statements depends on the functional currency of the consolidated companies. For companies whose functional currency is not the euro, translation into the reporting currency is based on the closing rate method: Balance sheet items are translated into euros using closing rates on the balance sheet date; expenses and income are translated into euros at monthly average rates and accumulated for the year. The difference between a company's translated equity at historical rates at the time of acquisition or retention and its equity at closing rates on the balance sheet date is reported separately in equity under other comprehensive income (translation adjustments) and is recognized in income only upon the company's disposal.

For certain companies outside the eurozone or U.S. dollar zone, the euro or U.S. dollar is the functional currency. In such cases, the translation into the functional currency of financial statements prepared in the local currency is done according to the temporal method: All nonmonetary assets and related depreciation and amortization as well as equity are translated at the exchange rate applying to the respective transactions. All other balance sheet items are translated using closing rates on the balance sheet date; other expenses and income are translated at monthly average rates. The resulting translation differences are recognized in the income statement under other operating income or expenses. If necessary, financial statements in the functional currency are translated into the presentation currency according to the closing rate method.

Selected exchange rates

1 euro is equivalent to	Closing rates		Average rates	
	Dec. 31, 2017	Dec. 31, 2016	2017	2016
Argentina (ARS)	22.64	16.72	18.74	16.34
Great Britain (GBP)	0.89	0.86	0.88	0.82
Norway (NOK)	9.84	9.09	9.33	9.29
Russia (RUB)	69.39	64.3	65.92	74.14
United States (USD)	1.2	1.05	1.13	1.11

We refer to the following amendments made in 2017:

➔ **Amendments to IAS 7 – Disclosure Initiative**

The amendments aim to improve the information provided about changes to an entity's liabilities arising from financing activities. They specify that an entity must disclose changes to financial liabilities and related financial assets for which payments received and payments made are shown under cash provided by/used in financing activities in the statement of cash flows.

➔ **Annual Improvements to IFRSs (2014–2016):**

Three IFRSs were amended in the Annual Improvements to IFRSs (2014–2016), of which only the following had to be applied in 2017: In IFRS 12, it was clarified that disclosures pursuant to IFRS 12 generally also apply to an entity's interests in subsidiaries, joint ventures and associated companies that are classified as held for sale in accordance with IFRS 5, with the exception of the disclosures outlined in IFRS 12.B10–B16 (Financial Information). The clarification is not expected to have any material effect on Wintershall.

1.3 IFRSs and IFRICs not yet to be considered

The effects on the Wintershall Group financial statements of the IFRSs and IFRICs not yet in force or not yet endorsed by the European Union in 2017 were reviewed and are explained below.

➔ **IFRS 9 – Financial Instruments**

The IASB published the final version of IFRS 9 – Financial Instruments on July 24, 2014. IFRS 9 contains new requirements for the classification and measurement of financial instruments, fundamental changes regarding the accounting treatment of impairments of certain assets, and a revised approach to hedge accounting. The European Union endorsed the standard on November 29, 2016. IFRS 9 is effective for reporting periods beginning on or after January 1, 2018. Consequently, Wintershall will apply IFRS 9 for the first time as of January 1, 2018.

IFRS 9 retains "amortized cost" and "fair value" as measurement paradigms for financial instruments, and continues to differentiate between changes in fair value recognized through profit or loss or other comprehensive income. Whether financial assets are measured at amortized cost or fair value will in future depend firstly on the business model for managing financial asset portfolios. Secondly, it will depend on the cash flow condition, that is, the contractual cash flow characteristics of an individual financial asset.

In future, impairments are to be recognized for financial assets not measured at fair value through profit or loss in the amount of expected credit losses, based on the change in the default risk of the counterparties. The impairment approach generally adopts a three-stage model to calculate impairment losses. A simplified approach, which applies to certain financial instruments such as trade accounts receivable, uses a two-stage model to assess impairment losses.

IFRS 9 also contains new requirements for the application of hedge accounting to better present an entity's risk management activities, in particular with respect to the management of nonfinancial risks.

The new requirements for classification and measurement can also have an impact on the accounting treatment of other shareholdings, which must be measured only at fair value in accordance with IFRS 9.B5.2.3 in the future.

With the introduction of the cash flow condition in IFRS 9, which must be considered in the classification of financial assets, it could happen that financial assets measured at amortized cost or at fair value through other comprehensive income according to IAS 39 are to be recognized at fair value through profit or loss in the future.

In the future, expected losses on trade accounts receivable at Wintershall will largely be calculated on the basis of internal or external customer ratings and the associated probability of default.

Furthermore, the new impairment model is also to be used for further financial instruments, which are not recognized at fair value through profit or loss, such as bank deposits, loan receivables and miscellaneous receivables. Internal and external ratings for the respective counterparties will also be used as a basis for calculating impairments. Since individual valuation allowances were not calculated for the above assets under IAS 39, the first-time adoption of IFRS 9 will lead to additional impairments.

With regard to new hedge accounting regulations, Wintershall assumes that, in principle, all existing hedge accounting relationships can be continued under IFRS 9.

In the future, Wintershall will measure material other shareholdings at fair value in accordance with IFRS 9. This is not expected to lead to a material implementation effect.

The first-time adoption of IFRS 9 will take place using the modified retrospective method. Wintershall expects this to result in a reduction in equity by between €1,000 thousand and €2,000 thousand, which will be recognized directly in equity as of January 1, 2018.

This is primarily due to the recognition of impairments to trade accounts receivable. The expected impact constitutes an estimate, which can deviate from the actual impact.

➔ **IFRS 15 – Revenues from Contracts with Customers**

The IASB published the new standard on revenue recognition, IFRS 15, on May 28, 2014. The endorsement by the European Union was issued in the third quarter of 2016. The standard particularly aims to standardize existing regulations and thus improve transparency and comparability of financial information. According to IFRS 15, sales revenue is recognized when control of the agreed-upon goods or services and the benefits obtainable from them are transferred to the customer. Revenue is measured at the amount that the entity expects to receive in exchange for goods and services. The rules and definitions of IFRS 15 supersede the content of IAS 11, IAS 18, and IFRIC 13. The new standard will be effective for reporting periods beginning on or after January 1, 2018. The potential impact of the new standard, including the subsequent clarifications adopted, on Wintershall's net assets, financial position and results of operations, was assessed.

Based on its analyses, Wintershall does not expect any further material effects on its results of operations or net assets. IFRS 15 will have a minor impact on Wintershall, as contracts with customers of Wintershall generally only give rise to a single performance obligation in each case, which is to be fulfilled at a certain point in time. This is also assumed for continuous gas supplies, which are normally billed monthly.

The Wintershall Group will apply IFRS 15 for the first time from January 1, 2018. The modified retrospective method will be used for first-time adoption. The introduction of the new standard will lead to changes in the balance sheet in the form of the new balance sheet items "contract assets" and "contract liabilities," as well as additional quantitative and qualitative disclosures in the notes.

➔ **IFRS 16 – Leases**

The IASB published the new standard on leasing, IFRS 16, on January 13, 2016. The rules and definitions of IFRS 16 supersede the content of IAS 17, IFRIC 4, SIC-15 and SIC-27. The standard requires an accounting model for a lessee that recognizes all right-of-use assets and liabilities from lease agreements in the balance sheet, unless the term is twelve months or less or the underlying asset is of low value (up to $5,000). As for the lessor, the new standard substantially carries forward the accounting requirements of IAS 17 – Leases. The European Union endorsed the new standard in the fourth quarter of 2017. The new standard will be effective for report- ing periods beginning on or after January 1, 2019. Wintershall does not plan on an early adoption of these amendments.

Wintershall has started to analyze the potential effects on its Consolidated Financial Statements and plans to make use of the practical expedients. However, it is assumed that a significant number of leasing agreements that today represent operating leases are to be reported in the balance sheet. As well as increasing Wintershall's total assets, the type of expenses associated with operating leases will change, as IFRS 16 replaces the straight-line expenses for operating leases with a depreciation charge for right-of-use assets and interest expenses on liabilities arising from the lease. Wintershall plans to recognize the adjustments arising from the transition to IFRS 16 using the modified retrospective method as a cumulative effect directly in other retained earnings as of January 1, 2019 without a restatement of comparative information.

➔ **Annual Improvements to IFRSs (2014–2016):**

Three IFRSs were amended in the Annual Improvements to IFRSs (2014– 2016) of which both the following amendments are mandatory as of January 1, 2018: In IAS 28, it was clarified that the election to measure an investment in an associated company or a joint venture held by an entity that is a venture capital organization or other qualifying entity, can be exercised on an investment-by-investment basis. The short-term exemptions in IFRS 1, Appendix E (IFRS 1.E3–E7) for first-time IFRS users were deleted. The amendments were endorsed by the European Union in the first quarter of 2018. They are not expected to have any material effect on Wintershall.

➔ **Amendments to IAS 28 – Long-term interests in associates and joint ventures**

On October 12, 2017, the IASB published amendments to IAS 28 on long-term interests in associated companies and joint ventures. These amendments clarify that IFRS 9 is to be applied to long-term interests in associated companies or joint ventures that are not accounted for using the equity method. The amendment – subject to E.U. endorsement – is mandatory as of January 1, 2019. The effects are explained under IFRS 9 – Financial Instruments in Note 1.2: Changes in accounting principles.

The IASB issued further amendments to standards and interpretations whose application is not yet mandatory and is still subject to E.U. endorsement. These amendments are unlikely to have a material impact on the reporting of Wintershall. Wintershall does not plan on early adoption of these amendments.

➔ **Amendments to IFRS 10 and IAS 28 – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture**

The IASB issued amendments to IFRS 10 and IAS 28 on September 11, 2014. The amendments address a known inconsistency between the requirements of IFRS 10 and IAS 28 (2011) in the case of the sale of an asset to an associated company or a joint venture or the contribution of an asset to an associated company or a joint venture.

IASB has postponed the effective date of the changes indefinitely.

➔ **Amendments to IFRS 2 – Classification and Measurement of Share-Based Payment Transactions:**

The amendments involve a number of individual issues pertaining to the accounting of cash-settled share-based payment transactions. The amendments relate to the calculation of fair value of obligations arising from share-

based payment transactions. The amendments are – pending E.U. endorsement – to be applied to compensation granted or changed in business years beginning on or after January 1, 2018.

➔ **Amendments to IFRS 9 – Financial assets with a prepayment feature with negative compensation:**

The amendments pertain to a limited adjustment of the relevant criteria for the classification of financial assets. Financial assets with a prepayment feature with negative compensation may be recognized under certain conditions at amortized cost or at fair value through other comprehensive income instead of at fair value through profit and loss. The amendments are – subject to E.U. endorsement – effective on January 1, 2019.

➔ **Supplementary information on IFRIC 22 – Foreign Currency Transactions and Advance Consideration:**

IFRIC 22 addresses an application question for IAS 21 – The Effects of Changes in Foreign Exchange Rates. It clarifies the point in time for determining the exchange rate used to translate foreign-currency transactions containing advance payments that have been made or received. The underlying asset, income or expense is translated using the relevant exchange rate on the date on which the asset or liability resulting from the prepayment was first recognized. The interpretation is – pending E.U. endorsement – to be applied in the first reporting period of a business year beginning on or after January 1, 2018.

➔ **IFRIC 23 – Uncertainty over Income Tax Treatments:**

IFRIC 23 expands on the requirements in IAS 12 on how to account for uncertainties surrounding the income tax treatment of circumstances and transactions. IFRIC 23 is – subject to E.U. endorsement – effective for reporting periods beginning on or after January 1, 2019.

➔ **Annual Improvements to IFRSs (2015-2017):**

Four IFRSs were amended in the Annual Improvements to IFRSs (2015–2017).

In IFRS 3, it was clarified that when a party to a joint arrangement obtains control of a business that is a joint operation and had rights to the assets and obligations for the liabilities relating to that joint operation immediately before the acquisition date, the transaction is a business combination achieved in stages. The acquirer shall therefore apply the requirements for a business combination achieved in stages, including remeasuring its previously held interest in the joint operation.

In IFRS 11, it was clarified that when an entity obtains joint control of a business that is a joint operation and had rights to the assets and obligations for the liabilities relating to that joint operation immediately before the acquisition date, the previously held interest in that business is not to be remeasured.

IAS 12 was amended to the extent that all income tax effects of dividend payments must be considered in the same way as the income on which the dividends are based.

Finally, in IAS 23, it was determined that when entities borrow funds in general for the acquisition of qualifiying assets that those costs for borrowed capital specifically for the acquisition of qualifying assets should not be considered in the determination of the financing rate until their completion.

The amendments are – subject to E.U. endorsement – to be applied for the first time in the reporting period beginning on or after January 1, 2019.

1.4 Accounting policies

➔ Oil and gas production:

Exploration and development expenditures are accounted for using the successful efforts method. Under this method, costs of successful exploratory drilling as well as successful and dry development wells are capitalized.

An exploration well is a well located outside of an area with proven oil and gas reserves. A development well is a well which is drilled to the depth of a reservoir of oil or gas within an area with proven reserves.

Exploratory drilling is generally reported under construction in progress until its success can be determined. When the presence of hydrocarbons is proven such that the economic development of the field is probable, the costs remain capitalized as suspended well costs. At least once a year, all suspended wells are assessed from an economic, technical and strategic viewpoint to see if development is still intended. If this is not the case, the capitalized costs for the well in question are impaired. When reserves are proven, the exploration wells are re-classified as machinery and technical equipment when production begins.

Production costs include all costs incurred to operate, repair and maintain the wells as well as the associated plant and ancillary production equipment, including the associated depreciation.

The unit of production method is used to depreciate assets from oil and gas production at the field or reservoir level. Depreciation is generally calculated on the basis of the production of the period in relation to the proven, developed reserves. Depreciation charges on producing fields are recognized in cost of sales, while depreciation charges on exploration potential belong to exploration costs. Impairment losses and reversals of impairment losses on other noncurrent assets are included in other operating income or expenses.

Exploration expenses include all costs related to areas with unproven oil or gas deposits. These include costs for the exploration of areas with possible oil or gas deposits, among others. Costs for geological and geophysical investigations are always reported under exploration expenses. In addition, this item includes valuation allowances for capitalized expenses for exploration wells which did not encounter proven reserves. Depreciation of successful exploratory drilling is reported under cost of sales.

An Exploration and Production Sharing Agreement is a type of contract in crude oil and gas concessions whereby the expenses and profits from the exploration, development and production phases are divided between the state and one or more exploration and production companies using defined keys. The revenue Wintershall is entitled to under such contracts is reported as sales.

The intangible asset from the marketing contract for natural gas from the Yuzhno Russkoye natural gas field is amortized based on Wintershall's share of the produced and distributed volumes.

Intangible assets relate primarily to exploration and production rights. During the exploration phase, these are not subject to amortization but are tested for impairment annually. When economic success is determined, the rights are amortized in accordance with the unit of production method.

➔ Revenue recognition

An Exploration and Production Sharing Agreement is a type of contract in crude oil and gas concessions whereby the expenses and profits from the exploration, development and production phases are divided between the state and one or more exploration and production companies using defined keys. The revenue Wintershall is entitled to under such contracts is reported as sales.

Revenues from the sale of goods or the rendering of services are recognized upon the transfer of ownership and risk to the buyer. They are measured at the fair value of the consideration received. Sales revenues are reported without consumption taxes.

➔ Total assets

Acquired intangible assets (excluding goodwill) with defined useful lives are generally measured at cost less straight-line amortization. The useful life is determined using the period of the underlying contract or the period of time over which the intangible asset can be expected to be used.

Impairments are recognized if the recoverable amount of the asset is lower than the carrying amount. The recoverable amount is the higher of either fair value less costs to sell or the value in use. The value in use is determined on the basis of future cash inflows and outflows, and the weighted average cost of capital after taxes, depending on tax rates and country-related risks. If the reasons for an impairment no longer exist, the write-downs are reversed up to the value of the asset, had an impairment not been recognized. Depending on the type of intangible asset, amortization is reported under cost of sales, selling expenses, research and development expenses or other operating expenses.

Internally generated intangible assets are measured at cost and amortized over their estimated useful lives. Impairments are recognized if the carrying amount of an asset exceeds the recoverable amount. In addition to those costs directly attributable to the asset, costs of internally generated intangible assets also include an appropriate portion of overhead costs.

WIHO Group's intangible assets relate primarily to exploration and production rights. During the exploration

phase, these are not subject to amortization but are tested for impairment annually. When economic success is determined, the rights are amortized in accordance with the unit of production method.

The intangible asset from the marketing contract for natural gas from the Yuzhno Russkoye natural gas field is amortized based on Wintershall's share of the produced and distributed volumes.

Emission rights: Emission right certificates, granted free of charge by the German Emissions Trading Authority (Deutsche Emissionshandelsstelle) or a similar authority in other countries, are recognized on the balance sheet with a value of zero. Certificates purchased on the market are capitalized at cost as intangible assets. Emissions generated create an obligation to surrender the emission certificates. Emission certificates purchased on the market are subsequently measured at fair value, up to a maximum of the amount of the acquisition costs. If the fair value is lower than the carrying amount on the balance sheet date, the emission rights are impaired.

Goodwill is only written down if there is an impairment. Impairment testing takes place once a year and whenever there is an indication of an impairment. Impairment reversals are not conducted for goodwill.

Property, plant and equipment are measured at cost less depreciation and impairment over their useful lives. The revaluation method is not applied. Low-value assets are fully written off in the year of acquisition.

The cost of self-constructed plants includes direct costs, appropriate allocations of material and production overhead costs, and a share of the general administrative costs of the divisions involved in the construction of the plants.

Costs for maintenance and repair as part of normal business operations are recognized as an expense.

Both movable and immovable fixed assets are for the most part depreciated using the straight-line method, with the exception of production licenses and plants, which are primarily depreciated based on use in accordance with the unit of production method. The estimated useful lives and depreciation methods of property, plant and equipment are based on historical values, plans and estimates. The depreciation methods, useful lives and residual values are reviewed at each balance sheet date. The weighted average depreciation periods were as follows:

Average depreciation in years	
Buildings and structural installations	**32**
Machinery and technical equipment	**9**
Other equipment, operating and office equipment	**6**

Impairments are recognized if the recoverable amount of the asset is lower than the carrying amount. The measurement is based on fair value less costs to sell or the value in use. The value in use is determined on the basis of future cash inflows and outflows, and the weighted average cost of capital after taxes, depending on tax rates and country-related risks. An impairment is recognized for the difference between the carrying amount and the recoverable amount. If the reasons for an impairment no longer exist, the write-downs are reversed up to the value of the asset, had an impairment not been recognized.

Investment properties held to realize capital gains or rental income are immaterial. They are valued at the lower of fair value or acquisition cost less depreciation.

Leases: A lease is an agreement whereby the lessor conveys to the lessee the right to use an asset for an agreed period of time in return for a payment or series of payments. Leasing contracts are classified as either finance or operating leases.

Assets subject to operating leases are not capitalized. Lease payments are recognized in the income statement in the period they are incurred.

Leases can be embedded within other contracts. If separation is required under IFRS, then the embedded lease is recorded separately from its host contract and each component of the contract is carried and measured in accordance with the applicable regulations.

Borrowing costs: Borrowing costs directly incurred as part of the acquisition, construction or production of a qualifying asset are capitalized as part of the acquisition or production cost of that asset. A qualifying asset is an asset for which the time period necessary to make it ready for its intended use or sale is longer than one year. Borrowing costs are capitalized up to the date the asset is ready for its intended use. The borrowing costs were calculated based on a rate of 2.0% (2016: 2.5%) and adjusted on a country-specific basis, if necessary. All other borrowing costs are recognized as an expense in the period in which they are incurred.

Investments accounted for using the equity-method: The carrying amounts of these companies are adjusted annually based on the pro rata share of net income, dividends and other changes in equity. Should there be indications of a permanent reduction in the value of an investment, an impairment is recognized in the income statement.

Inventories are measured at acquisition cost or cost of conversion based on the weighted average method. If the market price or fair value of the sales product which forms the basis for the net realizable value is lower, then the sales products are written down to this lower value. The net realizable value is the estimated price in the ordinary course of business less the estimated costs of completion and the estimated selling costs.

In addition to direct costs, cost of conversion includes an appropriate allocation of production overhead costs based on normal utilization rates of the production plants, provided that they are related to the production process. Pensions, social services and voluntary social benefits are also included, as well as allocations for administrative costs, provided they relate to the production. Borrowing costs are not included in cost of conversion.

Inventories may be written down if the prices for the sales products decline, or in cases of a high rate of days sales of inventory (DSI). Write-downs on inventories are reversed if the reasons for them no longer apply.

➔ Taxes

The Wintershall Group reports taxes incurred in the course of doing business (economic perspective) and, on the basis of the allocation agreements, recognizes them as liabilities to the tax group parent, BASF SE, to whose tax group the German Group companies belong.

Deferred taxes: Deferred taxes are recorded for temporary differences between the carrying amount of assets and liabilities in the financial statements and the carrying amounts for tax purposes as well as for tax loss carryforwards and unused tax credits. This also comprises temporary differences arising from business combinations, with the exception of goodwill. Deferred tax assets and liabilities are calculated using the respective country-specific tax rates applicable for the period in which the asset or liability is realized or settled. Tax rate changes enacted or substantively enacted on or before the balance sheet date are taken into consideration.

Deferred tax assets are offset against deferred tax liabilities provided they are related to the same taxation authority and have the same maturities. Surpluses of deferred tax assets are only recognized provided that the tax benefits are likely to be realized. The valuation of deferred tax assets is based on the estimated probability of a reversal of the differences and the assessment of the ability to utilize tax loss carryforwards and unused tax credits. This depends on whether future taxable profits will exist during the period in which temporary differences are reversed and in which tax loss carryforwards and unused tax credits can be claimed. The valuation of deferred tax assets is based on internal projections of the future earnings of the particular Group company.

Changes in deferred taxes in the balance sheet are recorded as deferred tax expense or income if the underlying trans- action is not to be recognized directly in equity or in income and expenses recognized in equity. For those effects which have been recognized in equity, changes to deferred tax assets and tax liabilities are also recognized directly in equity.

➔ Financial instruments

Financial assets and financial liabilities are recognized in the balance sheet when the Wintershall Group becomes a party to a financial instrument. Financial assets are derecognized when the contractual rights to the cash flows from the financial asset expire or when the financial asset, with all risks and rewards of ownership, is transferred. Financial liabilities are derecognized when the contractual obligations expire, are discharged or cancelled. Regular-way purchases and sales of financial instruments are accounted for using the settlement date.

The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When pricing on an active market is available, for example share prices, these are used as the basis for the measurement. Otherwise, the measurement is based on internal measurement models using current market parameters or external measurements, for example, from banks. These internal measurements predominantly use the net present value method and option pricing models.

If there is objective evidence of a permanent impairment of a financial instrument that is not measured at fair value through profit or loss, an impairment loss is recognized. Objective evidence that financial assets may be impaired are deemed to include a debtor in arrears or in default, evidence that a debtor is filing for insolvency, adverse changes in the payment status of borrowers or issuers, the disappearance of an active market for a security due to financial difficulties, or observable data that indicates a considerable decline in the cash flows expected from a group of financial assets. If the Group does not have any realistic prospect of recovering the asset, an impairment loss is recognized on these amounts. If an event that occurs after the impairment loss has been recognized leads to a decrease in the impairment loss, the impairment loss is reduced by that amount.

If the reason for the impairment of loans and receivables as well as held-to-maturity financial instruments no longer exists, the impairment is reversed up to the amortized cost and recognized in the income statement. Impairments on financial instruments are booked in separate accounts.

Financial assets and liabilities are divided into the following measurement categories:

- **Financial assets and liabilities at fair value recognized in the income statement** consist of derivatives and other trading instruments. At Wintershall, this measurement category only includes derivatives. Derivatives are reported in other receivables and miscellaneous assets or other liabilities. Wintershall does not make use of the fair value option under IAS 39. The calculation of fair values is based on market parameters or measurement models based on such parameters. In some exceptional cases, the fair value is calculated using parameters which are not observable on the market.

- **Loans and receivables** comprise financial assets with fixed or determinable payments, which are not quoted on an active market and are not derivatives or classified as available-for-sale. This measurement category includes trade accounts receivable as well as other receivables and loans reported under other receivables and miscellaneous assets. Initial measurement is done at fair value, which generally matches the nominal value of the receivable or loan. Interest-free and low-interest long-term loans and receivables are recorded at present value. Subsequent measurement recognized in income is generally made at amortized cost using the effective interest method.

  If there is objective evidence for an impairment of a receivable or loan, an individual valuation allowance is made. When assessing the need for a valuation allowance, regional and sector-specific conditions are considered. In addition, use is made of internal and external ratings as well as the assessments of debt collection agencies and credit insurers, when available. Valuation allowances are only recognized for those receivables which are not covered by insurance or other collateral. The valuation allowances for receivables whose insurance includes a deductible are not recognized in excess of the amount of the deductible. Write-downs are based on historical values relating to customer solvency and the age, period overdue, insurance policies and customer-specific risks. In addition, a valuation allowance must be recognized when the contractual conditions which form the basis for the receivable are changed through renegotiation in such a way that the present value of the future cash flows decreases. If the amendment of the contractual conditions is material, the old asset is derecognized and a new asset is recognized in its place.

  If, in a subsequent period, the amount of the valuation allowance decreases and the decrease can be related objectively to an event occurring after the valuation allowance was made, then it is reversed in the income statement. Reversals of valuation allowances may not exceed amortized cost. Loans and receivables are derecognized when they are definitively found to be uncollectible.

- **Held-to-maturity financial assets** consist of nonderivative financial assets with fixed or determinable payments and a fixed term, for which there is the ability and intent to hold until maturity, and which do not fall under other valuation categories. Initial measurement is done at fair value, which matches the nominal value in most cases. Subsequent measurement is carried out at amortized cost, using the effective interest method. For Wintershall, there are no material financial assets that fall under this category.

- **Available-for-sale financial assets** comprise financial assets which are not derivatives and do not fall under any of the previously stated valuation categories. This measurement category comprises shareholdings reported under the item other financial assets which are not accounted for using the equity method as well as short and long-term securities. The measurement is carried out at fair value. Changes in fair value are initially recognized in OCI and are only recognized in the income statement when the assets are disposed of or have been impaired. Subsequent reversals are recognized directly in equity (other comprehensive income). Only in the case of debt instruments, reversals are recognized in the income statement up to the amount of the original impairment; reversals above this amount are recognized directly in equity. If the fair value of available-for-sale financial assets decreases below acquisition costs, the assets are impaired if the decline in value is material or can be considered lasting. The fair values are determined using market prices. Shareholdings whose fair value cannot be reliably determined are carried at acquisition cost and are written down in the case of an impairment. This category of shareholdings includes investments in other shareholdings, provided that these shares are not publicly traded. There are no plans to sell significant shares in these shareholdings.

- **Financial liabilities measured at amortized cost** are initially recognized at their fair values. These normally correspond to the amount received. Subsequent measurement is carried out at amortized cost, using the effective interest method.

- **Cash and cash equivalents** consist primarily of cash on hand and bank balances with maturities of less than three months.

Income from interest-bearing assets is recognized on the outstanding receivables on the balance sheet date using interest rates calculated by means of the effective interest method. Dividends from shareholdings not accounted for using the equity method are recognized when the shareholders' right to receive payment is established.

Derivative financial instruments can be embedded within other contracts. If IFRS requires separation, then the embedded derivative is accounted for separately from its host contract and measured at fair value.

Financial guarantees of the Wintershall Group are contracts that require compensation payments to be made to the guarantee holder if a debtor fails to make payment when due under the terms of the financial guarantee.

Financial guarantees given by Wintershall are measured at fair value upon initial recognition. In subsequent periods, financial guarantees are carried at the higher of amortized cost or the best estimate of the present obligation on the reporting date.

➔ **Other comprehensive income**

The expenses and income shown in other comprehensive income are divided into two categories: Items that will be recognized in the income statement in the future (known as “recycling”) and items that will not be reclassified to the income statement in the future. The first category includes translation adjustments and changes in the fair value of derivatives held to hedge future cash flows and net investments in a foreign operation. Items in other comprehensive income that will not be reclassified to the income statement at a future date include effects from the remeasurement of defined benefit plans.

➔ **Debt**

Provisions for pensions and similar obligations: Provisions for pensions are based on actuarial computations made according to the projected unit credit method. In doing so, assumptions for valuation parameters include: future developments in compensation, pensions and inflation, employee turnover and the life expectancy of beneficiaries. The resulting obligations are discounted on the balance sheet date using the market yields on high-quality corporate fixed-rate bonds with a minimum of one AA rating.

The calculation of pension provisions is based on actuarial reports.

Actuarial gains and losses from changes in estimates relating to the actuarial assumptions used to calculate defined benefit obligations, the difference between standardized and actual returns on plan assets, as well as the effects of the asset ceiling are recognized directly in equity as other comprehensive income.

Other provisions: Other provisions are recognized when there is a present obligation as a result of a past event and when there is a probable outflow of resources whose amount can be reliably estimated. Provisions are recognized at the probable settlement value.

Provisions for German trade income tax, German corporate income tax and similar income taxes are determined and recognized in the amount necessary to meet the expected payment obligations less any prepayments that have been made. Other taxes to be assessed are considered accordingly.

Provisions are established for certain environmental protection measures and risks if there exists a present legal or constructive obligation arising from a past event, and the expected cash outflow can be estimated with sufficient reliability. Provisions for the filling of wells and the removal of production equipment after the end of production (restoration obligations) are initially recognized at the present value of the future restoration costs at the time the plant is commissioned. An asset is capitalized for the same amount as part of the carrying amount of the plant concerned and is depreciated along with the plant. The discount on the provision is unwound annually until the time of the planned restoration.

Provisions are recognized for expected severance payments or similar personnel expenses as well as for demolition expenses and other charges related to restructuring measures that have been planned and publicly announced by management.

Provisions for long-service and anniversary bonuses are predominantly calculated based on actuarial principles. For contracts signed under early retirement programs, approved supplemental payments are accrued in installments until the end of the exemption phase at the latest. Accounting and measurement follow the German Accounting Standards Committee e.V.’s Application Note 1 (IFRS) of December 2012.

Other provisions also cover risks resulting from legal disputes and proceedings, provided the criteria for recognizing a provision are fulfilled. In order to determine the amount of the provisions, the Company takes into consideration the facts related to each case, the size of the claim, claims awarded in similar cases and independent expert advice as well as assumptions regarding the probability of a successful claim and the range of possible claims. The actual costs can deviate from these estimates.

The probable amount required to settle noncurrent provisions is discounted if the effect of discounting is material. In this case, the provision is recognized at present value. Assumptions must be made in determining the discount rate (2017: 2.0%; 2016: 2.5%) used for calculating noncurrent provisions. Financing costs related to unwinding the discount of provisions in subsequent periods are shown in other financial result.

➔ **Other accounting policies**

Business combinations: In business combinations, the acquired assets and liabilities are recognized at fair value on the date the acquirer effectively obtains control. The fair value of acquired assets and assumed liabilities at the date of exchange, as well as the useful lives of the acquired assets, are determined on the basis of assumptions. The measurement is largely based on projected cash flows. The actual cash flows can significantly deviate from these estimates. Independent external appraisals are used for the purchase price allocation of material business combinations. Valuations in the course of business combinations are based on existing information as of the acquisition date.

➔ Use of estimates and assumptions in preparing the Consolidated Financial Statements

The carrying amount of assets, liabilities and provisions, contingent liabilities and other financial obligations in the Consolidated Financial Statements depends on the use of estimates, assumptions and use of discretionary scope. Specific estimates or assumptions used in individual accounting or valuation methods are disclosed in their respective sections. They are based on the circumstances and estimates on the balance sheet date and affect the reported amounts of income and expenses during the reporting periods. These assumptions particularly concern discounted cash flows in the context of impairment tests and purchase price allocations; the determination of useful lives of property, plant and equipment and intangible assets; the carrying amount of shareholdings; and the measurement of provisions for such things as employee benefits, warranties, trade discounts, environmental protection and taxes. Although uncertainty is appropriately incorporated in the valuation factors, actual results can differ from these estimates.

The assumptions regarding the long-term development of oil and gas prices are significant for impairment tests. This is primarily relevant for plants (oil and gas fields) and goodwill. The internal company projections are based on an empirical analysis of the global oil and gas supply and demand. Short-term estimates up to three years also consider the current prices on active markets or forward transactions. In long-term estimates, assumptions are made regarding factors such as inflation, production quantities and costs as well as energy efficiency and the substitution of energy sources. Using external sources and reports, the oil and gas price estimates are regularly checked for plausibility.

For planning purposes in 2018, Wintershall is using an average yearly price for oil of $65/bbl (Brent) and for gas of approximately €16/MWh (roughly $5.5/mmBtu).

In line with global growth, the demand for oil and gas will continue to increase. Higher marginal costs of production and the currently modest levels of investment should lead to a significant increase in prices in the medium to long-term. Considering the current high levels of oil inventories and the assumption of a longer-term increase in oil supplies from the United States, the oil price scenario has been adjusted compared with the previous year and is now expected to reach $100 only by 2022. WIHO Group's gas price scenario assumes only a moderate increase in gas prices in the E.U. in the next few years due to overcapacity in gas liquefaction (LNG). Afterwards, a significant increase up to around €30/MWh (approximately $11/mmBTU) is expected by 2025 as a result of further increasing demand and higher costs of new production and liquefaction projects.

Impairment tests on assets are carried out whenever certain triggering events indicate that an impairment may be necessary. External triggering events include, for example, changes in customer industries, technologies used and economic downturns. Internal triggering events for an impairment test include planned restructuring measures or physical damage to assets.

Impairment tests are based on a comparison of the carrying amount and the recoverable amount. The recoverable amount is the higher of fair value less costs to sell and the value in use. As a rule, value in use is determined using the discounted cash flow method. The estimation of cash flows and the assumptions used consider all information available on the respective balance sheet date on the future development of the operating business. Actual future developments may vary. Impairment testing relies upon the cash-generating unit's long-term earnings forecasts, which are based on economic trends. The weighted average cost of capital (WACC) based on the Capital Asset Pricing Model plays an important role in impairment testing. It comprises a risk-free rate, the market risk premium and the spread for the credit risk. Additional important assumptions are the forecasts for the detailed planning period and the terminal growth rates used.

An impairment is recognized if the recoverable amount of the asset is lower than the carrying amount. The impairment of the asset (excluding goodwill) is made in the amount of the difference between these amounts.

The goodwill impairment test is based on cash-generating units. At Wintershall, these largely correspond to the business segments. If there is a need for a valuation allowance, the existing goodwill is, if necessary, completely written off as a first step. If there is further need for a valuation allowance, this is allocated to the remaining assets of the cash-generating unit. Goodwill impairments are reported under other operating expenses.

2. Scope of consolidation

2.1 Changes in scope of consolidation

In 2017, the scope of consolidation for the Consolidated Financial Statements encompassed 16 companies (2016: 16). Of this number, 1 company (Wintershall Nederland Transport & Trading B.V.) was consolidated for the first-time. The merger of Wintershall Russia Holding GmbH with Wintershall Holding GmbH means that a total of one company was deconsolidated.

In the 2016 comparative period, there were no changes in the scope of consolidation.

While Wintershall does not hold majority shares in ZAO Gazprom YRGM Trading, Wintershall is entitled to the earnings of the company due to profit distribution arrangements, so that the company is fully consolidated in the Group Consolidated Financial Statements.

A list of companies included in the Consolidated Financial Statements and a list of all companies in which BASF SE has a shareholding as required by section 313(2) of the German Commercial Code is provided in the List of Shares Held.

Scope of consolidation	Europe	Thereof Germany	Russia	South America
As of January 1	**13**	**9**	**2**	**1**
Thereof proportionally consolidated	0	0	1	0
First-time consolidations	1	0	0	0
Thereof proportionally consolidated	0	0	0	0
Deconsolidation	1	1	0	0
Thereof proportionally consolidated	0	0	0	0
As of December 31	**13**	**8**	**2**	**1**
Thereof proportionally consolidated	0	0	1	0

Overview of impact of changes in the scope of consolidation (excluding the impact of acquisitions and divestitures)

	2017		2016	
	€ thousand	**%**	**€ thousand**	**%**
Sales	**2,034**	**0.0**	**–**	**–**
Noncurrent assets	**343,590**	**0.0**	**–**	**–**
Thereof property, plant and equipment	**151**	**0.0**	**–**	**–**
Current assets	**15,443**	**0.0**	**–**	**–**
Thereof cash and cash equivalents	**188**	**0.0**	**–**	**–**
Total assets	**359,033**	**0.0**	**–**	**–**
Equity	**11,267**	**0.0**	**–**	**–**
Noncurrent liabilities	**108**	**0.0**	**–**	**–**
Thereof financial indebtedness	**0.0**	**0.0**	**–**	**–**
Current liabilities	**117**	**0.0**	**–**	**–**
Thereof financial indebtedness	**0.0**	**0.0**	**–**	**–**
Total equity and liabilities	**11,492**	**0.0**	**–**	**–**

2.2 Joint Operations

A majority of the activities in Exploration & Production business sector take place through joint activities, which are not incorporated in separate companies. This primarily relates to activities in Germany, Norway and Argentina. They are always accounted for as joint operations in accordance with IFRS 11.

The proportionally consolidated joint operation comprises AO Achimgaz, Novy Urengoy, Russia, which is jointly operated with Gazprom for the production of natural gas and condensate Wintershall holds a 50% interest in the company and controls it jointly with Gazprom. The company sells its products exclusively to Gazprom, and this secures its continuing financing. It was therefore classified as joint operation in accordance with IFRS 11.

2.3 Joint ventures and associated companies

➔ **Material joint ventures accounted for using the equity method**

The material joint ventures accounted for using the equity method are W & G Infrastruktur Finanzierungs-GmbH, Kassel/Germany (share: 50%) and Wintershall Noordzee B.V., Rijswijk/Netherlands (share: 50%), both of which are jointly operated with the partner Gazprom.

W & G Infrastruktur Finanzierungs-GmbH, Kassel/Germany, a joint venture between Wintershall and Gazprom for the bundling of the regulated gas transportation business, was established in August 2017 on the basis of the intragroup transaction described below. Effective November 30, 2017, GASCADE Gastransport GmbH, Kassel/Germany and NEL Gastransport GmbH, Kassel/Germany were transferred from W & G Transport Holding GmbH to W & G Infrastruktur Finanzierungs-GmbH.

Additionally, W & G Infrastruktur Finanzierungs-GmbH has become party to the financing arrangement previously between WIGA Transport Beteiligungs-GmbH & Co. KG and an international banking consortium; besides WIGA Transport Beteiligungs-GmbH & Co. KG, W & G Infrastruktur Finanzierungs-GmbH functions as a further debtor and assumed €925 million of financial liabilities previously held by WIGA Transport Beteiligungs-GmbH & Co. KG against a transfer of loan receivables to GASCADE Gastransport GmbH and NEL Gastransport GmbH as well as cash. This was deposited in BASF Group's cash pool. In doing so, W & G Infrastruktur Finanzierungs-GmbH effectively took over the financing function for both of these companies operating in the regulated gas transportation business.

Financial information on W & G Infrastruktur Finanzierungs-GmbH, Kassel/Germany (Group)	
€ million	**Dec. 31, 2017**
Balance sheet	
Noncurrent assets	1,181
Current assets	721
Thereof marketable securities, cash and cash equivalents	2
Total assets	**1,902**
Equity	461
Noncurrent liabilities	1,342
Thereof financial indebtedness	923
Current liabilities	99
Thereof financial indebtedness	–
Total equity and liabilities	**1,902**
Statement of income	
Sales	560
Depreciation, amortization and impairments	147
Interest income	1
Interest expenses	-8
Income taxes	23
Net income	114
Carrying amount according to the equity method as of the beginning of the year	**–**
Proportional net income	57
Proportional change of other comprehensive income	–
Total comprehensive income	**57**
Corporate actions/withdrawals/changes in the scope of consolidation/other adjustments	608
Thereof withdrawals (includes profit transfers)	-62
Other adjustments of income and expense	-8
Carrying amount according to the equity method as of the end of the year	**657**

The disclosures also contain effects from the transfer of GASCADE Gastransport GmbH and NEL Gastransport GmbH to W & G Infrastruktur Finanzierungs-GmbH.

Financial information on Wintershall Noordzee B.V., Rijswijk/Netherlands			
€ million	**Dec. 31, 2017**	Dec. 31, 2016	Jan. 1, 2016
Balance sheet			
Noncurrent assets	1,148	1,061	1,230
Current assets	127	137	115
Thereof marketable securities, cash and cash equivalents	75	55	3
Total assets	**1,275**	**1,198**	**1,345**
Equity	614	456	582
Noncurrent liabilities	594	491	594
Thereof financial indebtedness	162	0	0
Current liabilities	67	251	169
Thereof financial indebtedness	0.4	182	90
Total equity and liabilities	**1,275**	**1,198**	**1,345**
Statement of income			
Sales	149	149	
Depreciation, amortization and impairments	28	-286	
Interest income	0	0	
Interest expenses	-2	-2	
Income taxes	46	130	
Net income	157	-126	
Carrying amount according to the equity method As of the beginning of the year	228	291	
Proportional net income	79	-48	
Proportional change of other comprehensive income	0	0	
Total comprehensive income	**79**	**-48**	
Capital measures/dividends/changes in the scope of consolidation/other adjustments	0	-15	
Thereof dividends (includes profit transfers)	0	0	
Other adjustments of income and expense	0	0	
Carrying amount according to the equity method As of the end of the year	307	228	

➔ **Material associated companies accounted for using the equity method**

- OAO Severneftegazprom, Krasnoselkup/Russia (Wintershall's share: 25%, economic share: 35%)

Financial information on OAO Severneftegazprom, Krasnoselkup/Russia			
€ million	**Dec. 31, 2017**	Dec. 31, 2016	Jan. 1, 2016
Balance sheet			
Noncurrent assets	886	1,031	971
Current assets	196	258	355
Thereof marketable securities, cash and cash equivalents	109	153	262
Total assets	**1,082**	**1,290**	**1,326**
Equity	791	987	756
Noncurrent liabilities	190	206	365
Thereof financial indebtedness	0	0	0
Current liabilities	101	96	205
Thereof financial indebtedness	15	24	28
Total equity and liabilities	**1,082**	**1,290**	**1,326**
Statement of income			
Sales	748	679	
Depreciation, amortization and impairments	-78	-64	
Financial result	5	12	
Income taxes	25	55	
Net income	88	220	
Carrying amount according to the equity method As of the beginning of the year	380	302	
Proportional net income	34	63	
Proportional change of other comprehensive income	-28	84	
Total comprehensive income	**6**	**147**	
Capital measures/dividends/changes in the scope of consolidation/other adjustments	-77	-69	
Thereof dividends (includes profit transfers)	-77	-69	
Other adjustments of income and expense	0	0	
Carrying amount according to the equity method As of the end of the year	309	380	

- Nord Stream AG, Zug, Switzerland (Wintershall's share: 15.5%)

Financial information on Nord Stream AG, Zug/Switzerland (100%)			
€ million	**Dec. 31, 2017**	Dec. 31, 2016	Jan. 1, 2016
Balance sheet			
Noncurrent assets	5,656	5,944	6,234
Current assets	696	589	606
Thereof marketable securities, cash and cash equivalents	337	141	158
Total assets	**6,352**	**6,533**	**6,840**
Equity	2,258	1,946	1,762
Noncurrent liabilities	3,713	4,040	4,558
Thereof financial indebtedness	3,311	3,509	567
Current liabilities	381	547	520
Thereof financial indebtedness	19	17	24
Total equity and liabilities	**6,352**	**6,533**	**6,840**
Statement of income			
Sales	1,076	1,079	
Depreciation, amortization and impairments	-293	-293	
Financial result	-239	-261	
Income taxes	-15	-11	
Net income	577	486	
Carrying amount according to the equity method As of the beginning of the year	322	290	
Proportional net income	68	72	
Proportional change of other comprehensive income	17	7	
Total comprehensive income	**85**	**79**	
Capital measures/dividends/changes in the scope of consolidation/other adjustments	-41	-47	
Thereof dividends (includes profit transfers)	-41	-47	
Other adjustments of income and expense	0	0	
Carrying amount according to the equity method As of the end of the year	366	322	

- Wintershall AG, Kassel, which carries out exploration and production activities in Libya jointly with Gazprom Libyen Verwaltungs GmbH (Wintershall's share: 51%)

Financial information on Wintershall AG, Kassel/Germany (100%)			
€ million	**Dec. 31, 2017**	Dec. 31, 2016	Jan. 1, 2016
Balance sheet			
Noncurrent assets	598	646	732
Current assets	241	328	232
Thereof marketable securities, cash and cash equivalents	3	0	2
Total assets	**839**	**974**	**964**
Equity	190	182	261
Noncurrent liabilities	541	547	543
Thereof financial indebtedness			
Current liabilities	108	245	160
Thereof financial indebtedness	0	68	83
Total equity and liabilities	**839**	**974**	**964**
Statement of income			
Sales	152	208	
Depreciation, amortization and impairments	-34	-12	
Interest income	0	0	
Interest expenses	-3	-4	
Income taxes	-68	-126	
Net income	8	-79	
Carrying amount according to the equity method As of the beginning of the year	**93**	133	
Proportional net income	4	-40	
Proportional change of other comprehensive income	**0**	0	
Total comprehensive income	**4**	**-40**	
Capital measures/dividends/changes in the scope of consolidation/other adjustments	0	0	
Thereof dividends (includes profit transfers)	0	0	
Other adjustments of income and expense	0	0	
Carrying amount according to the equity method As of the end of the year	**96**	93	

- Wintershall Wolga Petroleum GmbH, Kassel, Germany (Wintershall's share: 100%)

Financial information on Wintershall Wolga Petroleum GmbH, Kassel/Germany (holds 50% of shares of Wolgodeminoil LLC)			
€ million	**Dec. 31, 2017**	Dec. 31, 2016	Jan. 1, 2016
Balance sheet			
Noncurrent assets		29	25
Current assets		41	28
Thereof marketable securities, cash and cash equivalents		31	18
Total assets		**70**	**53**
Equity		40	30
Noncurrent liabilities		1	2
Thereof financial indebtedness			
Current liabilities		29	21
Thereof financial indebtedness		19	15
Total equity and liabilities		**70**	**53**
Statement of income			
Sales		58	
General administrative expenses		-2	
Other interest and similar income		2	
Income taxes		-5	
Net income		17	
Carrying amount according to the equity method			
As of the beginning of the year	**38**	35	
Proportional net income	15	14	
Proportional change of other comprehensive income	**-2**	3	
Total comprehensive income	**13**	**17**	
Capital measures/dividends/changes in the scope of consolidation/other adjustments	-21	-14	
Thereof dividends (includes profit transfers)	-21	-14	
Other adjustments of income and expense	0	0	
Carrying amount according to the equity method **As of the end of the year**	**30**	38	

The joint stock company Achim Trading, Moscow/Russia (Wintershall's share: 18.01%, economic share: 25.01%, partner: Gazprom), markets the output from blocks IV and V of the Achimov formation. The investment value in the amount of €768 million remained unchanged in comparison with the previous year and arose from the fair value measurement as a result of the asset swap with Gazprom on September 30, 2015. The company's economic activities will commence in 2020 with the scheduled start of production from blocks IV and V. Therefore, there is no relevant financial information to report according to IFRS 12 in 2017.

2.4 Acquisitions and Divestitures

Wintershall did not carry out any acquisitions or divestitures (business within the meaning of IFRS 3) in 2017. As a result, there was no impact on the consolidated financial statements from such transactions.

➔ **Agreed-upon transactions**

In addition to reducing its interest in Aguada Pichana Oeste (West), Wintershall also decreased its interest in the neighboring Aguada Pichana Este (East) block by selling shares to Total Austral S.A., Buenos Aires/Argentina at the beginning of 2018.

➔ **Intended transactions**

On December 7, 2017, BASF signed a letter of intent with the LetterOne group on the merger of their respective oil and gas businesses in a joint venture, which would operate under the name Wintershall DEA. The definitive transaction agreements are to be negotiated over the coming months. The transaction could close in the second half of 2018, subject to the customary regulatory approvals. There is no assurance that BASF will enter into definitive transaction agreements with LetterOne or that the intended transaction will be consummated.

3. Wintershall Group List of Shares Held in accordance with section 313(2) of the German Commercial Code

The list of consolidated companies and the complete list of all companies in which Wintershall has a share as required by section 313(2) of the German Commercial Code and information for exemption of subsidiaries from accounting and disclosure obligations are an integral component of the list of shareholdings below.

I. Companies fully or proportionately consolidated in the consolidated financial statements and companies accounted for using the equity method

1. Fully consolidated subsidiaries

Company	Domicile	Equity interest (%)
Europe		
Wintershall Holding GmbH	Kassel	100.00
E & A Internationale Explorations- und Produktions-GmbH	Kassel	100.00
WIGA Transport Beteiligungs-GmbH & Co. KG	Kassel	50.02
W & G Transport Holding GmbH	Kassel	49.97
Untertage-Speicher-Gesellschaft mbH	Kassel	100.00
Wintershall Vermögensverwaltungsgesellschaft mbH	Kassel	100.00
Wintershall Middle East GmbH	Kassel	100.00
OPAL Gastransport GmbH & Co. KG	Kassel	49.97
Wintershall Nederland Transport & Trading B.V.	Rijswijk, Netherlands	100.00
Wintershall Oil AG	Zug, Switzerland	100.00
Wintershall Nederland B.V.	Rijswijk, Netherlands	100.00
Wintershall Petroleum (E&P) B.V.	Rijswijk, Netherlands	100.00
Wintershall Norge AS	Stavanger, Norway	100.00
Russia		
ZOA Gazprom YRGM Trading	Krasnoselkup, Russian Federation	25.00 [1)]
South America		
Wintershall Energía S.A.	Buenos Aires, Argentina	100.00

1) Fully consolidated in accordance with IFRS 10

2. Proportionately consolidated joint operations

Company	Domicile	Equity interest (%)
Russia		
AO Achimgaz	Novy Urengoy, Russian Federation	50.00

3. Joint ventures accounted for using the equity method

Company	Domicile	Equity interest (%)
Europe		
Wintershall Noordzee B.V.	Rijswijk, Netherlands	50.00
W & G Infrastruktur Finanzierungs-GmbH	Kassel	49.97

4. Associated companies accounted for using the equity method

Company	Domicile	Equity interest (%)
Europe		
Wintershall Wolga Petroleum GmbH (holds 50% of shares of Wolgodeminoil LLC)	Kassel	100.00
NEL Gastransport GmbH	Kassel	49.97
Wintershall AG	Kassel	51.00
GASCADE Gastransport GmbH	Kassel	49.97
Nord Stream AG	Zug, Switzerland	15.50 [2]
Russia		
Limited Liability Company Achim Development	Novy Urengoy, Russian Federation	25.01
OAO Severneftegazprom	Krasnoselkup, Russian Federation	25.00 [3]
Joint Stock Company Achim Trading	Moscow, Russian Federation	18.01 [2]

2) Wintershall exercises significant influence over the financial and operating policy
3) Total share of profit or loss of 35% through one additional preferred share

II. Investees not included due to immateriality

1. Subsidiaries not consolidated due to immateriality

Company	Domicile	Equity interest (%)
Europe		
Wintershall Libyen Oil & Gas GmbH	Kassel	100.00
Wintershall Exploration and Production International C.V.	Rijswijk, Netherlands	100.00
Wintershall Global Support B.V.	Rijswijk, Netherlands	100.00
Wintershall Russland GmbH	Kassel	100.00
Nordkaspische Explorations- und Produktions GmbH	Kassel	100.00
WIGA Verwaltungs-GmbH	Kassel	50.02
Wintershall Lenkoran GmbH	Kassel	100.00
OPAL Verwaltungs-GmbH	Kassel	49.97
Gullfaks AS	Stavanger, Norway	100.00
AWIAG Limited	Birkirkara, Malta	100.00
South America		
Wintershall do Brasil Servicos Ltda.	Rio de Janeiro, Brazil	100.00
Wintershall BM-C-19 Ltda.	Rio de Janeiro, Brazil	100.00
Wintershall BM-ES-1 Ltda.	Rio de Janeiro, Brazil	100.00
Wintershall BM-ES-7 Ltda.	Rio de Janeiro, Brazil	100.00
Wintershall Chile Ltda.	Santiago de Chile, Chile	100.00

2. Joint ventures not accounted for using the equity method due to immateriality

Company	Domicile	Equity interest (%)
Europe		
Erdgas Münster GmbH	Münster	28.76
Russia		
Limited Liability Company Joint Venture "Wolgodeminoil"	Volgograd, Russian Federation	50.00

Notes on statement of income

4. Functional costs

Under the cost-of-sales method, functional costs incurred by the operating functions are determined on the basis of cost center accounting. The functional costs particularly contain the personnel costs, depreciation and amortization accumulated on the underlying final cost centers as well as allocated costs within the cost accounting cycle. Operating expenses that cannot be allocated to the functional costs are reported as other operating expenses.

Cost of sales

Cost of sales includes all production and purchase costs of the company's own products as well as merchandise which has been sold in the period, particularly plant, energy and personnel costs.

Selling expenses

Selling expenses particularly include marketing and advertising costs, freight costs, packaging costs, distribution management costs, commissions, and licensing costs.

General administrative expenses

General and administrative expenses primarily include the costs of the central units, the costs of managing business units, and costs of general management and the Board of Executive Directors.

Research and development expenses

Research and development expenses include the costs resulting from research projects as well as the necessary license fees for research activities.

5. Sales

€ thousand	**2017**	**2016**
Own products	1,946,996	1,810,883
Merchandise	1,063,839	828,944
Commissions	144,786	52,957
Other	506,083	415,546
Other receivables and miscellaneous assets	**3,661,704**	**3,108,330**

Other comprises primarily services rendered.

6. Other operating income

€ thousand	2017	2016
Income from the translation of financial statements in foreign currencies	10,288	17,247
Reversals of impairment losses on noncurrent assets	165,020	–
Gains on the disposal of noncurrent assets	75,176	5,896
Income from refunds and compensation payments	110,013	186,895
Income from the adjustment and reversal of provisions recognized in other operating expenses	2,879	9,852
Revenue from miscellaneous revenue-generating activities	10,270	12,588
Other income	13,434	16,692
Other operating income	**387,080**	**249,170**

Income from the translation of financial statements in foreign currencies contained gains from the translation of companies whose local currency is different from the functional currency.

Reversals of impairment losses on noncurrent assets amounted to €165,020 thousand in 2017; they related to oil and gas fields in Norway.

Gains on the disposal of noncurrent assets amounted to €75,176 thousand, an increase of €69,280 thousand compared with 2016. They resulted from the disposal of shares in oil and gas concessions in Argentina.

Income from refunds and compensation payments declined by €76,882 thousand. In both years, the income was primarily attributable to price compensation from the Argentinian government for gas producers, which was introduced in connection with the New Gas Price Scheme (NGPS) in response to the lower, partly locally regulated gas prices.

Revenue from miscellaneous revenue-generating activities of €10,270 thousand (2016: €12,588 thousand) was attributable to lease and rental income and staff restaurant operations.

Other income related to, among other things, income from the reversal of provisions and the reversal of valuation allowances on receivables and bills, gains on the disposal of other assets – excluding financial assets – and miscellaneous income.

Income from the reversal of provisions related mainly to restoration and remediation obligations, the BOP program (BASF stock option program), and employee obligations. Provisions are reversed or adjusted if the circumstances on the balance sheet date were such that utilization was no longer expected, or expected to a lesser extent. In 2017, there was also income from the reversal of provisions for the BOP program, amounting to €1,367 thousand. In 2016, by contrast, there was an expense of €4,515 thousand arising from the BOP program.

7. Other operating expenses

€ thousand	2017	2016
Expenses from foreign-currency and hedging transactions	143,008	52,425
Amortization, depreciation and impairments of noncurrent assets	82,693	–
Costs from miscellaneous revenue-generating activities	8,207	11,786
Project costs that are not subject to mandatory capitalization	22,539	26,357
Expenses from the addition of valuation allowances for trade receivables	10,310	6,461
Expenses for charges, fees, travel expenses, and other services	27,771	25,421
Other expenses	42,444	20,495
Other operating expenses	**336,971**	**142,944**

Expenses from foreign-currency and hedging transactions increased from €52,425 thousand in 2016 to €143,008 thousand in 2017. The increase is primarily attributable to expenses incurred in Norway.

Amortization, depreciation and impairments of noncurrent assets are the result of impairment losses recognized in Norway. Out of a total of €82,693 thousand, €55,911 thousand is attributable to impairment losses on property, plant, and equipment. The recoverable amount of these assets equaled the value in use and the weighted average cost of capital rate before taxes used was 8.3%.

Costs from miscellaneous revenue-generating activities decreased by €3,579 thousand year-on-year.

Expenses for project costs that are not subject to mandatory capitalization and **expenses for charges, fees, travel expenses, and other services** were on a level with those incurred in 2016.

Other expenses consist of, among other items, losses on the disposal of other assets (excluding financial assets) (€544 thousand; previous year: €586 thousand), additions to/reversals of valuation allowances on inventories (€1,338 thousand; previous year: €–957 thousand), the derecognition of inventories (€332 thousand; previous year: €940 thousand), restructuring measures, reorganization, decommissioning costs (€2,818 thousand; previous year: €0 thousand), additions to BOP provisions (€88 thousand; previous year: €4,515 thousand), other tax expenses (€110 thousand; previous year: €102 thousand), as well as miscellaneous expenses (€30,935 thousand; previous year: €6,036 thousand).

8. Income from companies accounted for using the equity method

€ thousand	**2017**	2016
Proportional net income	**161,639**	**125,627**
of which: joint ventures	**41,269**	17,263
of which: associated companies	**120,370**	108,364
Other adjustments of income and expense	**85,970**	**-21,600**
of which: joint ventures	**85,970**	-21,600
of which: associated companies	**–**	–
Income from companies accounted for using the equity method	**247,609**	**104,027**

Income from companies accounted for using the equity method rose in 2017, especially as a result of joint ventures in the E&P activity area. This was partially offset by a decline in the share of profits (€–14 million) of gas transport companies accounted for using the equity method. This was attributable to the determination of new revenue ceilings and the refunding of excess revenue collected in previous years.

9. Financial result

€ thousand	Dec. 31, 2017	Dec. 31, 2016
Income from equity investments	2,582	8,852
Income from profit transfers	415	2,813
Income from the disposal of shareholdings	994	44
Income from other shareholdings	3,991	11,709
Expenses for loss absorbtion	-2,816	-786
Write-downs on/losses from the sale of shareholdings	-111	-4,500
Expenses from other shareholdings	-2,927	-5,286
Net income from shareholdings	**1,064**	**6,423**
Interest income from cash and cash equivalents	14,572	25,434
Interest income from loans	24,462	6,193
Interest income from securities	1,474	1,844
Other interest income	16,279	17,500
Interest and dividend income	56,787	50,971
Interest expenses on financial liabilities	-40,380	-66,764
Other interest expenses	-65,673	-74,027
Interest expenses	-106,053	-140,791
Interest result	**-49,266**	**-89,820**
Gains on the disposal of/reversal of impairment losses on securities/loans	5,426	317
Capitalized construction period interest	30,096	37,456
Net interest income from overfunded pension plans and similar obligations	255	465
Miscellaneous financial income	3,600	5,808
Other financial income	39,377	44,046
Write-downs on/losses from securities and loans	-1,284	-9,396
Reversal of discounting of other noncurrent provisions	-26,832	-27,997
Other interest expense from discounting	-495	0
Net interest expense from overfunded pension plans and similar obligations	-6,142	-7,191
Miscellaneous financial expenses	-5,473	-9,298
Other financial expenses	-40,226	-53,882
Other financial result	**-849**	**-9,836**
Financial result	**-49,051**	**-93,233**

The interest result improved by €40,554 thousand compared with the previous year, from €–89,820 thousand to €–49,266 thousand, as a result of higher interest income and lower interest expenses. The decline in interest expenses is attributable to the repayment of financial liabilities in Argentina. Higher interest income arose particularly from loans granted in connection with the financing of the Nord Stream 2 project.

The **net interest expense from underfunded pension plans and similar obligations** decreased in comparison with the previous year, as a result of the reduced net defined benefit liability as of December 31, 2016. Net interest expense of the respective business year is based on the discount rate and the defined benefit obligation at the beginning of the year.

The decline in **other financial expenses** was mostly attributable to lower costs for the hedging of receivables denominated in rubles and impairment losses on loans.

10. Income taxes

In Germany, a uniform corporate income tax rate of 15.0 % as well as a solidarity surcharge of 5.5 % thereon is levied on all paid out and retained earnings. In addition to corporate income tax, income generated in Germany is subject to a trade tax that varies depending on the municipality in which the company is represented. The weighted average rate of assessment amounted to 15.3% in 2017 (2016: 14.1%). The 30% rate used to calculate deferred taxes for German Group companies remained unchanged in 2017. The profits of foreign Group companies are assessed using the tax rates applicable in their respective countries. These are also generally used to calculate deferred taxes to the extent that tax rate adjustments for the future have not yet been enacted.

➔ **Tax expense**

€ thousand	**2017**	**2016**
Corporate income tax, solidarity surcharge and trade taxes (Germany)	256,785	239,524
Foreign income tax	37,978	49,952
Taxes for prior years	7,895	7,649
Current tax expense	302,658	297,125
From changes in temporary differences	-187,646	-257,605
From changes in tax loss carryforwards / unused tax credits	32,456	-44,573
From changes in the tax rate	10,419	-1,603
Income taxes	157,887	-6,656
Other taxes as well as sales and consumption taxes	16,688	10,697
Tax expense	**174,575**	**4,041**

The current tax expense for corporate income tax, solidarity surcharge and trade taxes (Germany) increased due to higher income of the subsidiary companies in Germany.

The changes in **temporary differences** were largely due to realization and currency effects in connection with provisions for pensions, financial liabilites, and intangible assets.

Other taxes as well as sales and consumption taxes included real estate taxes and other comparable taxes totaling €5,763 thousand.

Reconciliation of the income taxes and the effective tax rate (€ thousand)

Profit before tax	**884,785**		**397,275**	
Expected tax based on German corporate income tax (15%)	132,718	15.00%	59,591	15.00%
Solidarity surcharge	235	0.03%	662	0.17%
German trade tax	17,854	2.02%	51,399	12.94%
Foreign tax-rate differential	100,247	11.33%	-29,130	-7.33%
Income tax subsidies on investments	-92,062	-10.41%	-89,570	-22.55%
Tax-neutral currency effects	19,950	2.25%	4,132	1.04%
Tax-exempt income and non-deductible expenses, net	2,908	0.33%	13,805	3.47%
Income after taxes of companies accounted for using the equity method	-37,142	-4.20%	-15,621	-3.93%
Taxes for prior years	7,895	0.89%	7,649	1.93%
Foreign taxes	13,041	1.47%	20,144	5.07%
Changes in the tax rate	10,419	1.18%	-1,603	-0.40%
Other	-18,176	-2.05%	-28,115	-7.08%
Income taxes/effective tax rate	**157,887**	**17.84%**	**-6,656**	**-1.68%**

The Wintershall Group tax rate amounted to 17.8% in 2017 (2016: -1.68%).

The foreign tax-rate differential increased due to improvement in earnings in countries with a high tax rate, particularly in Norway.

The income tax subsidies on investments result from additional depreciation of oil and gas production facilities in Norway and led to a tax credit.

Taxes for prior years include primarily taxes from tax allocations made.

➔ **Deferred taxes**

Changes in 2017

€ thousand	Net balance as of January 1, 2017	Recognized in profit or loss	Currency effect	Recognized directly in equity	Other	Net balance as of Dec. 31, 2017
Intangible assets	**-218,343**	**30,708**	**19,342**	**0**	**7**	**-168,286**
Property, plant and equipment	**-1,928,359**	**82,922**	**207,816**	**0**	**3**	**-1,637,618**
Financial assets	**97**	**-96**	**0**	**0**	**-1**	**0**
Inventories and receivables	**64,730**	**7,167**	**-2,026**	**0**	**-3**	**69,868**
Provisions for pensions	**53,833**	**851**	**-1,252**	**-2,773**	**1**	**50,660**
Other provisions and liabilities	**512,328**	**53,736**	**-67,867**	**-31**	**-1**	**498,165**
Other	**114**	**359**	**-39**	**0**	**0**	**434**
Tax loss carryforwards	**81,542**	**-30,875**	**-6,073**	**0**	**12**	**44,606**
Total	**-1,434,058**	**144,772**	**149,901**	**-2,804**	**18**	**-1,142,171**

Changes in 2016

€ thousand	Net balance as of January 1, 2016	Recognized in profit or loss	Currency effect	Recognized directly in equity	Other	Net balance as of Dec. 31, 2016
Intangible assets	**-236,814**	**3,303**	**-29,807**	**0**	**44,975**	**-218,343**
Property, plant and equipment	**-1,985,767**	**151,119**	**-47,958**	**0**	**-45,753**	**-1,928,359**
Financial assets	**-3,345**	**-11,298**	**0**	**0**	**14,740**	**97**
Inventories and receivables	**-27,933**	**92,731**	**-67**	**0**	**-1**	**64,730**
Provisions for pensions	**42,317**	**65**	**248**	**11,201**	**2**	**53,833**
Other provisions and liabilities	**511,797**	**22,209**	**12,611**	**0**	**-34,289**	**512,328**
Other	**643**	**-522**	**-7**	**0**	**0**	**114**
Tax loss carryforwards	**31,537**	**46,175**	**3,830**	**0**	**0**	**81,542**
Total	**-1,667,565**	**303,782**	**-61,150**	**11,201**	**-20,326**	**-1,434,058**

Deferred taxes result from temporary differences between tax balances and the measurement of assets and liabilities according to IFRS as well as from tax loss carryforwards and unused tax credits. The remeasurement of all the assets and liabilities associated with acquisitions according to IFRS 3 has resulted in significant deviations between fair values and the values in the tax accounts. This leads primarily to deferred tax liabilities.

In 2017, deferred tax income of €144,772 thousand was recognized in the income statement (previous year: €303,782 thousand).

Undistributed earnings of subsidiaries resulted in temporary differences of €767,692 thousand in 2017 for which deferred tax liabilities were not recognized, as they are either not subject to taxation on payout or they are expected to be reinvested for indefinite periods of time.

➔ **Tax loss carryforwards**

The regional distribution of deferred tax assets is as follows:

€ thousand	Tax loss carryforwards		Deferred tax assets	
	2017	2016	2017	2016
Germany	0	0	0	0
Foreign	81,102	151,004	44,606	81,542
Total	**81,102**	**151,004**	**44,606**	**81,542**

There are tax loss carryforwards in Norway, which will not expire. They are expected to be used in 2018. No deferred tax assets were recognized for tax loss carryforwards of €23,915 thousand (2016: €46,463 thousand).

➔ **Tax obligations**

Tax obligations primarily include assessed income taxes and other taxes as well as estimated income taxes not yet assessed for the current year. Tax obligations amounted to €133,877 thousand in 2017 (2016: €181,871 thousand).

11. Minority interests

Minority interests *(€ thousand)*

Dec. 31,	**2017**	2016
Minority interests in profits	**41,280**	75,852

The €34,572 thousand year-on-year decline in minority interests in profits to €41,280 thousand occurred in 2017, primarily because of positive special income in the gas transport business in the previous year.

The table below shows information for each subsidiary of the Group, including material noncontrolling interests, after intercompany eliminations:

	2017			2016		
	WIGA Transport Beteiligungs-GmbH	**W&G Transp. Holding GmbH**	**OPAL Gastransport GmbH & Co. KG**	**WIGA Transport Beteiligungs-GmbH**	**W&G Transp. Holding GmbH**	**OPAL Gastransport GmbH & Co. KG**
Percentage of noncontrolling interests	49.98%	49.98%	49.98%	49.98%	49.98%	49.98%
Noncurrent assets	55	1,599,885	131	260,454	1,584,902	127
Current assets	2,129	10,546	38,394	3,351	23,165	27,694
Noncurrent liabilities	-699,046	-65,686	-2,857	-1,598,001	-65,481	-8,596
Current liabilities	-678,893	-9,117	-10,895	-117,191	-8,125	-2,192
Net assets/liabilities	-1,375,755	1,535,628	24,773	-1,451,387	1,534,461	17,033
Net assets attributable to noncontrolling interests	-687,602	767,507	12,382	-725,403	766,924	8,513
Sales revenue	88	20,173	173,284	0	37,069	128,637
Profit	10,399	48,025	24,170	11,622	131,464	8,676
Other comprehensive income	5		6	-11		-18
Comprehensive income	**10,404**	**48,025**	**24,176**	**11,611**	**131,464**	**8,658**
Profit attributable to noncontrolling interests	5,197	24,003	12,080	5,809	65,706	4,336
Other comprehensive income attributable to noncontrolling interests	3	–	3	-6	–	-11

12. Personnel expenses and employees

➔ Personnel expenses

The Wintershall Group spent €254,637 thousand on wages and salaries, social security contributions and expenses for pensions and assistance in 2017 (2016: €242,116 thousand). This represented an increase in personnel expenses of 5.2%.

Personnel expenses

€ thousand	**2017**	2016
Wages and salaries	**214,569**	203,093
Social security contributions and expenses for pensions and assistance	**40,068**	39,023
Thereof for pensions	**23,817**	21,619
Thereof for social security	**16,251**	17,404
Total	**254,637**	**242,116**

➔ Number of employees

As of December 31, 2017, the number of employees had risen to 1,984, after 1,976 employees as of December 31, 2016. Employees from joint operations are included in the number of employees at year end relative to BASF's share in the respective company.

Total employment contracts headcount

as of Dec. 31,	**2017**	2016
Headcount	**1,984**	1,976
of which: trainees	**58**	59
of which: employees on fixed-term contracts	**92**	80

Annual average	**2017**	2016
Headcount	**1,989**	1,988
of which: trainees	**53**	53
of which: employees on fixed-term contracts	**91**	89

Notes on balance sheet

13. Intangible assets

Wintershall's goodwill is allocated to seven business segments, which are managed on a global basis.

Annual impairment testing took place in the fourth quarter of the year on the basis of the business segments. Recoverable amounts were determined using the value in use. This was done using plans approved by company management and their respective cash flows. The planning is based on experience, current performance and management's best possible estimates on the future development of individual parameters. Oil and gas prices as well as the WACC are the key inputs for forecasting cash flows in the latest financial plans. Market assumptions regarding, for example, economic development and market growth are included based on external macroeconomic sources as well as sources specific to the industry.

More information on oil and gas pricing can be found in chapter 1.4 Accounting policies.

The required discounting of cash flows for impairment testing is calculated with the weighted average cost of capital rate, which is determined using the Capital Asset Pricing Model. It comprises a risk-free rate, a market risk premium, and a spread for credit risk based on the respective industry-specific peer group. The calculation also takes into account the capital structure and the beta factor of the respective peer group. The valuation model uses a field-based approach. The period under consideration includes the planned license terms and the production profiles of the included oil and gas fields. Furthermore, instead of using a single weighted average cost of capital rate, the country risk is considered in each case: this leads to a more precise calculation of the recoverable amount. Considering these parameters, the cost of capital varied between 11.32% and 36.99% (2016: between 10.96% and 37.68%).

After determining the recoverable amount in each case, it was determined for all business segments that reasonable possible deviations from the key assumptions would not lead to the carrying amounts of the units exceeding their respective recoverable amounts.

Business segment goodwill

€ thousand	**Dec. 31, 2017**	**Dec. 31, 2016**	**Jan. 1, 2016**
Wintershall Holding	**51,748**	58,876	57,005
Wintershall Energia	**116,524**	132,575	128,361
Wintershall Middle East	**9,736**	11,077	10,725
Wintershall Petroleum (E&P)	**9,624**	10,950	10,602
Wintershall Norge	**923,076**	1,050,226	1,019,585
Achimgaz	**221,744**	252,289	244,271
Gazprom YRGM Trading	**171,843**	195,514	189,301

Cost of capital

	Dec. 31, 2017	**Dec. 31, 2016**
Wintershall Holding	11.32%	10.96%
Wintershall Energia	20.07%	21.50%
Wintershall Middle East	18.50%	18.01%
Wintershall Petroleum (E&P)	36.99%	37.68%
Wintershall Norge	35.45%	34.61%
Achimgaz	13.65%	12.79%
Gazprom YRGM Trading	13.65%	12.79%

Development of intangible assets 2017

€ thousand	Distribution, supply and similar rights	Goodwill	Product rights, licenses and trademarks	Other rights and values	**Total**
Cost					
Balance as of January 1, 2017	958,648	1,852,600	572,888	63,559	**3,447,695**
Additions	–	–	10,883	3,951	**14,834**
Disposals	–	–	-248	-28,863	**-29,111**
Transfers	–	–	-177,439	–	**-177,440**
Currency effects	-70,346	-224,295	-36,702	-3,430	**-334,773**
Balance as of December 31, 2017	888,302	1,628,305	369,382	35,217	**2,921,205**
Amortization					
Balance as of January 1, 2017	-316,279	-141,092	-106,411	-51,121	**-614,903**
Additions	-38,323	–	-33,396	-5,322	**-77,041**
Disposals	–	–	248	28,851	**29,099**
Transfers	–	–	–	–	**0**
Currency effects	25,280	17,082	3,710	3,355	**49,427**
Balance as of Dec. 31, 2017	-329,322	-124,010	-135,849	-24,237	**-613,418**
Net carrying amount as of Dec. 31, 2017	**558,980**	**1,504,295**	**233,533**	**10,980**	**2,307,787**

Besides goodwill, intangible assets also include acquired **intangible assets** as well as internally generated intangible assets. In addition, they include rights, which are amortized in accordance with the unit of production method. As of December 31, 2017, their accumulated cost amounted to €962,000 thousand and accumulated amortization to €312,000 thousand; amortization charges in 2017 amounted to €41,000 thousand.

Concessions for oil and gas production under the category **product rights, licenses and trademarks** with a net carrying amount of €233,533 thousand in 2017 authorize the exploration and production of oil and gas in certain areas. At the end of the term of a concession, the rights are returned.

Disposals of intangible assets in the amount of €29,111 thousand were largely attributable to software being derecognized in Norway following its amortization to zero.

The **transfers** in the amount of €177,440 thousand largely concerned the confirmed oil and gas deposits in the Maria field in Norway to property, plant and equipment. Non-confirmed deposits in connection with acquired concessions are reported as intangible assets under product rights, licenses and trademarks.

In 2017, **amortization and impairments** included impairment losses of €26,781 thousand on the exploration potential for the oil and gas production in Norway.

Currency effects reduced intangible assets by €285,346 thousand and arose mainly from the depreciation of the U.S. dollar and the ruble relative to the euro.

Development of intangible assets 2016

€ thousand	Distribution, supply and similar rights	Goodwill	Product rights, licenses and trademarks	Other rights and values	**Total**
Cost					
Balance as of Jan. 1, 2016	764,080	1,796,451	590,519	62,156	**3,213,206**
Additions	–	–	13,170	827	**13,997**
Disposals	–	-2,783	-26,235	-1,404	**-30,422**
Transfers	–	–	-16,424	927	**-15,497**
Currency effects	194,568	58,932	11,858	1,053	**266,411**
Balance as of Dec. 31, 2016	958,648	1,852,600	572,888	63,559	**3,447,695**
Amortization					
Balance as of Jan. 1, 2016	-238,023	-136,608	-110,748	-37,915	**-523,294**
Additions	-15,370	–	-6,196	-13,314	**-34,880**
Disposals	–	–	11,789	1,268	**13,057**
Transfers	–	–	–	48	**48**
Currency effects	-62,886	-4,484	-1,256	-1,208	**-69,834**
Balance as of Dec. 31, 2016	-316,279	-141,092	-106,411	-51,121	**-614,903**
Net carrying amount on Dec. 31, 2016	**642,369**	**1,711,508**	**466,477**	**12,438**	**2,832,792**

Besides goodwill, intangible assets also include acquired **intangible assets** as well as internally generated intangible assets. In addition, they include rights, which are amortized in accordance with the unit of production method. As of December 31, 2016, their acquisition costs amounted to €1,029,000 thousand and accumulated amortization to €328,000 thousand; amortization in 2016 amounted to €19,000 thousand.

Product rights, licenses, and trademarks include concessions for oil and gas production with a net carrying amount of €466,477 thousand in 2017, which authorize the exploration and production of oil and gas in certain territories. At the end of the term of a concession, the rights are returned.

Disposals of intangible assets in the amount of €30,422 thousand were largely attributable to the sale of the 25 percent interest in the Byrding field to Statoil.

Currency effects increased intangible assets by €196,577 thousand and arose mainly from the appreciation of the ruble and the U.S. dollar relative to the euro.

14. Property, plant and equipment

Development of property, plant and equipment 2017

€ thousand	Land and buildings	Machinery and technical equipment	Miscellaneous equipment and fixtures	Construction in progress	**Total**
Cost					
Balance as of Jan. 1, 2017	77,109	9,291,103	90,558	2,472,593	**11,931,363**
Additions	1,236	596,769	3,550	370,617	**972,172**
Changes in scope of consolidation	–	14,060	–	–	**14,060**
Disposals	-490	-242,617	-9,363	-1,595	**-254,065**
Transfers	1,682	1,183,818	1,440	-1,009,373	**177,567**
Currency effects	–	-584,416	-1,790	-265,039	**-851,245**
Balance as of Dec. 31, 2017	79,537	10,258,717	84,395	1,567,203	**11,989,852**
Depreciation					
Balance as of Jan. 1, 2017	-45,224	-4,929,418	-70,497	-210,908	**-5,256,047**
Additions	-2,276	-1,045,438	-5,453	-59,231	**-1,112,398**
Changes in scope of consolidation	–	-14,042	–	–	**-14,042**
Disposals	368	228,166	9,272	1,588	**239,394**
Transfers	–	53,484	–	-53,484	**0**
Currency effects	–	325,668	1,136	22,249	**349,053**
Reversals of impairment losses	–	59,225		105,795	**165,020**
Balance as of Dec. 31, 2017	-47,132	-5,322,355	-65,542	-193,991	**-5,629,020**
Net carrying amount as of December 31, 2017	**32,405**	**4,936,362**	**18,853**	**1,373,212**	**6,360,832**

Property, plant, and equipment declined by €314,484 thousand year-on-year to €6,360,832 thousand.

A significant **disposal** of property, plant, and equipment was Wintershall's sale of the interest in the Aguada Pichana Oeste (West) block in Argentina to Pan American Energy (PAE) and YPF S.A. in July 2017. The sale followed a decision taken by the partner companies involved, PAN, YPF, Total, and Wintershall, to divide Aguada Pichana and to separately develop the two blocks created as a result.

Additions to property, plant and equipment arising from investment projects amounted to €972,172 thousand in 2017. Material investments pertained to the construction of oil and gas facilities and the drilling of wells in Europe and South America. In total, these additions from investments were more than offset by impairment losses (€1,112,398 thousand) and currency effects (€502,192 thousand), which arose from the depreciation of the U.S. dollar relative to the euro.

Machinery and technical equipment contain oil and gas deposits, including related wells, production facilities and further infrastructure, which are depreciated according to the unit of production method.

The **transfers** largely concerned the confirmed oil and gas deposits in the Maria field in Norway from intangible assets to machinery and technical equipment.

Development of property, plant and equipment 2016

€ thousand	Land and buildings	Machinery and technical equipment	Miscellaneous equipment and fixtures	Construction in progress	**Total**
Cost					
Balance as of Jan. 1, 2016	76,775	8,059,538	91,376	2,392,321	**10,620,010**
Additions	699	375,701	5,948	717,656	**1,100,004**
Changes in scope of consolidation	–	–	–	–	**0**
Disposals	-831	-114,736	-8,004	-11,605	**-135,176**
Transfers	466	758,502	424	-738,200	**21,192**
Currency effects	–	212,098	814	112,421	**325,333**
Balance as of Dec. 31, 2016	77,109	9,291,103	90,558	2,472,593	**11,931,363**
Depreciation					
Balance as of Jan. 1, 2016	-43,595	-3,874,977	-70,383	-212,481	**-4,201,436**
Additions	-2,103	-1,049,038	-7,422	-3,493	**-1,062,056**
Changes in scope of consolidation	–	–	–	–	**–**
Disposals	474	88,299	7,764	11,372	**107,909**
Transfers	–	-48	–	–	**-48**
Currency effects	–	-93,679	-456	-6,306	**-100,441**
Reversals of impairment losses	–	25	–	–	**25**
Balance as of Dec. 31, 2016	-45,224	-4,929,418	-70,497	-210,908	**-5,256,047**
Net carrying amount on Dec. 31, 2016	**31,885**	**4,361,685**	**20,061**	**2,261,685**	**6,675,316**

Property, plant, and equipment increased by €256,742 thousand year-on-year to €6,675,316 thousand. This was mainly attributable to **additions to property, plant and equipment arising from investment projects** in an amount of €1,100,004 thousand, which related primarily to investments in the construction of oil and gas production facilities and wells.

Currency effects increased property, plant and equipment by €224,892 thousand and arose mainly from the appreciation of the U.S. dollar relative to the euro.

15. Investments accounted for using the equity method and other financial assets

investments accounted for using the equity method

€ thousand	**2017**	2016
As of January 1	2,581,398	2,588,536
Changes in scope of consolidation	–	–
Additions	12,064	–
Disposals	–	–
Transfers	-36,920	-7,138
Currency effects	–	–
Net carrying amount as of December 31	**2,556,542**	**2,581,398**

Investments accounted for using the equity method declined by €24,856 thousand compared with the previous year (€2,581,398 thousand), to €2,556,542 thousand. The decline was mainly attributable to currency effects (€–31 million).

Other financial assets approximately matched the prior-year level.

€ thousand	**Dec. 31, 2017**	Dec. 31, 2016	Jan. 1, 2016
Other financial assets	73,492	71,456	9,259
Total net assets	**73,492**	**71,456**	**9,259**

Other financial assets relate primarily to equity investments or buildings measured at cost; none of these assets were sold in the fiscal year under review and they are expected to be held in the next year. They are measured at amortized cost rather than fair value because of insufficient market liquidity.

16. Inventories

Inventories

€ thousand	Dec. 31, 2017	Dec. 31, 2016	Jan. 1, 2016
Raw materials, consumables, and supplies	**61,099**	59,958	61,626
Work-in-process, finished goods and merchandise	**23,260**	16,239	26,542
Inventories	**84,359**	76,197	88,168

Inventories increased by €8,162 thousand year-on-year to €84,359 thousand (previous year: €76,197 thousand), driven above all by higher gas inventories in Germany (€6,104 thousand).

17. Receivables and miscellaneous assets

Other receivables and miscellaneous assets

	Dec. 31, 2017		Dec. 31, 2016		Jan. 1, 2016	
€ thousand	**Noncurrent**	**Current**	**Noncurrent**	**Current**	**Noncurrent**	**Current**
Loans and interest receivables	495,309	282	271,861	27,181	423,530	44,112
Dividends/profit or loss transfers	–	29,267	–	45,295	–	12,110
Securities	–	16,682	20,160	16,356	–	–
Derivatives with positive fair values	–	4,422	–	1,062	–	1,705
Intra-consortium billings	16,611	37,034	19,013	35,238	22,735	38,345
Operating receivables	4,539	129,824	6,474	124,143	5,066	143,221
Tax refund claims	–	17,275	–	19,024	–	73,749
Receivables from employees	1	448	6	627	41	529
Prepaid expenses	1,466	44,743	19	52,435	–	26,181
Other financial receivables	–	3,152	767	4,859	2,127	12,142
Total	517,926	283,129	318,300	326.222	453,499	352,094
Other receivables and miscellaneous assets	**801,055**		**644,522**		**805,593**	

The increase in noncurrent **loans and interest receivables** was predominantly due to the loan in the amount of €325 million granted by Wintershall Nederland Transport and Trading B.V., Rijswijk, Netherlands, to Nord Stream 2 AG, and the loan in the amount of €140 million granted by W & G Trans- port Holding GmbH, Kassel, Germany, to W & G Infrastruktur Finanzierungs-GmbH, Kassel, Germany, in 2017. In 2017, the loans granted by the fully consolidated WIGA Transport Beteiligungs-GmbH & Co. KG, Kassel/Germany, to NEL Gastransport GmbH, Kassel/Germany, and GASCADE Gastransport GmbH, Kassel/Germany, were repaid to W & G Infrastruktur Finanzierungs-GmbH, which is accounted for using the equity method; this transaction had an offsetting effect of €259 million.

Impairment losses on receivables in 2017

€ thousand	Balance as of Jan. 1, 2017	Additions recognized in income	Reversals recognized in income	Additions not recognized in income	Reversals not recognized in income	Currency translation effect	**Balance as of Dec. 31, 2017**
Accounts receivable, trade	9,201	10,310	1,555	–	–	-2,167	**15,789**
Other receivables	63,870	1,284	5,260	–	342	–	**59,552**
Total	**73,071**	**11,594**	**6,815**	**0**	**342**	**-2,167**	**75,341**

Impairment losses on receivables in 2016

€ thousand	Balance as of Jan. 1, 2016	Additions recognized in income	Reversals recognized in income	Additions not recognized in income	Reversals not recognized in income	Currency translation effect	**Balance as of Dec. 31, 2016**
Accounts receivable, trade	10,257	6,037	4,637	–	–	-2,456	**9,201**
Other receivables	55,677	9,396	–	–	–	-1,203	**63,870**
Total	**65,934**	**15,433**	**4,637**	**0**	**0**	**-3,659**	**73,071**

The changes recognized in profit or loss include individual valuation allowances.

Changes not recognized in income were primarily related to changes in the scope of consolidation, translation adjustments and derecognition of uncollectible receivables.

In the current economic environment, BASF has not observed any material changes in the credit quality of its receivables. In 2017, individual valuation allowances of €10,310 thousand were recognized for **accounts receivable, trade**, and €1,555 thousand were reversed. In 2016, individual valuation allowances of €6,037 thousand were recognized for trade accounts receivable and valuation allowances of €4,637 thousand were reversed.

Maturity analysis of loans and interest receivables

€ thousand	Dec. 31, 2017		Dec. 31, 2016		Jan. 1, 2016	
	Gross value	Valuation allowances	Gross value	Valuation allowances	Gross value	Valuation allowances
Not yet due	**548,861**	**53,392**	336,353	58,184	518,117	50475
Past due less than 30 days	**0**	**0**	0	0	0	0
Past due between 30 and 89 days	**0**	**0**	0	0	0	0
Past due more than 90 days	**6,160**	**6,010**	5,656	5,686	5,202	5,202
Total	**555,021**	**59,402**	**342,009**	**63,870**	**523,319**	**55,677**

Aged debtor analysis

€ thousand	Dec. 31, 2017		Dec. 31, 2016		Jan. 1, 2016	
	Gross value	Valuation allowances	Gross value	Valuation allowances	Gross value	Valuation allowances
Not yet due	**499,249**	**8,287**	455,479	0	378,967	50
Past due less than 30 days	**10,120**	**0**	9,903	164	13,951	15
Past due between 30 and 89 days	**1,481**	**483**	27,305	33	7,996	3,990
Past due more than 90 days	**7,044**	**7,018**	10,449	9,004	6,935	6,194
Total	**517,894**	**15,788**	503,136	9,201	407,849	10,249

As of December 31, 2017, there were no material other receivables classified as financial instruments that were overdue and for which no valuation allowance was made.

18. Capital, reserves and retained earnings

➔ Share capital

Wintershall Holding GmbH's share capital as of December 31, 2017 was €105,000 thousand, divided into 105,000,000 shares with a notional value of €1.00 each.

➔ Capital surplus

In fiscal year 2017, the parent company paid an amount of €400,000 thousand into the capital surplus, which had previously been distributed to it from retained profits. As a result, the capital surplus increased to €415,543 thousand as of the balance sheet date, December 31, 2017.

➔ Retained earnings

The IFRS net profit for the period of €685,620 thousand (2016: €328,081 thousand) was added to unappropriated net profit. Wintershall Holding GmbH's HGB profit for the year 2017, which amounted to €401,546 thousand, was transferred to BASF Handels- und Exportgesellschaft mbH. In addition, retained profits were reduced as a result of a dividend distribution of €59,639 thousand to Gazprom. In addition, a further amount of €400,000 thousand was distributed to BASF, which in turn made a payment to the capital surplus in the same amount.

€ thousand	Dec. 31, 2017	Dec. 31, 2016	Jan 1, 2016
Retained earnings	3,693,019	3,796,943	3,834,712

➔ Other comprehensive income

€ thousand	Dec. 31, 2017	Dec. 31, 2016	Jan 1, 2016
Other comprehensive income	-1,071,791	-745,137	-1,126,261

Especially the increase in the value of the euro, relative to the U.S. dollar, in 2017 led to a decrease of €346,378 thousand in the translation adjustment to minus €896,498 thousand.

In 2017, other comprehensive income increased by €7,853 thousand before taxes due to the positive development of plan assets. In 2016, the change in plan assets amounting to €–35,050 million before tax was particularly due to the increase in defined benefit obligations, which resulted from the significant decrease in the discount rate over the course of the year.

19. Minority interests

		Dec. 31, 2017		Dec. 31, 2016		Jan 1, 2016	
		Equity interest		Equity interest		Equity interest	
Group company	**Partner**	%	€ thousand	%	€ thousand	%	€ thousand
WIGA Transport Beteiligungs-GmbH & Co. KG, W & G Transport Holding GmbH, OPAL Gastransport GmbH & Co. KG	Gazprom Germania GmbH, Berlin	49.97	71,678	49.97	-42,606	49.97	-127,954
Equity interest in W & G Transportation Holding GmbH and OPAL Gastransport GmbH & Co. KG: 49.97%; voting rights and portion of earnings: 50.02%							

20. Provisions for pensions and similar obligations

In addition to state pension plans, most employees are granted company pension benefits from either defined contribution or defined benefit plans. Benefits generally depend on years of service, contributions or compensation, and take into consideration the legal framework of labor, tax and social security laws of the countries where the companies are located. To limit the risks of changing financial market conditions as well as demographic developments, employees have been almost exclusively offered defined contribution plans for future years of service in recent years.

BASF SE's Group Pension Committee monitors the risks of all pension plans of the Group. In this context, it issues guidelines regarding the governance and risk management of pension plans, particularly with regard to the funding of the pension plans and the portfolio structure of the existing plan assets. The organization, responsibilities, strategy, implementation and reporting requirements are documented for the units involved.

➔ Economic and legal environment of the plans

There are pension obligations subject to government supervision or similar legal restrictions, especially in Germany. For example, there are minimum funding requirements to cover pension obligations, which are based on actuarial assumptions that may differ from those in IAS 19. Furthermore, there are restrictions in qualitative and quantitative terms relating to parts of the plan assets for the investment in certain asset categories. This could result in fluctuating employer contributions, financing requirements and the assumption of obligations in favor of the pension funds to comply with the regulatory requirements.

The obligations and the plan assets used to fund the obligations are exposed to demographic, legal and economic risks. Economic risks are primarily due to unforeseen developments on commodity and capital markets. They affect, for example, pension adjustments based on the level of inflation in Germany, as well as the impact of the discount rate on the amount of the defined benefit obligation. However, measures taken in previous years to close plans with defined benefits for future service, especially final pay promises, led to a reduction in risk with regard to future benefit levels.

The strategy of the Wintershall Group with regard to financing pension commitments is aligned with country-specific supervisory and tax regulations.

Particularly in Germany, pension benefits were granted for which the employer has a subsidiary liability. Moreover, pension benefits in Germany include minimum interest guarantees to a limited extent. If the pension fund cannot generate the income needed to service the minimum guarantee, this must be provided by the employer under the subsidiary liability. To the extent that recourse to the employer is unlikely based on the structure and provision of the pension benefits as well as the asset situation of the pension fund, these plans are treated as defined contribution plans.

➔ Description of the defined benefit plans

The typical plan structure in the individual countries is described in the following. Different arrangements may exist, in particular due to the assumption of plans as part of acquisitions; however, these do not have any material impact on the description of plans in the individual countries.

Germany

For Wintershall Holding GmbH and German Group companies, a basic level of benefits is provided by BASF Pensionskasse VVaG, a legally independent funded plan, which is financed by contributions of employees and the employer as well as the return on plan assets. Some of the benefits financed via the BASF Pensionskasse VVaG are subject to adjustments that must be borne by its member companies to the extent that these cannot be borne by BASF Pensionskasse VVaG due to the regulations imposed by the German supervisory authority. In 2004, the basic benefits plan at Wintershall was closed for newly hired employees at German BASF companies and replaced by a defined contribution plan.

Occupational pension commitments in addition to the basic plan are financed through pension provisions in the German Group companies. The benefits are largely based on cash balance plans. Furthermore, employees are given the option of participating in various deferred compensation schemes.

Norway

In Norway, there is a legal obligation to grant occupational pension benefits. For employees whose remaining period of service was 15 years or less as of January 1, 2016, the final salary promise continues to apply after the closure of the plan. Employees whose remaining period of service was more than 15 years as of that date will be granted benefits under a defined contribution plan. Both pension plans are financed through Nordea Liv AS insurance.

➔ **Actuarial assumptions**

The valuation of the defined benefit obligation is largely based on the following assumptions:

Assumptions used to determine the defined benefit obligation as of December 31

	Germany			Norway			Switzerland		
	2017	2016	2015	2017	2016	2015	2017	2016	2015
Discount rate	**1.90**	1.80	2.5	**2.30**	2.10	2.5	**0.50**	0.60	0.8
Projected pension increase	**1.50**	1.50	1.5	**0.40**	–	–	**–**	–	–

Assumptions used to determine expenses for pension benefits in the respective business year

	Germany			Norway			Switzerland		
	2017	2016	2015	2017	2016	2015	2017	2016	2015
Discount rate	**1.80**	2.50	2.40	**2.10**	2.50	3.0	**0.60**	0.80	1.0
Projected pension increase	**1.50**	1.50	1.75	**–**	–	0.3	**–**	–	–

The assumptions used to ascertain the defined benefit obligation as of December 31 are used in the following year to determine the expenses for pension benefits.

A BASF Group-wide, uniform procedure is used to determine the discount rates used for the valuation of material pension obligations of the Wintershall Group. Accordingly, the discount rates were derived from the yields on corporate bonds in the respective currency zones with an issuing volume of more than 100 million units of the respective currency with a minimum rating of AA– up to AA+ from at least one of the three rating agencies: Fitch, Moody's, or Standard & Poor's.

The pension plans are in all cases measured on the basis of the mortality tables applicable as of December 31 of the reporting period concerned, which in Germany were derived from the BASF Group's portfolio and last updated in 2015.

Mortality tables as of December 31, 2017

Germany	Heubeck Richttafeln 2005G (modified)
Norway	K2013
Switzerland	BVG 2015 generational

➔ **Sensitivity analysis**

A change in the material actuarial assumptions would have the following effects on the defined benefit obligation:

Sensitivity of the defined benefit obligation as of December 31 *(€ million)*

	Increase by 0.5 percentage points			Decrease by 0.5 percentage points		
	2017	2016	2015	2017	2016	2015
Discount rate	**-37**	-37	-32	**42**	42	37
Projected pension increase	**28**	28	23	**-25**	-25	-21

An alternative valuation of the defined benefit obligation was conducted in order to determine how changes in the underlying assumptions would influence the amount of the defined benefit obligation. A linear extrapolation of these amounts based on alternative changes in the assumptions as well as an addition of combined changes in the individual assumptions is not possible.

➔ **Explanation of the amounts in the statement of income and balance sheet**

Composition of expenses for pension benefits (€ million)	2017	2016
Expenses for defined benefit plans	17	15
Expenses for defined contribution plans	7	7
Expenses for pension benefits (recognized in income from operations)	**24**	22
Net interest expense	6	7
Expenses for pension benefits (recognized in the financial result)	**6**	7

The net interest on the defined benefit liability is recognized in the financial result. This results from the difference between the interest cost of the defined benefit obligation and the standardized return on plan assets. The expected contribution payments and benefits paid over the course of the business year are considered in the determination of net interest. Net interest expense of the respective business year is based on the discount rate and the defined benefit obligation at the beginning of the year.

Development of defined benefit obligation (€ million)	2017	2016	2015
Defined benefit obligation as of January 1	484	438	477
Current service cost	15	13	20
Interest cost	9	10	11
Benefits paid	-16	-15	-15
Participants' contributions	1	1	1
Actuarial gains/losses			
for adjustments relating to financial assumptions	–	34	-13
for adjustments relating to demographic assumptions	–	–	-1
for experience adjustments	-1	3	-5
Past service cost	–	–	-26
Other changes	2	-1	-16
Currency effects	-5	1	5
Defined benefit obligation as of December 31	**489**	484	438

As of December 31, 2017, the weighted average duration of the defined benefit obligation amounted to 16.9 years (2016: 17.1 years; 2015: 15.6 years).

Development of plan assets (€ million)	2017	2016	2015
Plan assets as of Jan. 1	161	152	170
Standardized return on plan assets	3	3	4
Deviation between actual and standardized return on plan assets	7	2	2
Employer contributions	11	5	10
Participants' contributions	1	1	1
Benefits paid	-4	-4	-4
Past service cost	–	–	-28
Other changes	–	1	-7
Currency effects	-3	1	4
Plan assets as of December 31	**176**	161	152

The standardized return on plan assets is calculated by multiplying plan assets at the beginning of the year with the discount rate used for existing defined benefit obligations at the beginning of the year, taking into account benefit and contribution payments expected to be made during the year.

The expected contribution payments for 2018 amount to approximately €4 million. In 2017, a special endowment was provided to improve the funding level at BASF Pensionskasse VVaG. An amount of €6 million was attributable to the Wintershall Group in this process.

Development of the net defined benefit liability (€ million)	2017	2016	2015
Net defined benefit liability as of January 1	-323	-286	-307
Current service cost	-15	-13	-20
Interest cost	-9	-10	-11
Standardized return on plan assets	3	3	4
Deviation between actual and standardized return on plan assets	7	2	2
Actuarial gains/losses of the defined benefit obligation	1	-37	19
Benefits paid by unfunded plans	12	11	11
Employer contributions	11	5	10
Effects of plan curtailments	–	–	-2
Other changes	-2	2	9
Currency effects	2	–	-1
Net defined benefit liability as of December 31	**-313**	**-323**	**-286**
Thereof pension provisions	313	323	286

Regional allocation of defined benefit plans as of December 31 (€ million)	Pension obligations			Plan assets			Net defined benefit liability		
	2017	2016	2015	2017	2016	2015	2017	2016	2015
Germany	451	448	408	149	135	131	-302	-313	-277
Norway	37	35	28	26	25	19	-11	-10	-9
Switzerland	1	1	2	1	1	2	–	–	–
Total	**489**	**484**	**438**	**176**	**161**	**152**	**-313**	**-323**	**-286**

➔ **Explanations regarding plan assets**

The target asset allocation has been defined by using asset liability studies and is reviewed regularly. Accordingly, plan assets are aligned with the long-term development of the obligations, taking into consideration the risks associated with the specific asset classes and the regulations relating to the investment of plan assets. The existing portfolio structure is oriented towards the target asset allocation. In addition, current market assessments are taken into consideration. In order to mitigate risks and maximize returns, a widely spread global portfolio of individual assets is held. Existing currency risks are hedged, depending on the earnings profile of the individual asset classes.

Structure of plan assets (%)	2017	2016	2015
Equities	**25%** (100)	**25%** (100)	**27%** (100)
Debt instruments	**57%** (81)	**57%** (74)	**56%** (68)
of which to government debtors	**8%** (91)	**6%** (85)	**6%** (79)
of which to other debtors	**49%** (82)	**51%** (72)	**50%** (67)
Real estate	**6%** (-)	**7%** (-)	**6%** (-)
Alternative investments	**12%** (-)	**11%** (-)	**10%** (-)
Cash and money market investments	**–** (100)	**–** (100)	**1%** (100)
Total	**100%** (72)	**100%** (68)	**100%** (67)

The amounts in brackets designate the portion of the respective asset class for which there is an active market.

In addition to corporate and government bonds, the debt instruments asset class comprises promissory notes and debentures (Pfandbriefe). Government bonds primarily concern bonds from those countries enjoying the highest credit ratings, such as the United States, United Kingdom, Germany and Switzerland. Corporate bonds mainly comprise investment-grade bonds, whereby particular high-yield bonds are also held to a limited extent. In connection with the ongoing monitoring of default risk based on a given risk budget and on the continuous observation of the development of the credit- worthiness of issuers, an adjustment of plan asset allocation to a revised market assessment may be made, if necessary. Alternative investments largely comprise investments in private equity, absolute return funds and senior secured loans.

In 2017, a special endowment was provided to improve the funding level at BASF Pensionskasse VVaG. In 2017 and 2016, there were no material transactions between the legally independent pension funds and the Wintershall Group companies.

The funding of the plans was as follows:

Current funding situation of the pension plans as of December 31 (€ million)	2017		2016		2015	
	Defined benefit obligation	Plan assets	Defined benefit obligation	Plan assets	Defined benefit obligation	Plan assets
Unfunded plans	**236**	–	**237**	–	**222**	–
Funded plans	**253**	176	**247**	161	**216**	152
Total	**489**	176	**484**	161	**438**	152

➔ **Defined contribution plans and government pensions**

The contributions to defined-contribution plans contained in income from operations amounted to €7 million in 2017 and €7 million in 2016.

Contributions to government pension plans were €23 million in 2017 and €22 million in 2016.

21. Other provisions

€ thousand Provisions for	Dec. 31, 2017	Thereof current	Dec. 31, 2016	Thereof current	Jan 1, 2016	Thereof current
Remediation/landfill site risks	5	0	5	0	11	0
Emission rights	1,041	1,041	656	656	948	948
Employee obligations	31,510	14,777	32,801	13,695	37,547	23,450
Litigation risks, compensation claims	1,259	1,059	1,403	1,203	1,563	1,363
Procurement risks and other impending losses	3,177	3,177	5,510	3,230	9,044	3,534
Mining restoration obligations	1,217,385	10,986	1,217,033	22,550	1,185,319	64,876
Other restoration obligations	6,121	6,121	6,943	6,943	7,304	7,304
Other	160,708	94,639	104,390	61,034	108,553	82,836
Total	**1,421,206**	**131,800**	1,368,741	109,311	1,350,289	184,311

Restoration obligations primarily relate to the estimated costs for the filling of wells and the removal of production equipment after the end of production. The use of **mining restoration obligations** depends on the economic depletion of the field, which may take between approximately one and thirty years.

Provisions for **remediation and landfill site risks** cover expected costs for the removal of environmental contamination at existing production or storage sites and similar measures.

Provisions for **employee obligations** primarily include obligations for the granting of long-service bonuses and anniversary payments, variable compensation including associated social security contributions, as well as provisions for early retirement programs for employees nearing retirement.

Provisions for **litigation, damage claims, warranties and similar commitments** contain anticipated expenses from lawsuits in which Wintershall is the defendant party, as well as obligations under damage claims against Wintershall and fines.

Details of the cases on which this is based are provided in note 24.

Other largely includes noncurrent tax provisions.

The following table shows the development of other provisions by category. Other changes include primarily changes due to currency effects and changes in the scope of consolidation.

Changes in other provisions in 2017

€ thousand	Balance as of Jan. 1, 2017	Additions	Use	Reversals	Unwinding of the discount	Transfer	Other changes	**Balance as of Dec. 31, 2017**
Cost								
Remediation/landfill site risks	5	–	–	–	–	–	–	**5**
Emission rights	656	1,041	-561	-95	–	–	–	**1,041**
Employee obligations	32,801	17,704	-16,430	-2,125	–	524	-964	**31,510**
Litigation risks, compensation claims	1,403	174	–	–	–	–	-318	**1,259**
Procurement risks and other impending losses	5,510	897	-3,220	–	–	–	–	**3,187**
Mining restoration obligations	1,217,033	96,029	-27,744	-19,445	26,832	-34	-75,286	**1,217,385**
Other restoration obligations	6,943	–	-501	-321	–	–	–	**6,121**
Other	104,390	84,997	-21,689	-1,799	–	-1,506	-3,685	**160,708**
Total	**1,368,741**	**200,842**	**-70,145**	**-23,785**	**26,832**	**-1,016**	**-80,253**	**1,421,216**

Changes in other provisions in 2016

€ thousand	Balance as of Jan. 1, 2016	Additions	Use	Reversals	Unwinding of the discount	Transfer	Other changes	**Balance as of Dec. 31, 2016**
Cost								
Remediation/landfill site risks	11	–	-5	–	–	-1	–	**5**
Emission rights	948	656	-868	-80	–	–	–	**656**
Employee obligations	37,547	20,467	-25,690	-1,961	–	2,390	48	**32,801**
Litigation risks, compensation claims	1,563	57	–	–	–	–	-217	**1,403**
Procurement risks and other impending losses	9,044	–	-3,534	–	–	–	–	**5,510**
Mining restoration obligations	1,185,319	106,069	-70,314	-49,119	27,997	–	17,081	**1,217,033**
Other restoration obligations	7,304	–	-361	–	–	–	–	**6,943**
Other	108,557	28,582	-23,428	-10,342		-17	1,038	**104,390**
Total	**1,350,293**	**155,831**	**-124,200**	**-61,502**	**27,997**	**2,372**	**17,950**	**1,368,741**

22. Liabilities

➔ **Accounts payable, trade**

Trade accounts payable rose by €44,017 thousand to €286,756 thousand, mainly due to changes in Germany (€24,493 thousand) and Russia (€15,489 thousand).

➔ **Liabilities to credit institutions**

In order to finance the gas transportation business, a €1,650 million loan was incurred with a 5-year term at a variable interest rate in 2014. In 2017, €925 million of this amount was transferred to the newly established company W & G Infrastruktur Finanzierungs-GmbH, Kassel, Germany, accounted for using the equity method, to finance the natural gas transportation companies, GASCADE Gastranport GmbH, Kassel, Germany, and NEL Gastransport GmbH, Kassel, Germany, which are also accounted for using the equity method.

The Wintershall Group is generally financed through BASF Group financing, where an interest rate of 0.0% applied in the past two years due to negative key interest rates.

Maturities of liabilities to credit institutions

€ thousand	**2017**	2016	2015
Following year 1	**100,150**	137,832	71,078
Following year 2	**2,455**	122,514	121,676
Following year 3	**499,004**	1,351,285	106,756
Following year 4	**–**	–	1,346,519
Following year 5	**–**	–	–
Following year 6 and beyond	**–**	–	–
Total	**601,609**	1,611,631	1,646,029

Breakdown of liabilities to credit institutions

€ thousand	**2017**	2016	2015
€	**499,543**	1,447,678	1,496,275
ARS	**102,066**	163,953	149,754
Total	**601,609**	1,611,631	1,646,029

➔

➔ Other liabilities

Other liabilities rose by €508,465 thousand year-on-year. Higher cash deposits with the Wintershall Group by the gas transport companies accounted for using the equity method contributed to this rise.

	2017		2016		2015	
	Noncurrent	**Current**	**Noncurrent**	**Current**	**Noncurrent**	**Current**
Loan and interest liabilities	1,356,454	1,729,491	1,407,051	1,956,808	1,407,975	1,974,803
Derivatives with negative fair values	–	1,985	–	10,587	–	6,802
Intra-consortium billings	8,746	155,089	7,304	172,992	7,589	262,793
Liabilities to BASF Group companies	–	2,394,029	–	1,560,062	–	1,680,132
Employee liabilities	–	8,441	–	6,936	–	8,384
Deferred income	676	168	842	202	1,011	168
Other	14,487	15,184	16,692	36,809	16,189	23,487
Total	1,380,363	4,304,387	1,431,889	3,744,396	1,432,764	3,956,569
Other liabilities	**5,684,750**		**5,176,285**		**5,389,333**	

23. Other financial obligations

The figures listed below are stated at nominal value:

€ thousand	**Dec. 31, 2017**	Dec. 31, 2016	Jan. 1, 2016
Bills of exchange	**0**	0	0
Guarantees	**36,952**	41,973	45,562
Warranties	**0**	0	0
Collateral granted on behalf of third-party liabilities	**0**	0	0
Other contingent liabilities	**18**	95	1,500
Total	**36,970**	42,068	47,062

The guarantees are financial guarantees. If the amount of the obligation is unlimited, the amount of the primary liability as of the balance sheet date determines the amount reported. If there is joint and several liability, the full amount of the liability is reported; if there is proportionate liability, only the relevant portion is reported.

➔ Lease obligations

Assets used under long-term leases primarily concerned buildings and IT infrastructure.

➔ Obligations arising from purchase contracts

Obligations arising from purchase contracts resulted primarily from long-term purchase obligations for natural gas. Firm purchase obligations as of December 31, 2017, were as follows:

€ thousand	**2017**
2018	1,175,399
2019	1,083,424
2020	969,602
2021	1,066,580
2022	1,193,990
2023 and beyond	1,056,731
Total	**6,545,726**

Additional disclosures

24. Risks from litigation and claims

In the arbitration proceedings initiated in May 2013, Metrogas S.A., Chile, claims damages valued in an amount of €227 million as a result of insufficient gas deliveries against Wintershall Energía S.A., Argentina (WIAR), Total Austral S.A., Argentina, and Pan American Energy LLC, Argentina. The defendants, as sellers, concluded a natural gas supply contract with Metrogas in 1997. WIAR's share of supply in the contract is 37,5 %. After the resignation of the chairman of the Arbitral Tribunal in mid-2016, the International Chamber of Commerce (ICC) nominated a new Arbitral Tribunal that pursued the arbitration proceedings during 2017. The hearing took place in April 2017. On February 2, 2018, the Arbitral Tribunal dismissed the Metrogas claim in its entirety and imposed the procedural costs on Metrogas.

As the beneficiary of a planning approval decision, W & G Transport has been summoned to appear as an interested party before the Higher Administrative Court of Bautzen with regard to pending complaints in connection with the OPAL route's crossing of the territory of a wind farm for generating power in Southern Saxony. If the complaint is upheld, a route would, in the worst-case scenario, have to be built outside of the wind farm, and this would entail new planning and construction costs of approximately €10-15 million; it is not expected that services will be interrupted as a result. The proceedings have been suspended because the parties involved have entered into mediation. Bilateral negotiations are currently under way between the operator of the pipeline, OPAL Gastransport GmbH & Co. KG, on behalf of the OPAL collective of fractional co-owners, consisting of W & G Transport Holding GmbH (80%) and Lubmin-Brandov Gastransport GmbH (20%), and the plaintiffs.

OPAL Gastransport GmbH & Co. KG ("OGT"), Gazprom Export, Gazprom, and the German Federal Network Agency (Bundesnetzagentur, BNetzA), with the approval of the European Commission, entered into a settlement agreement ("OPAL Settlement Agreement") in November 2016, which amends the ancillary provisions of the exemption from regulation of the OPAL pipeline granted in 2009. The key element of the amendment is to replace the restriction on Gazprom, which allows it only to book 50% of the OPAL pipeline's offtake capacities, with ancillary provisions, which essentially allow it to award 50% of the offtake capacities through the general capacity auctions.

Several appeals have been lodged against this agreement: PGNiG SA (PGNiG) und PGNiG Supply & Trading GmbH (PGNiG S&T) appealed against the OPAL Settlement Agreement to the Higher Regional Court of Düsseldorf (OLG Düsseldorf) and applied for injunctive relief. At the same time, PGNiG, PGNiG S&T, as well as the Republic of Poland and Naftogaz of Ukraine brought actions for annulment before the General Court of the European Union (EGC) against the European Commission's approval of the OPAL Settlement Agreement. In addition, PGNiG, PGNiG S&T, and the Republic of Poland have applied to the EGC for injunctive relief. In July 2017, the President of the EGC rejected the applications of PGNiG, PGNiG S&T, and the Republic of Poland for the granting of injunctive relief. Moreover, in December 2017 and March 2018, the EGC also rejected as inadmissible the actions for annulment brought by PGNIG S&T, Naftogaz of Ukraine, and PGNIG against the European Commission's approval of the OPAL Settlement Agreement. The ruling on the other pending action for annulment brought by the Republic of Poland is still being awaited. PGNIG S&T has appealed to the European Court of Justice against the EGC's inadmissibility ruling. OGT is unable to comment on the chances of success of the action for annulment brought by the Republic of Poland, because OGT is not a party to the proceedings. In October 2017, the Higher Regional Court of Düsseldorf rejected as groundless the applications by PGNIG and PGNIG S&T for the granting of injunctive relief. The Higher Regional Court of Düsseldorf made it clear at the same time that, in its opinion, the European Commission's approval was a prerequisite for the OPAL Settlement Agreement's entry into force, and it would therefore only rule on the merits of the appeals lodged by PGNIG and PGNIG S&T, once the EGC had ruled on the actions for annulment against the European Commission's approval. When a ruling can be expected in the action brought by the Republic of Poland cannot be predicted with any certainty at present; no decision is expected before the summer of 2018. If the action of the Republic of Poland is rejected, the chances of success of the appeals pending in the Higher Regional Court of Düsseldorf are considered more improbable than not.

Furthermore, Wintershall Holding GmbH and its affiliated companies are defendants in or parties to a variety of judicial, arbitrational or regulatory proceedings on a recurring basis. To our current knowledge, none of these proceedings will have a material effect on the economic situation of Wintershall.

Details of the provisions for litigation, damage claims, warranties and similar commitments are provided in note 21.

25. Supplementary information on financial instruments

Detailed information on financial risks and Wintershall's risk management can be found in the "Opportunities and risks report" in the Management's Report.

25.1 Financial risks

➔ Foreign currency risks

Changes in exchange rates could lead to losses in the value of financial instruments and adverse changes in future cash flows. Foreign currency risks from financial instruments result from the translation at the closing rate of financial receivables, loans, cash and financial liabilities into the functional currency of the respective Group company. Foreign currency contracts are used to hedge foreign exchange risks from nonderivative financial instruments and planned transactions.

The foreign currency risk exposure corresponds to the net amount of the nominal volume of the primary and the derivative financial instruments which are exposed to currency risks. In addition, planned purchase and sales transactions of the respective following year are included, if they fall under the currency risk management system. Long and short positions in the same currency are offset against each other.

The sensitivity analysis is conducted by simulating a 10 % appreciation of the respective functional currency against the other currencies. The effect on the Wintershall Group's income before taxes and minority interests was €383,553 thousand as of December 31, 2017, €224,579 thousand as of December 31, 2016, and €187,073 thousand as of December 31, 2015. The currency exposure was €–2,145,718 thousand as of December 31, 2017, €–2,493,546 thousand as of December 31, 2016, and €–2,085,721 thousand as of December 31, 2015.

Exposure and sensitivity by currency

	Dec. 31, 2017		Dec. 31, 2016		Jan. 1, 2016	
€ thousand	Exposure	Sensitivity	Exposure	Sensitivity	Exposure	Sensitivity
RUB	135,573	-12,325	73,561	-6,687	223,518	-20,320
USD		–	–	–	132,618	-14,600
NOK	-2,281,291	395,878	-2,567,107	231,266	-2,441,857	221,993
Total	-2,145,718	383,553	-2,493,546	224,579	-2,085,721	187,073

Currency risks are largely hedged using linear products with symmetric sensitivity. The options were only used to hedge a one-sided risk, because only the put options were used.

➔ Interest rate risks

Interest rate risks result from changes in prevailing market interest rates, which can cause a change in the fair value of fixed-rate instruments, and changes in the interest payments of variable-rate instruments. To hedge these risks, interest rate swaps are used. While these risks are relevant to the financing activities of BASF, they are not of material significance for BASF's operating activities.

Loan exposure and interest rate sensitivity

	Dec. 31, 2017		Dec. 31, 2016		Jan. 1, 2016	
€ thousand	Exposure	Sensitivity	Exposure	Sensitivity	Exposure	Sensitivity
Loans	-699,920	-4,247	-849,920	15,602	-899,920	21,694
Total	-699,920	-4,247	-849,920	15,602	-899,920	21,694

➔ Commodity price risks

Commodity price risks exist only as part of ordinary business activities, applying the own-use exemption under IAS 39.

➔ Default and credit risk

Default and credit risks arise when counterparties do not fulfill their contractual obligations. Wintershall regularly analyzes the creditworthiness of each significant debtor and grants credit limits on the basis of this analysis. Due to the global activities and diversified customer structure of the Wintershall Group, there is no significant concentration of default risk. The carrying amount of all receivables, loans and interest-bearing securities plus the nominal value of other financial obligations subject to default risk represents the maximum default risk for Wintershall.

25.2 Maturity analysis

The interest and principal payments as well as other payments for derivative financial instruments are relevant for the presentation of the maturities of the contractual cash flows from financial liabilities. Future cash flows are not discounted here.

Derivatives are included using their net cash flows, provided they have a negative fair value and therefore represent a liability. Derivatives with positive fair values are assets and are therefore not considered.

Trade accounts payable are generally interest-free and due within one year. Therefore, the carrying amount of trade accounts payable equals the sum of future cash flows.

Maturities of contractual cash flows from financial liabilities as of Dec. 31, 2017

€ thousand	Liabilities to credit institutions	Liabilities resulting from derivative financial instruments	Miscellaneous liabilities	Total
2018	100,024	2,003	5,723,613	**5,825,640**
2019	2,868	–	307,650	**310,518**
2020	499,174	–	306,996	**806,170**
2021	–	–	1,541	**1,541**
2022	–	–	1,256	**1,256**
2023 and thereafter	–	–	200,961	**200,961**
Total	**602,066**	**2,003**	**6,542,017**	**7,146,086**

Maturities of contractual cash flows from financial liabilities as of Dec. 31, 2016

€ thousand	Liabilities to credit institutions	Liabilities resulting from derivative financial instruments	Miscellaneous liabilities	Total
2017	246,207	4,149	4,052,039	**4,302,395**
2018	196,474	–	549,376	**745,850**
2019	1,355,200	6,438	332,184	**1,693,821**
2020	–	–	331,530	**331,530**
2021	–	–	779	**779**
2022 and thereafter	–	–	200,487	**200,487**
Total	**1,797,881**	**10,587**	**5,466,394**	**7,274,862**

Maturities of contractual cash flows from financial liabilities as of Jan. 1, 2016

€ thousand	Liabilities to credit institutions	Liabilities resulting from derivative financial instruments	Miscellaneous liabilities	Total
2016	91,297	2,949	4,275,629	**4,369,875**
2017	123,120	–	182,466	**305,586**
2018	108,200	–	662,461	**770,661**
2019	1,347,112	3,852	513,910	**1,864,873**
2020	–	–	313,310	**313,310**
2021 and thereafter	–	–	390	**390**
Total	**1,669,729**	**6,801**	**5,778,436**	**7,624,695**

25.3 Classes and categories of financial instruments

For trade accounts receivable, other receivables and miscellaneous assets, loans, cash and cash equivalents, as well as trade accounts payable and other liabilities, the carrying amount approximates the fair value. Shareholdings which are not traded on an active market and whose fair value could not be reliably determined are recognized at amortized cost and are reported under other financial assets.

Carrying amounts and fair values of financial instruments as of Dec. 31, 2017

€ thousand	Carrying amount[1]	Total carrying amount within scope of application of IFRS 7	Valuation categories in accordance with IAS 39	Fair value	Thereof fair value level 1[2]	Thereof fair value level 2[3]	Thereof fair value level 3
Shareholdings	73,492	73,492	Afs				
Accounts receivable, trade	502,106	502,106	LaR	502,106			
Derivatives	4,422	4,422	aFVtPL	4,422		4,422	
Thereof foreign currency forward contracts	4,422	4,422		4,422		4,422	
Loans and interest receivables	495,591	495,591	LaR	495,591			
Other receivables and miscellaneous assets	301,042	132,337	LaR	132,337			
Cash and cash equivalents	110,326	110,326	LaR	110,326	110,326		
Total assets	**1,486,979**						
Liabilities to credit institutions	601,609	601,609	AmC	601,609			
Accounts payable, trade	286,756	286,756	AmC	286,756			
Derivatives	1,985	1,985	aFVtPL	1,985		1,985	
Thereof foreign currency forward contracts	1,985	1,985		1,985		1,985	
Loan and interest liabilities to third parties	3,085,945	3,085,945	AmC	3,085,945			
Overnight deposit liabilities to affiliated companies	2,394,029	2,394,029	AmC	2,394,029			
Other liabilities	202,791	175,681	AmC	175,681			
Total liabilities	**6,573,115**						

[1] Equity investments or buildings, none of which were sold in the fiscal year under review and which are expected to be held in the next year. They are measured at amortized cost rather than fair value because of insufficient market liquidity.
[2] Determination of the fair value based on quoted, unadjusted prices on active markets
[3] Determination of the fair value based on parameters for which directly or indirectly quoted prices on active markets are available.

Carrying amounts and fair values of financial instruments as of Dec. 31, 2016

€ thousand	Carrying amount[4]	Total carrying amount within scope of application of IFRS 7	Valuation categories in accordance with IAS 39	Fair value	Thereof fair value level 1[5]	Thereof fair value level 2[6]	Thereof fair value level 3
Shareholdings	71,456	71,456	Afs				
Accounts receivable, trade	493,935	493,935	LaR	493,935			
Derivatives	1,062	1,062	aFVtPL	1,062		1,062	
Thereof foreign currency forward contracts	1,062	1,062		1,062		1,062	
Loans and interest receivables	299,042	299,042	LaR	299,042			
Other receivables and miscellaneous assets	344,418	182,383	LaR	182,383			
Cash and cash equivalents	92,719	92,719	LaR	92,719	92,719		
Total assets	1,302,632						
Liabilities to credit institutions	1,611,631	1,611,631	AmC	1,611,631			
Accounts payable, trade	242,739	242,739	AmC	242,739			
Derivatives	10,587	10,587	aFVtPL	10,587		10,587	
Thereof foreign currency forward contracts	4,149	4,149		4,149		4,149	
Thereof interest rate swaps	6,438	6,438		6,438		6,438	
Loan and interest liabilities to third parties	3,363,859	3,363,859	AmC	3,363,859			
Overnight deposit liabilities to affiliated companies	1,560,062	1,560,062	AmC	1,560,062			
Other liabilities	241,777	201,030	AmC	201,030			
Total liabilities	**7,030,655**						

Carrying amounts and fair values of financial instruments as of Jan. 1, 2016

€ thousand	Carrying amount	Total carrying amount within scope of application of IFRS 7	Valuation categories in accordance with IAS 39	Fair value	Thereof fair value level 1[5]	Thereof fair value level 2[5]	Thereof fair value level 3
Shareholdings	9,259	9,259	Afs				
Accounts receivable, trade	397,600	397,600	LaR	397,600			
Derivatives	1,705	1,705	aFVtPL	1,705		1,705	
Thereof foreign currency forward contracts	55	55		55		55	
Thereof foreign currency options	1,650	1,650		1,650		1,650	
Loans and interest receivables	467,642	467,642	LaR	467,642			
Other receivables and miscellaneous assets	336,246	214,213	LaR	214,213			
Cash and cash equivalents	366,030	366,030	LaR	366,030	366,030		
Total assets	1,578,482						
Liabilities to credit institutions	1,646,029	1,646,029	AmC	1,646,029			
Accounts payable, trade	256,828	256,828	AmC	256,828			
Derivatives	6,802	6,802	aFVtPL	6,802		6,802	
Thereof foreign currency forward contracts	2,950	2,950		2,950		2,950	
Thereof interest rate swaps	3,852	3,852		3,852		3,852	
Loan and interest liabilities to third parties	3,382,778	3,382,778	AmC	3,382,778			
Overnight deposit liabilities to affiliated companies	1,680,132	1,680,132	AmC	1,680,132			
Other liabilities	319,621	227,877	AmC	227,877			
Total liabilities	**7,292,190**						

[4] Equity investments or buildings, none of which were sold in the fiscal year under review and which are expected to be held in the next year. They are measured at amortized cost rather than fair value because of insufficient market liquidity.
[5] Determination of the fair value based on quoted, unadjusted prices on active markets.
[6] Determination of the fair value based on parameters for which directly or indirectly quoted prices on active markets are available.

Offsetting of financial assets and financial liabilities as of December 31, 2017

€ thousand	Amounts which can be offset			Amounts which cannot be offset		
	Gross amount	Amount offset	Net amount	Due to global netting agreements	Relating to financial collateral	Potential net amount
Derivatives with positive fair values	4,440	-18	4,422	-1,976	0	2,446
Derivatives with negative fair values	2,003	-18	1,985	-1,967	0	18

Offsetting of financial assets and financial liabilities as of December 31, 2016

€ thousand	Amounts which can be offset			Amounts which cannot be offset		
	Gross amount	Amount offset	Net amount	Due to global netting agreements	Relating to financial collateral	Potential net amount
Derivatives with positive fair values	33,949	-32,887	1,062	-1,009	0	53
Derivatives with negative fair values	43,474	-32,887	10,587	-1,009	0	9,578

Offsetting of financial assets and financial liabilities as of December 31, 2015

€ thousand	Amounts which can be offset			Amounts which cannot be offset		
	Gross amount	Amount offset	Net amount	Due to global netting agreements	Relating to financial collateral	Potential net amount
Derivatives with positive fair values	90,973	-89,268	1,705	-55	0	1,650
Derivatives with negative fair values	96,070	-89,268	6,802	-55	0	6,747

The table “Offsetting of financial assets and financial liabilities” shows the extent to which financial assets and financial liabilities are offset in the balance sheet, as well as potential effects from the offsetting of instruments subject to a legally enforce- able global netting agreement or similar agreement.

Net gains and losses from financial instruments comprise the results of valuations, the amortization of discounts, the recognition and reversal of impairments, results from the translation of foreign currencies as well as interest, dividends and all other effects on the earnings resulting from financial instruments. The line item financial instruments at fair value through profit or loss contains only those gains and losses from instruments which are not designated as hedging instruments as defined by IAS 39. Net gains or net losses from available-for-sale financial assets contain income and expenses from write- downs/reversals of write-downs, interest, dividends and the reclassification of valuation effects from equity on the sale of the securities and shareholdings.

Net gains and losses on financial instruments

€ million	**2017**	2016
Loans and receivables	**-54**	-77
Thereof interest	**70**	62
Available-for-sale financial assets	**10**	-3
Thereof interest	**1**	2
Financial liabilities measured at amortized cost	**-391**	-391
Thereof interest	**-385**	-415
Financial instruments at fair value through profit or loss	**4**	-7

The decrease in net losses on receivables and loans resulted mainly from a decline in losses on foreign currency transactions for these financial instruments.

There was an increase in net gains on available-for-sale financial assets, which was primarily attributable to lower write-downs on shareholdings.

25.4 Derivative instruments and hedge accounting

The use of derivative instruments

Wintershall is exposed to foreign-currency, interest-rate and commodity-price risks during the normal course of business. These risks are hedged through a centrally determined strategy employing derivative instruments. Hedging is only employed for underlying items from the operating business, cash investments, and financing as well as for planned capital measures. The risks from the underlying transactions and the derivatives are constantly monitored. Where derivatives have a positive market value, Wintershall is exposed to credit risks from derivative transactions in the event of nonperformance of the other party. To minimize the default risk on derivatives with positive market values, transactions are exclusively conducted with creditworthy banks and partners and are subject to predefined credit limits.

The contracting and execution of derivative financial instruments for hedging purposes are conducted according to internal guidelines, and subject to strict control mechanisms.

The fair values of derivative financial instruments are calculated using valuation models which use input parameters observable on the market.

Fair values of derivative financial instruments

€ thousand	**2017**	2016	2015
Foreign currency derivatives	2,436	-3,088	-1,245
Interest derivatives	–	-6,438	-3,852
Commodity derivatives	–	–	–
Total	**2,436**	-9,525	-5,096

26. Leases

➔ **Lease payments under operating leases**

In addition, Wintershall is a lessee under operating lease contracts. The lease commitments totaling €234,916 thousand in 2017 (2016: €329,771 thousand) are due in the following years:

Commitments from operating lease contracts *(€ thousand)*

€ thousand	**2017**	2016
Less than 1 year	42,569	48,843
1-5 years	147,644	184,774
More than 5 years	44,703	96,154
Total	**234,916**	329,771

Other explanatory notes

27. Statement of cash flows

Cash provided by operating activities contained the following payments:

€ thousand	2017	2016
Income tax payments	**456,075**	118,754
Interest payments	**66,642**	94,311
Dividends received	**70,687**	73,912

Interest payments included interest received of €37,727 thousand (2016: €43,257 thousand) and interest paid of €104,369 thousand (2016: €137,568 thousand).

Cash and cash equivalents were not subject to any utilization restrictions, as in the previous year.

The payments made to shareholders, which totaled €824,685 thousand, comprised the profit transferred for 2016 (€365,046 thousand), the dividend paid to Gazprom in 2017 (59,639 thousand), and the dividend distribution (€400,000 thousand). The dividend distribution of €400,000 thousand was subsequently paid back into the capital surplus.

Reconciliation according to IAS 7

			Non-cash changes			
€ thousand	**Dec. 31, 2016**	**Cash**	Currency effects	Changes in the scope of consolidation	Other effects	**Dec. 31, 2017**
Financial indebtedness	1,611,631	-1,034,936	15,127		9,787	**601,609**
Loan liabilities	2,985,873	-143,727	-163,517			**2,678,629**
Other financing-related liabilities	1,910,247	893,251	39,562	-15,745		**2,827,315**
Financial and similar liabilities	**6,507,751**	**-285,412**	**-108,828**	**-15,745**	**9,787**	**6,107,553**

The reconciliation shows changes in such financial liabilities for which payments received and made are shown under cash provided by/used in financing activities in the statement of cash flows.

Other financing-related liabilities primarily comprise liabilities from accounts used for cash pooling with BASF companies in the Consolidated Financial Statements. They are reported in miscellaneous liabilities within the balance sheet item other liabilities which qualify as financial instruments.

The assets/liabilities relating to hedging transactions form part of the balance sheet item derivatives with positive or negative fair values and include only those transactions which hedge risks arising from financial indebtedness and financing-related liabilities secured by micro hedges. There were, however, no such transactions in 2017.
The hedging transactions described here are economic hedges.

28. Capital structure management

The aim of capital structure management is to maintain the financial flexibility needed to further develop BASF's business portfolio and take advantage of strategic opportunities. The objectives of the company's financing policy are to secure solvency, limit financial risks and optimize the cost of capital.

The equity of the Wintershall Group as reported in the balance sheet amounted to €3,213,450 thousand as of December 31, 2017 (December 31, 2016: €3,129,744 thousand); the equity ratio was 24.82% on December 31, 2017 (December 31, 2016: 22.91%).

The Wintershall Group's preferred way of borrowing is through BASF in the form of Group loans and overnight loans. The latter are realized through cash pooling at BASF SE, in which all material Wintershall Group companies participate, if this is technically and legally possible. Against this backdrop, accounts denominated in Russian rubles and Argentinian pesos in particular are excluded from cash pooling.

29. Share price-based compensation program and BASF incentive share program

➔ Share price-based compensation program

The stock price-based compensation program (BASF: Long-Term Incentive (LTI) Program/Wintershall: BASF Option Program (BOP)) for senior executives of the BASF Group, which commenced in 1999, was continued in 2017.

In particular the Board of Executive Directors and senior executives are eligible to participate in the BASF Option Program (BOP). A total of 29 people took part in the 2017 incentive share program and therefore have claims under the option program.

The program provides for the grant of virtual options. The options are settled in cash when exercised.

Participation in the BOP program is voluntary. In order to take part in the program, a participant must make a personal investment: A participant must hold BASF shares amounting to 10% to 30% of his or her individual variable compensation for a two-year period from the granting of the option (holding period). The number of shares to be held is determined by the variable compensation and the volume-weighted average market price for BASF shares on the first trading day after the Annual Meeting of BASF, which was €87.84 on May 15, 2017.

The participant receives four option rights for each BASF share he or she has invested in. Each option consists of two parts, right A and right B, which may be exercised if defined thresholds have been met:

The threshold of right A is met if the price of the BASF share has increased by more than 30% in comparison with the base price (absolute threshold). The value of right A is the difference between the market price of BASF shares on the exercise date and the base price; it is limited to 100 % of the base price. If the cumulative percentage performance of BASF shares exceeds the percentage performance of the MSCI World Chemicals IndexSM (MSCI Chemicals), right B may be exercised (relative threshold). The value of right B is the base price of the option multiplied by twice the percentage outperformance of BASF shares compared with the MSCI Chemicals Index on the exercise date. It is limited to the closing price on the date of exercise minus the computed nominal value of BASF shares. Beginning with the 2013 BOP program, right B is only valuable if the price of BASF shares at least corresponds with the base price. During the exercise period, there are certain times (closed periods) during which the options may not be exercised. Each option can only be exercised in full. This means that one of the performance targets must be surpassed. If the other performance target is not surpassed and the option is exercised, the other option right lapses. Starting with the 2013 BOP program, a participant's maximum gain from exercising an option is limited to five times the original individual investment. The maximum gain from exercising an option is limited to 10 times the original individual investment for programs from previous years. Option rights are nontransferable and are forfeited if the option holders no longer work for BASF or have sold part of their individual investment before the expiry of the two-year vesting period. They remain valid in the case of retirement.

With the above exceptions, the 2010 to 2016 programs were structured in a similar way to the 2017 BOP program.

The models used in the valuation of the option plans are based on the arbitrage-free valuation model according to Black-Scholes. The fair values of the options are determined using the binomial model.

Fair value of options and parameters used as of December 31, 2017

		Dec. 31, 2017	Dec. 31, 2016
Fair value	€	**33.87**	41.23
Dividend yield	%	**3.38**	3.38
Risk-free interest rate	%	**0.19**	0.05
Volatility BASF share	%	**23.63**	23.11
Volatility MSCI Chemicals	%	**14.22**	14.34
Correlation BASF share price – MSCI Chemicals	%	**73.41**	76.13

As of December 31, 2017, the fair values and the valuation parameters relate to the 2017 and 2016 BOP programs. The fair value calculation was based on the assumption that options will be exercised in a manner dependent on their potential gains. For the programs from preceding years, corresponding fair values were computed and valuation parameters were used.

Volatility was determined on the basis of the monthly closing prices over a historical period corresponding to the remaining term of the options.

The number of options held amounted to 263,047 as of December 31, 2017 (previous year: 248,422).

As a result of a resolution by the Board of Executive Directors of BASF SE in 2002 to settle options in cash, options outstanding from the BOP programs 2010 to 2017 were valued with the fair value as of December 31, 2017. A proportionate provision is recorded for programs in the vesting period. As a result of utilization and lower fair values of the options outstanding, the provision recognized for this purpose declined to €6,627 thousand as of December 31, 2017 (previous year: €8,183 thousand). The utilization of provisions amounted to €238 thousand in 2017.

➔ **BASF incentive share program**

In 1999, an incentive share program called “plus” was launched for all eligible employees except the senior executives entitled to participate in the BASF Option Program Each participant must make an individual investment in BASF shares from his or her variable compensation. For every 10 BASF shares purchased in the program, a participant receives one BASF share at no cost after one, three, five, seven and ten years of holding the BASF shares. As a rule, the first and second block of ten shares entitles the participant to receive one BASF share at no extra cost in each of the next 10 years.

The right to receive free BASF shares lapses if a participant sells the individual investment in BASF shares, if the participant stops working for the Company or one year after retirement.

13,507 free shares had been granted as of the reporting date (previous year: 14,141).

The free shares to be provided by the Company are measured at the fair value on the grant date. Fair value is determined on the basis of the stock price of BASF shares, taking into account the present value of dividends, which are not paid during the term of the program. The weighted average fair value at the grant date amounted to €86.02 for the 2017 program, and €67.90 for the 2016 program.

30. Compensation for the Board of Executive Directors and Supervisory Board

Executive management compensation amounted to €3,242 thousand in fiscal year 2017 (2016: €2,268 thousand). 17,872 options were granted to the active members of the Board of Executive Directors under the BASF stock option program in 2017. The fair market value per option was €29.94 as of July 1, 2017. Together with the options granted in previous years, active and former members of the Board of Executive Directors hold a total of 97,526 options.

€ thousand	**2017**	2016
Total compensation for the Board of Executive Directors	3,242	2,268
Fair value of options granted to the Board of Executive Directors in the fiscal year as of grant date	535	420
Total compensation for the Board of Executive Directors	**3,777**	**2,688**
Compensation for the Supervisory Board	61	61
Service costs for members of executive management (Board of Executive Directors) of Wintershall	1,018	773
Total compensation of former members of the Board of Executive Directors	911	780
Pension provisions for former members of the Board of Executive Directors and their surviving dependents	23,583	23,537

31. Related-party transactions

A related party is a natural person or legal entity which can exert influence on the Wintershall Group or over which the Wintershall Group exercises control or joint control or a significant influence. In particular, this comprises nonconsolidated subsidiaries, joint ventures and associated companies as well as BASF SE and its subsidiaries. The following tables show the volume of business with related parties that are included at amortized cost or accounted for using the equity method.

Sales to related parties

	Sales	
€ thousand	**2017**	2016
Nonconsolidated subsidiaries	5,093	137
Associated companies	134,963	123,113
Joint ventures	10,828	4,001
Sister companies	121,315	92,286
Parent company	288,520	239,235
Total	**560,719**	**458,772**

Trade accounts receivable from / trade accounts payable to related parties

	Accounts receivable, trade			Accounts payable, trade		
€ thousand	**Dec. 31, 2017**	**Dec. 31, 2016**	**Jan. 1, 2016**	**Dec. 31, 2017**	**Dec. 31, 2016**	**Jan. 1, 2016**
Nonconsolidated subsidiaries	5,618	181	133	546	400	320
Associated companies	5,243	452	3,202	63	73	54
Joint ventures	2,608	578	1,057	313	124	68
Sister companies	16,039	10,999	13,226	3,477	4,946	4,228
Parent company	28,439	25,330	24,014	8,112	4,336	6,213
Trade accounts receivable from / trade accounts payable to related parties	**57,947**	**37,540**	**41,632**	**12,511**	**9,879**	**10,883**

Other receivables and liabilities with related parties

	Other receivables			Other liabilities		
€ thousand	**Dec. 31, 2017**	**Dec. 31, 2016**	**Jan. 1, 2016**	**Dec. 31, 2017**	**Dec. 31, 2016**	**Jan. 1, 2016**
Nonconsolidated subsidiaries	32,890	48,437	27,619	3	786	3,427
Associated companies	867	648	1,619	110,781	169,186	106,520
Joint ventures	149,350	283,636	398,800	675,974	16,241	24,944
Sister companies	49	13,768	32,897	2,883,955	3,162,634	1,618,312
Parent company	4,422	1,065	1,711	1,611,036	1,379,181	3,112,570
Other receivables and miscellaneous assets	**187,578**	**347,554**	**462,646**	**5,281,749**	**4,728,028**	**4,865,773**

Liabilities under the profit and loss transfer agreement with BASF Handels- und Export GmbH amounted to €405,236 thousand as of December 31, 2017, €376,990 thousand as of December 31, 2016, and €527,763 as of December 31, 2015.

Sales and trade accounts receivable from and trade accounts payable to related parties mainly included business with own products, agency and licensing businesses, and other operating business.

Other receivables and liabilities primarily arose from financing activities, outstanding dividend payments, profit-and-loss transfer agreements, and other finance-related and operating activities and transactions.

In 2015 to 2017, other receivables from joint ventures were due in particular to the transfer of the financing function for the regulated gas transportation activities to the newly established joint venture W & G Infrastruktur Finanzierungs-GmbH, Kassel/Germany.

Receivables from the associated companies GASCADE Gastransport GmbH, Kassel, Germany, and NEL Gastransport GmbH, Kassel, Germany, in the amount of €259 million were transferred to W & G Infrastruktur Finanzierungs-GmbH and a loan of €140 million was granted to it. The cash that was also transferred to the joint venture was deposited in the BASF Group's cash pool and led to an increase of €665 million in other liabilities from joint ventures.

The outstanding balances toward related parties were generally not secured and settled in cash. The balance of valuation allowances for trade accounts receivable from associated companies rose to €8,146 thousand as of December 31, 2017 (previous year: €0 thousand).

Additions to these valuation allowances amounting to €8,146 thousand were recognized as an expense in 2017 (2016: €0 thousand).

The balance of valuation allowances for other receivables from nonconsolidated subsidiaries decreased from €58,171 thousand as of December 31, 2016 to €53,495 thousand as of December 31, 2017. Additions to these valuation allowances amounting to €560 thousand and reversals of these valuation allowances of €5,236 thousand were recognized through profit or loss.

There were no reportable related party transactions with members of the Board of Executive Directors and their related parties in 2017.

The following table shows the compensation of key management personnel.

Compensation of key management personnel

€ thousand	2017	2016
Short-term benefits	3,303	2,329
Post-employment benefits	25,512	25,090
Other long-term benefits	–	–
Termination benefits	–	–
Share-based payment	535	424

32. Services provided by the external auditor

Wintershall Group companies have used the following services from KPMG AG:

€ thousand	**2017**	2016
Annual audit	**889**	474
Audit-related services	**106**	62
Tax consultation services	**–**	–
Other services	**–**	–
TOTAL	**995**	536

The services provided by the external auditor mainly include services for the annual audit, and to a lesser extent, confirmation services, tax consultation services and other services.

The line item annual audit related to expenses for the audit of the Consolidated Financial Statements of the Wintershall Group as well as the legally required financial statements and the consolidated subsidiary companies and joint operations. Fees for other services primarily included project-related audits in connection with regulatory demands as well as other confirmation services.

Audited Consolidated Financial Statements of Dea (prepared in accordance with IFRS as adopted by the EU) as of and for the year ended 31 December, 2017

DEA Deutsche Erdoel AG
Consolidated Financial Statements
Fiscal Year
1 January - 31 December 2017

DEA Deutsche Erdoel AG - Consolidated Income Statement

€m	(Notes)	Jan. - Dec. 2017	Jan. - Dec. 2016
Sales and other operating revenues	(1)	1,458	1,483
Cost of sales	(2)	-728	-1,101
Gross profit		730	382
Exploration costs	(3)	-122	-119
General and administration expenses		-123	-149
Net impairment of assets	(8)	-100	-70
Operating result		385	44
Financial income	(5)	90	129
Financial expenses	(5)	-269	-224
Result from continuing operations before taxes	(6)	206	-51
Income taxes	(7)	-185	18
Result from continuing operations		21	-33
Result from discontinued operations		-	-3
Net result		21	-36
Thereof attributable to:			
Shareholders of the parent company		18	-39
Non-controlling interests		3	3

DEA Deutsche Erdoel AG - Consolidated Statement of Comprehensive Income

€m	Jan. - Dec. 2017	Jan. - Dec. 2016
Net result	21	-36
Items that may be reclassified to profit or loss		
Currency translation adjustments	-26	17
Fair valuation of financial assets available for sale	-	-12
Fair valuation of financial instruments in hedge relationship	-9	-48
Items that will not be reclassified to profit or loss		
Remeasurement of defined benefit plans	2	-17
Other comprehensive income (after taxes)	**-33**	**-60**
Total comprehensive income	**-12**	**-96**
Thereof attributable to:		
Shareholders of the parent company	-15	-99
Non-controlling interests	3	3

DEA Deutsche Erdoel AG - Consolidated Balance Sheet

Assets (€m)	(Notes)	31-12-2017	31-12-2016
Non-current assets			
Intangible assets	(8)	588	567
Property, plant and equipment	(8)	2,952	2,527
Investment property		2	3
Financial investments		4	1
Financial receivables	(9)	2,021	2,209
Other receivables and other assets	(10)	81	95
Deferred tax assets	(7)	116	85
		5,764	5,487
Current assets			
Inventories	(11)	83	90
Financial receivables	(9)	22	0
Trade accounts receivable	(10)	279	336
Other receivables and other assets	(10)	69	156
Income tax assets	(7)	11	1
Cash and cash equivalents	(12)	116	101
		580	684
		6,344	6,171

Equity and Liabilities (€m)	(Notes)	31-12-2017	31-12-2016
Equity	(13)		
Shareholder's equity		1,813	1,900
Non-controlling interests		5	4
		1,818	1,904
Non-current liabilities			
Provisions	(14)	728	616
Debt to banks	(15)	1,334	1,494
Financial debt	(15)	1,013	1,018
Income tax liabilities	(7)	26	26
Other liabilities	(16)	15	14
Deferred tax liabilities	(7)	526	431
		3,642	3,599
Current liabilities			
Provisions	(14)	208	209
Debt to banks	(15)	0	3
Financial debt	(15)	116	16
Trade accounts payable	(16)	304	308
Income tax liabilities	(7)	24	32
Other liabilities	(16)	232	100
		884	668
		6,344	6,171

DEA Deutsche Erdoel AG - Consolidated Cash Flow Statement

€m	(15)	Jan. - Dec. 2017	Jan.- Dec. 2016
Result from continuing operations		21	-33
Depreciation/impairment losses/reversal of impairment losses		390	570
Changes in provisions		16	-10
Changes in deferred taxes		108	-94
Gain/losses from disposal of assets		20	5
Other non-cash income/expenses		-28	14
Changes in working capital		110	46
Changes in other balance sheet items		276	128
Cash flow from operating activities		**913**	**626**
Cash outflows for additions to intangible assets, property, plant and equipment and investment property		-838	-656
Cash inflows from disposal of fixed assets		15	23
Cash outflows for acquisitions		-65	-
Cash inflows from (cash outflows for) divestitures		-	69
Cash inflows from (cash outflows for) financial assets		-20	6
Cash flow from investment activities		**-908**	**-558**
Profit transfer to parent company		-9	-
Distribution to non-controlling interests		0	-3
Repayments of debt to banks		-282	-772
Proceeds from debt to banks		304	203
Repayments of financial liabilities		-	-110
Proceeds from financial liabilities		-	395
Cash flow from financing activities		**13**	**-287**
Net change in cash and cash equivalents		**18**	**-219**
Effects of foreign exchange rate changes and other changes in value		-3	0
Cash and cash equivalents at beginning of reporting period		101	320
Cash and cash equivalents at end of reporting period		**116**	**101**
Supplementary information on cash flows from operating activities			
Income tax paid (less refunds)		44	1
Interest paid		90	60
Interest received		3	6
Dividends received		0	1

DEA Deutsche Erdoel AG - Consolidated Statement of Changes in Equity

€m	Subscribed capital	Capital reserve	Retained earnings	Currency translation adjustments	Fair valuation of financial instruments	Shareholder's equity	Non-controlling interests	Total
As at 01-01-2016	344	980	664	-75	41	1,954	4	1,958
Fair value of derivative financial instruments with no impact on profit or loss					-48	-48		-48
Fair value of financial assets available for sale with no impact on profit or loss					-12	-12		-12
Currency translation adjustments			0	16	1	17		17
Remeasurement of defined benefit plans			-17			-17		-17
Other comprehensive income			-17	16	-59	-60		-60
Net result			-39			-39	3	-36
Total comprehensive income			-56	16	-59	-99	3	-96
Profit and loss transfer/ distribution			45			45	-3	42
Other changes			4	-4				
As at 31-12-2016/01-01-2017	344	980	657	-63	-18	1,900	4	1,904
Fair value of derivative financial instruments with no impact on profit or loss					-9	-9		-9
Fair value of financial assets available for sale with no impact on profit or loss								
Currency translation adjustments			1	-27		-26		-26
Remeasurement of defined benefit plans			2			2		2
Other comprehensive income			3	-27	-9	-33		-33
Net result			18			18	3	21
Total comprehensive income			21	-27	-9	-15	3	-12
Profit and loss transfer/ distribution			-72			-72	-2	-74
Other changes								
As at 31-12-2017	344	980	606	-90	-27	1,813	5	1,818

About this report

DEA Deutsche Erdoel AG is a German limited company and is headquartered at Überseering 40 in 22297 Hamburg, Germany. It is registered at the Hamburg local court under HRB 6882. The nature of the operations and principal activities of DEA Deutsche Erdoel AG are described in the management report. The presented consolidated financial statements as at 31 December 2017 were approved for publication by the Board of Management of DEA Deutsche Erdoel AG on 6 February 2018. In accordance with the resolution adopted at the annual general meeting, PricewaterhouseCoopers GmbH Wirtschaftsprüfungs-gesellschaft audited the consolidated financial statements and the consolidated management report of DEA Deutsche Erdoel AG and issued its unqualified audit opinion. The consolidated financial statements are available from DEA Deutsche Erdoel AG, Überseering 40, 22297 Hamburg and at www.dea-group.com. The consolidated financial statements are filed electronically with the operator of the German Government Gazette and promulgated therein after their filing.

Basis of preparation

The consolidated financial statements were prepared in accordance with the International Financial Reporting Standards (IFRS) applicable in the EU, as well as in accordance with the supplementary accounting regulations applicable pursuant to Section 315e, Para. 1 of the German Commercial Code (HGB). All figures for the previous year were determined in conformity with the same principles unless new accounting methods have been used prospectively for the reporting period.

The financial statements are prepared in euros (€). The amounts, including prior-year figures, are generally reported in millions of euros (€m). If necessary, amounts are disclosed in thousands of euros (€k). This rounding effect does not produce any loss of information. Various items of the Income Statement and the Balance Sheet are combined to improve the transparency of presentation. These items are shown and explained separately in the Notes.

The financial statements have been prepared under the historical cost convention, except for derivative financial instruments and certain other financial assets and financial liabilities, which have been measured at fair value.

Summary of significant accounting policies

Scope of consolidation

The consolidated financial statements include the accounts of DEA Deutsche Erdoel AG and its subsidiaries over which the company has control. DEA AG controls an investee if it has power over the investee. In addition, DEA AG is exposed to, or has rights to, variable returns from its involvement with the investee and DEA AG has the ability to use its power over the investee to affect the amount of DEA AG's return. A subsidiary is de-consolidated from the date that control ceases. There are 20 consolidated companies (previous year: 20), 4 of them abroad (previous year: 4). Participation in 3 foreign subsidiaries (previous year: 3) of minor importance to the DEA AG Group are reported at fair value in accordance with IAS 39. In total, these subsidiaries account for less than 1 % of the consolidated revenue and income as well as of consolidated debt.

Consolidation principles

The financial statements of the domestic and foreign companies included in the Consolidated Financial Statements of DEA Deutsche Erdoel AG are drawn up in conformity with uniform accounting and valuation methods. Expenses and earnings as well as accounts receivable and payable between the consolidated subsidiaries are eliminated. Intercompany gains or losses are eliminated, unless they are negligible. Capital consolidation is performed by offsetting the carrying amounts of subsidiaries against their underlying equity. Depreciation charged in the companies' individual statements on shares in, and loans to, consolidated subsidiaries is reversed.

Business combinations

Cost of an acquisition is measured at the fair value of the assets given and liabilities incurred or assumed at the date of exchange. Identifiable assets acquired and liabilities assumed in a business combination (including contingent liabilities) are measured initially at their fair values at the acquisition date, irrespective of the extent of any non-controlling interest. Non-controlling interest in a subsidiary represents the portion of the subsidiary not owned by DEA Deutsche Erdoel AG. The results of the subsidiaries acquired or disposed of during the year are included in the consolidated statement of income from the date of acquisition or until their disposal, respectively.

Joint arrangements

Joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor. There are joint arrangements at DEA AG Group in the course of development and production activities. They are classified as joint operations since the arrangements transfer the rights and obligations relating to the assets and liabilities to the investors. The Group's shares in joint operations are accounted for by recognising its respective share in assets and liabilities as well as its income and expenses.

Currency translation

In the companies' individual statements, foreign currencies transactions are translated at exchange rates prevailing at the date of the transaction. Monetary foreign currency items are measured at the current exchange rate at each balance sheet date. Exchange gains or losses incurred by the balance sheet date are recognised in the income statement.

The financial statements of Group companies with functional currencies different from the Group's presentation currency (Euro) are translated using the current rate method. All balance sheet items are translated at the current exchange rates prevailing at the balance sheet date. Differences from previous-year translation are recognised in other comprehensive income without impact on profit or loss. Income statement items are translated generally at annual average rates. The use of average rates for the income statement creates additional differences compared with the application of current exchange rates for balance sheet items which are also recognised in other comprehensive income.

The following exchange rates were applied in translating foreign currencies to euros:

€	Rate on balance sheet date		Average rate	
	31-12-2017	31-12-2016	Jan. - Dec. 2017	Jan. - Dec. 2016
1 Pound sterling	1.13	1.17	1.14	1.22
100 Norwegian kroner	10.16	11.01	10.72	10.76
100 Polish zloty	23.94	22.67	23.49	22.92

Realisation of income

Sales revenues are valued at the fair value of counter-performance received or to be received, revenue reductions being considered in the process. Sales revenues are generally recorded when a service has been rendered or goods have been supplied and the associated risks have passed to the customers. No sales revenues worth mentioning are derived from services.

Income taxes

Tax positions under respective local tax laws and tax authorities' views can be complex and subject to different interpretations by tax payers and local tax authorities. Different interpretations of tax laws may result in additional tax payments for prior years and are included in management considerations. In the DEA AG Group, despite the existence of a fiscal unit, actual and deferred taxes are recognised on the basis of a tax allocation contract.

Under the liability method, deferred tax assets and liabilities are recognised for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets are recognised if sufficient future taxable profit is available, including knowledge about income from forecast operating earnings, the reversal of existing taxable temporary differences and established tax planning opportunities. As of each period-end, the DEA

AG Group evaluates the recoverability of deferred tax assets on the basis of projected future taxable profits. According to the level of historical taxable income and projections for future taxable income over the periods in which the deferred tax assets are deductible, the DEA AG Group believes it is probable the company will realise the benefits of these deductible differences. As future developments are uncertain, assumptions are necessary to estimate future taxable profits as well as the period in which deferred tax assets will recover. Estimates are revised in the period in which there is sufficient evidence to revise the assumption.

Intangible assets

Intangible assets include capitalised exploration expenditure, other intangible assets such as cost recovery rights, licence rights in the production phase, commercial and technical software and goodwills. They are reported at amortised costs.

The exploration phase comprises the period from the receipt of exploration rights until their expiry or until technical feasibility of a field development and economic viability have been demonstrated. The exploration expenditure capitalised during this phase includes, for example, concession acquisition costs, licences and exploration rights and exploration wells. Exploration wells are accounted for at their historic cost of acquisition or production according to the successful efforts method; i.e. expenses incurred on exploration wells are generally capitalised only if they were successful, in the sense that they led in particular to the discovery of oil and gas deposits. Once the reserves are proved and commercial viability is established and the development is highly probable, the exploration wells are reclassified into property, plant and equipment and intangible exploration rights are reclassified into other intangible assets. During the exploration phase, the exploration expenditure capitalised is not subject to scheduled amortisation/depreciation. With the start of production, it is amortised/depreciated according to the unit-of-production method.

With the exception of goodwill, all intangible assets have a finite useful life and are therefore subject to systematic linear or production-related depreciation. The useful life of concessions and other licence rights corresponds to the contractual term or comprises the period until the end of economic production. Software for commercial or technical applications is depreciated under the straight-line method over three years. The useful economic life and amortisation methods are subject to annual review.

Goodwill is not subject to systematic amortisation. It is subject to an impairment test on an annual basis or whenever there are indications of a diminution in value (impairment test). Goodwill is part of cash-generating units. The goodwill impairment test is performed at the level of a cash-generating unit or a group of cash-generating units. This is the lowest level at which goodwill is monitored for internal management purposes.

Property, plant and equipment

Property, plant and equipment comprise land and buildings, oil and gas assets, other plant, machinery and equipment as well as fixtures and fittings and office equipment. They are valued at amortised acquisition or production cost. Borrowing costs that can be directly allocated to the acquisition or production of an asset are capitalised as part of acquisition or production costs if a considerable period is necessary to convert the asset into its intended state for use or sale ("qualified asset"). The cost of property, plant and equipment includes the estimated cost of de-installation or demolition and removal and of the reconditioning of the

asset under public or private law obligations, to the extent related provisions are set up. Maintenance and repair costs are stated as expenses.

Oil and gas assets are generally depreciated using the unit-of-production method. Basically, in the case of capitalised wells the depreciation is based on the current production of the period in relation to proved developed producing reserves and in the case of acquisition costs and production facilities/support equipment the current production of the period is set in relation to total proved reserves.

Other property, plant and equipment, with the exception of land and similar rights, is depreciated using the straight-line method. The typical useful lives of the DEA AG Group's non-production-related property, plant and equipment are as follows:

	Years
Buildings	24 – 50
Gas storage	28
Technical plant and machinery	5 – 15
Factory and office equipment	3 – 20

Impairment test

An impairment loss is recognised for intangible assets as well as for property, plant and equipment and investment properties if the recoverable amount of the asset is less than its carrying amount. Exploration assets are required to be tested for impairment as soon as the technical feasibility and profitability of a resource can be proven. The presence of facts and circumstances indicating an impairment also gives rise to an impairment test. If the asset is part of a cash-generating unit (the smallest identifiable group of assets generating cash flows, which are largely independent of the cash inflows of other assets or other groups of assets), then an impairment is derived on the basis of the recoverable amount of the cash-generating unit. In the event that the carrying amount of a cash-generating unit to which a goodwill was allocated exceeds the recoverable amount, a resulting impairment loss is initially applied to the allocated goodwill. Any further impairment loss required will be taken into account through a pro-rata reduction in the remaining carrying amounts of the cash-generating unit. A reversal of an impairment loss up to the value of amortised cost is made if the reasons for an earlier impairment no longer exist. In this case, the increased book value resulting from a reversal must not exceed the amortised cost of acquisition or production. Impairment losses are reported net of reversals of impairment losses. Impairment losses on goodwill are not reversed.

Within the scope of the impairment test, the recoverable amount of the cash-generating unit is determined. The recoverable amount is defined as the higher of fair value less cost of disposal or value in use. The fair value represents the best possible estimate for the amount for which an independent third party would acquire the cash-generating unit on the balance sheet date; the cost of disposal is deducted. Value in use reflects the present value of the future cash flows which are expected to be generated with the cash-generating unit. If either of these amounts exceeds the carrying amount, it is not always necessary to

determine both amounts. These values are generally determined on the basis of discounted cash flow calculations which, in turn, are generally based on current corporate planning. The cash flow forecasts pertain to the life-of-field-period for the individual concession/licence or groups of concessions/licences. The calculations are based on historical experience as well as expectations of future market trends. The principal assumptions underlying the determination by management of the recoverable amount are the forecasts for market prices of oil and natural gas, the estimated reserves, the production forecast as well as the discount rates. The discount rates applied are based on weighted average capital costs taking into consideration specific country risks. The calculation was not related to the actual capital structure of the company but was derived by peer group.

Financial assets

Financial assets are recognised in the balance sheet if a company is a party to a contract for the asset in question. Market-conform purchases or sales of financial assets are recognised or derecognised on the day of trading. Financial assets are derecognised when the contractual rights to cash flows from the asset expire or the entity transfers the financial asset. The latter applies when all the essential risks and rewards of ownership of the asset are transferred, or the entity no longer has control of the asset.

Financial assets are allocated to the following valuation categories: “loans and receivables”, “available-for-sale financial assets” and “financial assets at fair value through profit or loss” ("held for trading" or “held in hedging relationship”).

Financial assets, with the exception of financial derivatives and available-for-sale financial assets, are valued at amortised cost by applying the effective interest method, if necessary. Any impairments necessary are determined by the actual risk of default. In the presence of appropriate indications, such as the insolvency of a customer or disputed invoices, specific impairments are made. Receivables are generally corrected via an allowance account. Impairments are reversed if payments are received or the default risk is reduced accordingly. The reversal is recognised in the same expense item in which the original impairment loss was recorded.

Available-for-sale financial assets are recognised initially and in the following periods at fair value as long as such can be determined reliably. Unrealised gains and losses are stated as other comprehensive income without impact on profit or loss. If there are objective and material indications of a reduction in the value of an asset, an impairment loss is recognised in profit or loss.

Inventories

Inventories are carried at cost of acquisition or production or at the lower net realisable value. Production costs reflect the full costs directly related to production and are determined on the basis of the normal capacity. To the extent that the net realisable value of previously impaired inventories has increased, the resulting reversal is recognised in the same expense item in which the original impairment was recorded.

Provisions

Provisions are set up for all legal or factual obligations to third parties as at the balance sheet date which are based on past events and will probably lead to an outflow of resources in the future and the extent of which can be reliably estimated. Possible obligations to third parties or existing obligations where an outflow of resources is improbable or the extent thereof cannot be reliably determined, are not to be recognised as provisions. They have to be disclosed as contingent liabilities in the notes unless the possibility of an outflow of resources with economic benefits is remote.

Provisions are carried at their foreseeable settlement amount and not netted against any recovery claims. The settlement amount comprises cost increases to be taken into account as of the balance sheet date. In the case of non-current provisions, the amounts are discounted to the present value, applying the country-specific or currency-specific market interest rate applicable as of the respective balance sheet date. Provisions based on a large number of similar events are reported at their expected value. Releases of provisions are written back against the expense item against which the provision was originally set up.

Decommissioning provisions cover the updated commitments for the plugging of wells, the de-installation of onshore and offshore production facilities and the reconditioning of operations and drilling sites. Their extent is based on the anticipated full costs, taking into account the empirical data and the cost benchmarks determined by the Association of German Crude Oil and Natural Gas Producers, with comparable assumptions available for foreign activities. Should any changes in interest rates or estimates in terms of the time or the level of payouts lead to changes in this provision, then the carrying amount of the associated asset will be adjusted accordingly. If the reduction is higher than the book value, the excess amount must be recorded with direct impact on income.

Provisions for pensions are recognised for defined benefit plans. This relates to commitments by the company to cover vested entitlements of employees in active service and current benefits to active and former employees or their dependents. These commitments relate in particular to old-age pension payments. The specific commitments are based on benefits that vary throughout the industry; however, as a rule they are measured according to employees' length of service and remuneration.

The company pension plan consists both of defined-benefit and contribution-based benefit plans. Provisions for defined-benefit plans are based on the actuarial projected benefit obligation, measured using the projected unit credit method. This benefit/years of service method takes into account not only the pension benefits and benefit entitlements known as of the balance sheet date, but also anticipated future increases in salaries and pension benefits. The calculation is based on actuarial reports, taking into account appropriate biometric parameters (for Germany, in particular the “Richttafeln 2005G” by Klaus Heubeck; for Norway, the mortality table “K2013”). The provision is reduced by the fair value of the plan assets set up to cover the pension commitments. The service cost, i.e. the increase in the obligation resulting from the work performed by employees in the period under review, is disclosed in operating result and the interest expenses/income are reported in financial expenses.

Results of the remeasurement of defined-benefit plans are fully recognised in the fiscal year in which they occur. They are reported outside profit or loss in the consolidated statement of comprehensive income and immediately assigned to retained earnings. Therefore, they remain outside profit or loss in subsequent periods as well.

In the case of contribution-based benefit plans, the company does not incur any further obligations beyond making contribution payments to special-purpose funds. The contribution payments are recorded as expenses.

Financial liabilities

Financial liabilities are allocated to the following categories: “liabilities valued at amortised cost of acquisition” and “financial liabilities at fair value through profit or loss” (“held for trading” or “designated as hedging instruments”).

Financial liabilities recognised for the first time are stated at fair value. For subsequent periods, liabilities, with the exception of financial derivatives, are valued at amortised cost of acquisition by applying the effective interest method, if necessary.

Derivative financial instruments

Derivative financial instruments are reported as assets or liabilities. All derivative financial instruments are measured at fair value regardless of their purpose. Derivative hedge transactions are reported in the balance sheet as at the relevant transaction dates. Changes in the fair value are recognised with an effect on income unless the instruments are used for hedge accounting purposes.

Cash flow hedges are used to hedge the risk of variability in cash flows related to an asset or liability carried on the balance sheet or related to a highly probable forecast transaction. If a cash flow hedge exists, the effective parts of changes in fair value for the hedging transactions effected are recorded under other comprehensive income in the equity until such time as the hedging transaction is realised. Changes in fair value of the hedge transactions deployed, caused by market price changes, are counteracted to an equal extent by expected changes in the fair value of the existing underlying transactions. As a rule, fair value changes are reported with an impact on profit or loss at that point in time when the hedge transaction is realised through profit or loss. The contribution to earnings from the hedging transaction is then transferred from other comprehensive income to the income statement.

IAS 39 establishes certain requirements in accounting for hedging transactions. In particular, hedging relationships need to be documented in detail and be effective, i.e. the changes in fair value of the hedge must lie within a bandwidth of 80 to 125 % of the diametrically opposed changes in fair value of the underlying transaction, both prospectively and retrospectively. Only the effective portion of a hedging relationship may be accounted for according to the rules described for cash flow hedges. The ineffective part of the hedge is immediately taken to the income statement.

Agreements concluded for the purpose of receiving or supplying non-financial items in accordance with the company's expected buying, selling or utilisation demand and held for this purpose (own-use contracts) are accounted for not as financial derivatives but as pending transactions. If the agreements contain embedded derivatives, then the derivatives will be accounted for separately from the underlying agreement if the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the underlying agreement.

Important estimates and assumptions

Preparation of the consolidated financial statements on the basis of IFRS requires management to make estimates and assumptions that affect the amounts reported for assets, liabilities, income and expenses as well as disclosed contingent liabilities and fair values. The assumptions and estimates mainly concern the following areas:

Oil and gas reserves

Oil and natural gas reserves are applied to determine the recoverable amount in the framework of the impairment test as well as for the production-related depreciation and amortisation using the unit-of-production method. Reserves are estimated by the Group's own qualified engineers and geoscientists applying standardised valuation methods, and are classified in line with international industry standards. This process is subject to defined principles. Furthermore, the estimates are audited by an independent consultant (RPS Group) on an annual basis.

Impairment tests

Key assumptions within impairment tests for intangible assets and property, plant and equipment relate to estimated reserves, forecasts for market prices of crude oil and natural gas, production forecasts and discount rates.

Derivative financial instruments

In accounting for derivative financial instruments, assumptions have to be made as to whether the principles of hedge accounting apply. In addition, for certain contracts a decision is required as to whether they are to be recognised as derivatives or treated as pending transactions like what are known as own-use contracts.

Provisions

Decommissioning provisions mainly require estimates and assumptions with regard to terms, exchange rates, costs to be considered and discount rates. Future actual cash outflows can differ, owing to changes in relation to these items.

With regard to pension provisions, the discount rate is one of the very important estimators. The discount factor for pension obligations is determined on the basis of yields on high quality, fixed-rate corporate bonds on the financial markets as of the balance sheet date.

All assumptions and estimates are based on conditions and evaluations made as at the balance sheet date. In addition, with regard to expected future business trends, the future development (considered realistic at the current time) of the economic environment in the industries and the regions in which the DEA AG Group operates is taken into account. If the actual trend deviates from the assumed development of conditions, then the assumptions and, if necessary, the carrying amounts of the assets and liabilities concerned will be adjusted accordingly. As of the date of preparation of the consolidated financial statements, it is not expected that there will be a material change in the assumptions and estimates.

Changes in accounting policies

The International Accounting Standards Board (IASB) has adopted changes in the existing International Financial Reporting Standards (IFRS), which became effective for the DEA AG Group as of 1 January 2017:

- Amendments to IAS 7 (2016) "Disclosure Initiative"
- Amendments to IAS 12 (2016) "Recognition of Deferred Tax Assets for Unrealised Losses"

The application of these amendments does not have any material impact on the DEA AG Group's consolidated financial statements. As part of the application of the amended IAS 7, the change in liabilities from financing activities is broken down into cash and non-cash components in order to allow a reconciliation between the balance sheet amount and the cash flow statement (see note 15).

New accounting policies

The IASB and the IFRS IC have adopted further standards and amendments to standards, which are not yet mandatory in the European Union (EU) for fiscal years which begin on 1 January 2017. EU endorsement is still pending in some cases.

The most important changes are described below:

- **IFRS 9 (2014) "Financial Instruments"** replaces the previous regulations of IAS 39. IFRS 9 contains new requirements for the classification and measurement of financial instruments, fundamental changes regarding the accounting treatment of financial asset impairments, and a reformed approach to hedge accounting. IFRS 9 retains "amortised cost" and "fair value" as the criteria for measuring financial instruments. Whether financial assets are measured at amortised cost or fair value will depend on two factors: the entity's business model for managing the portfolio to which the financial asset belongs and contractual cash flow characteristics of the financial asset. The allocation to the respective valuation categories is not expected to have a material impact on the financial statements. In the future, according to IFRS 9, the recognition of financial asset impairments will be based on expected losses. The general approach adopts a three-stage model to assess the provisions for risks. The model requires different degrees of impairment based on the credit default risk of the counterparties. For certain financial instruments, such as trade accounts receivable, operational simplifications for recognising impairment losses apply. Because of the new model, impairment on financial assets will increase by €0m - €10m. IFRS 9 regulations on hedge accounting aim for a closer alignment of hedge accounting with the entity's

risk management strategy and additionally include changes in the requirements for measuring effectiveness that will mainly be based on the hedge ratio. The hedge ratio needs to be adjusted (so-called "rebalancing") if it no longer meets the hedge effectiveness requirements under an unchanged risk management strategy. The change in regulations on hedge accounting will mainly result in an adjustment of the hedge documentation. IFRS 9 (2014) becomes effective for the first time for fiscal years starting on or after 1 January 2018.

- **IFRS 15 (2014) "Revenue from Contracts with Customers"** replaces the previous regulations of IAS 11, IAS 18, IFRIC 13, IFRIC 15, IFRIC 18 and SIC 31. The new standard introduces uniform criteria for the timing of revenue recognition. According to IFRS 15, sales revenue is recognised when control of the agreed-upon goods or services and the benefits obtainable from them are transferred to the customer. The transfer of the essential risks and rewards of ownership of the goods is no longer the deciding factor. Sales revenue is measured as the amount the entity expects to receive in exchange for goods and services. The new model for the determination of revenue recognition is based on five steps, with the contract with the customer and the individual performance obligations within the contract to be identified first. The transaction price is then determined and allocated to the performance obligations in the contract. Finally, sales are recognised for each performance obligation in the amount of the allocated portion of the transaction price as soon as the agreed-upon good or service has been provided or the customer receives control over it. Principles are set out for determining whether the goods or services have been provided over time or at one point in time. In April 2016, some clarifications on IFRS 15 were published, relating in particular to the identification of separate performance obligations, the distinction between principal and agent and the recognition of licence agreements. IFRS 15 (2014) becomes effective for the first time for fiscal years starting on or after 1 January 2018. The application will not have any material impact on the DEA AG Group's consolidated financial statements. The notes will contain further quantitative and qualitative disclosures.

- **IFRS 16 (2016) "Leases"** replaces the previous regulations of IAS 17, IFRIC 4, SIC 15 and SIC 27. The new standard introduces a single lessee accounting model. It requires a lessee to recognise assets and liabilities for all leases with a term of more than twelve months, unless the underlying asset is of low value. As for the lessor, the new standard substantially continues the lessor accounting requirements of IAS 17. IFRS 16 (2016) is applicable for the first time for fiscal years that begin on or after 1 January 2019. The DEA AG Group is currently reviewing its effects on the consolidated financial statements. The main impact identified relates to recognition of new assets and liabilities for most of the operating leases (see note 19). In the income statement, the lease expenses, typically on a straight-line basis, are replaced by depreciation of the capitalised assets and interest expenses on the lease liabilities. Some commitments may be covered by the exceptions for short-term and low value leases.

The following changes in standards and interpretations are not expected to have any material effect on the DEA AG Group's consolidated financial statements:

Standards and Interpretations	IASB Effective Date
Annual Improvements to IFRS Standards 2014 - 2016 (2016)	1 January 2018
Amendments to IFRS 2 (2016) "Classification and Measurement of Shared-based Payment Transactions"	1 January 2018
Amendments to IFRS 4 (2016) "Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts"	1 January 2018
IFRS Interpretation 22 (2016) "Foreign Currency Transactions and Advance Consideration"	1 January 2018
Amendments to IAS 40 (2016) "Transfer of Investment Property"	1 January 2018
IFRS Interpretation 23 (2017) "Uncertainty over Income Tax Treatments"	1 January 2019
Amendments to IFRS 9 (2017) "Prepayments Features with Negative Compensation"	1 January 2019
Amendments to IAS 28 (2017) "Long-term Interests in Associates and Joint Ventures"	1 January 2019
Annual Improvements to IFRS Standards 2015 - 2017 (2017)	1 January 2019
IFRS 17 (2017) "Insurance Contracts"	1 January 2021

Selected key financial data by region (voluntary disclosure)

The DEA AG Group operates within several geographical areas. The following representation at country level is in accordance with internal management reporting and does not represent segment information as defined by IFRS 8.

	January - December 2017				
€m/kboed	Germany/ Denmark	Norway	North Africa [1]	Other [2]	Total
Production (kboed) [3]	36	54	35	-	125
Revenues	448	802	200	-	1,450
Depletion, depreciation, amortisation	-49	-134	-104	-3	-290
Net impairment of assets	0	-63	-37	-	-100
EBITDAX	269	538	187	-67	927
Exploration cost	-1	-108	-24	11	-122
Capital expenditure (without acquisitions)	57	370	409	2	838

1) Comprising Egypt and Algeria
2) Incl. rest of the world, central functions and investment property
3) On working interest basis

	January - December 2016				
€m/kboed	Germany/ Denmark	Norway	North Africa [1]	Other [2]	Total
Production (kboed) [3]	39	63	36	-	138
Revenues	507	832	137	-	1,476
Depletion, depreciation, amortisation	-73	-364	-59	-4	-500
Net impairment of assets	-1	-79	10	0	-70
EBITDAX	346	538	-27	-81	776
Exploration cost	-3	-50	-23	-43	-119
Capital expenditure (without acquisitions)	53	158	444	1	656

1) Comprising Egypt and Algeria
2) Incl. rest of the world, central functions and investment property
3) On working interest basis

(1) Sales and other operating revenues

€m	Jan. - Dec. 2017	Jan. - Dec. 2016
Oil		
Germany/Denmark	197	228
Norway	479	509
North Africa	54	63
	730	800
Gas		
Germany/Denmark	222	249
Norway	313	310
North Africa	122	72
	657	631
Others		
Germany/Denmark	29	30
Norway	10	13
North Africa	24	2
	63	45
Sales revenues	1,450	1,476
Other operating revenues	8	7
	1,458	1,483

The oil revenues comprise losses from commodity derivatives amounting to €5m (previous year: income of €46m).

(2) Cost of sales

€m	Jan. - Dec. 2017	Jan. - Dec. 2016
Cost of operations		
Production costs	311	354
Royalties	79	62
Change in over-/underlift position	0	10
Tariffs, transport and lease expenses	114	87
Depletion, depreciation, amortisation	284	492
Other	-74	73
	714	1,078
Development costs	14	10
Other costs of sales	0	13
	728	1,101

Other cost of operations comprise net impairment gains on financial receivables of €75m (previous year: net losses of €70m) and restructuring costs of €1m (previous year: €3m).

(3) Exploration

Exploration costs in the income statement comprise, among other things, expenses related to seismology, geology, geophysics, unsuccessful exploration wells, additions and reversals of provisions and allocable administrative expenses. Impairment losses and reversals are not included in the exploration costs.

Inventories amounting to €0m (previous year: €0m) are allocated to the exploration division. Provisions comprise commitments from exploration amounting to €87m (previous year: €122m).

The cash flow from operating activities attributable to exploration amounts to €69m (previous year: €-108m). In addition, the cash flow from investment activities by the exploration division amounts to €-34m (previous year: €-50m).

(4) Staff costs

Total staff costs are included in the following items in the income statement:

€m	Jan. - Dec. 2017	Jan. - Dec. 2016
Cost of sales	84	60
Exploration costs	19	36
General and administration expenses	49	75
	152	171

€m	Jan. - Dec. 2017	Jan. - Dec. 2016
Wages and salaries	125	137
Social security and other benefits	16	18
Expenses relating to post-employment benefits	11	16
	152	171

In the fiscal year the average size of the DEA AG Group's workforce (excluding discontinued operations) converted to employee equivalents was 1,126 (previous year: 1,338), of whom 954 (previous year: 1,021) were in Germany. Full-time employees are included in the employee equivalents at 100 %. Part-time employees or employees with agreements subject to time limits are recorded only to the extent of their part-time quota or their employment time in relation to the annual time worked. In addition, the number of apprentices employed as at 31 December 2017 (headcount) was 13 (previous year: 17).

(5) Financial income and financial expenses

€m	Jan. - Dec. 2017	Jan. - Dec. 2016
Interest income from third parties	7	10
Interest income from affiliated companies	83	75
Foreign currency exchange gains, net	-	43
Income from investments	0	1
Financial income	**90**	**129**
Interest expenses to third parties	63	57
Interest expenses to affiliated companies	49	26
Less capitalised borrowing costs	-45	-13
Foreign currency exchange losses, net	145	-
Losses from financial derivatives, net	10	118
Other financial expenses	10	12
	232	200
Interest from additions to		
Provisions for pensions and similar obligations less plan assets (net pension obligations)	3	3
Abandonment provisions	34	20
Other provisions	0	1
	37	24
Financial expenses	**269**	**224**

(6) EBITDAX

EBITDAX is used for the purpose of internal management control and is derived from the result from continuing operations before taxes adjusted by the following items:

a) Interest income and expenses shown as financial income and expenses in the income statement, but adjusted for interest effects regarding pension provisions and pension plan assets which are shown separately in the line "pension items".
b) Income and expenses attributable to exploration, but excluding depletion/depreciation/ amortisation and impairment losses and reversal of impairment losses, interest income and expenses, currency effects and pension items for exploration, since these are adjusted in separate line items.
c) Depletion, depreciation, amortisation and impairment losses less reversal of impairment losses as shown in the income statement.
d) Acquisition, disposal and restructuring costs and further extraordinary items. This represents all fees, costs and expenses, stamp duty, registration and other taxes incurred by the company in connection with an acquisition or a disposal and material items of an unusual or non-recurring nature (e.g. resulting from restructuring activities).
e) Realised and unrealised foreign exchange gains and losses (including hedging results).
f) Gains over book value or losses on book value arising from the disposal of any fixed assets (other than the sale of trading stock).
g) Income from pension plan assets, interest expenses, service costs or other charges attributable to a post-employment benefit scheme.

€m	Jan. - Dec. 2017	Jan. - Dec. 2016
Result from continuing operations before taxes	206	-51
a) Interest and other financing costs	21	18
b) Exploration costs	120	118
c) Depletion, depreciation, amortisation and net impairment losses	390	570
d) Acquisition, disposal and restructuring costs and extraordinary items as well as income from investments	12	28
e) Realised and unrealised gains/losses from foreign currency valuation and financial derivatives	155	75
f) (Gain)/loss attributable to the disposal of fixed assets	9	-1
g) Pension items	14	19
EBITDAX	927	776

(7) Income taxes

€m	Jan. - Dec. 2017	Jan. - Dec. 2016
Current income taxes		
Germany	42	55
Norway	11	19
North Africa	24	2
Other	0	0
	77	76
Deferred taxes		
arising from deductible temporary differences	76	-121
resulting from taxable loss carry-forwards	32	27
	108	-94
	185	-18

Current income taxes relate to expenses from other periods, amounting to €6m (previous year: income of €6m).

The average consolidated income tax rate on earnings generated by companies liable to German taxation generally amounts to 30.55 % (previous year: 30.14 %). It results from the applicable corporation tax rate of 15.0 % and the solidarity surcharge of 5.5 % as well as the average trade income tax rate of the DEA AG Group. By way of derogation from this, for German companies that have activities in countries with which no double taxation agreement exists, a tax rate of 15.83 % (without trade income tax) is applied. Current taxes of foreign subsidiaries are based on local tax laws and applicable tax rates in the individual foreign countries. Deferred tax assets and liabilities in Germany and abroad are measured at the tax rates that are expected to apply in the period when the asset is realised or the liability is settled.

Taxes on income are derived from the expected tax expenses as follows:

€m	Jan. - Dec. 2017	Jan. - Dec. 2016
Result from continuing operations before taxes	206	-51
Expected tax expenses 30.55 % (previous year: 30.14 %)	63	-15
Changes in expected tax expenses due to:		
Tax rates differences	90	-49
Taxes relating to a different accounting period	6	-6
Tax effects on		
other tax-free earnings and earnings from foreign operations	8	12
expenses not deductible for tax purposes	1	1
different trade income tax assessment bases and tax rates	-3	1
changes in tax loss carry-forwards	-1	-2
tax provision	12	12
Other	11	28
Changes in deferred taxes due to tax rate changes	-2	0
Effective tax expenses	185	-18
Effective tax rate in %	90	35

Income tax assets and liabilities:

	31-12-2017		31-12-2016	
€m	Assets	Liabilities	Assets	Liabilities
Germany/Denmark	0	24	-	19
Norway	11	-	-	20
North Africa	-	20	-	6
Other	-	6	1	13
	11	50	1	58
Non-current	-	26	-	26
Current	11	24	1	32

Income tax liabilities consist primarily of income taxes for the respective current year and prior-year periods that have not been definitively audited by the tax authorities.

The deferred tax assets and liabilities (gross) are allocable to the following balance sheet items:

€m	31-12-2017		31-12-2016	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Non-current assets	85	751	41	740
Current assets	3	16	1	31
Tax-related special items	-	7	-	8
Non-current liabilities				
Pension provisions	49	-	52	-
Other non-current provisions/ liabilities	200	43	219	1
Other current provisions/liabilities	29	1	43	-
	366	818	356	780
Loss carry-forwards	42	-	78	-
Gross	408	818	434	780
Netting	-292	-292	-349	-349
Net amount	116	526	85	431

Deferred tax assets and liabilities for each company are netted. Deferred taxes on loss carry-forwards are netted against deferred tax liabilities.

Deferred tax assets as a rule comprise capitalised tax credit claims resulting from the expected utilisation of loss carry-forwards in subsequent years. The realisation of these loss carry-forwards is ensured to an adequate level of certainty. The amount of loss-carry-forwards not covered by deferred tax claims totals €51m (previous year: €56m).

In the year under review, deferred taxes of €5m (previous year: €25m) were netted against equity with no effect on profit or loss. They result from the valuation of derivative financial instruments with no effect on profit or loss, amounting to €4m (previous year: €18m), as well as from the remeasurement of defined benefit plans amounting to €1m (previous year: €7m).

Effects resulting from currency translation of deferred tax items in foreign financial statements amounting to €39m (previous year: €-27m) were recognised with no impact on profit or loss.

Of the total amount of deferred tax assets and deferred tax liabilities, €37m (previous year: €128m) and €20m (previous year: €29m) are expected to be realised within twelve months.

(8) Intangible assets and property, plant and equipment

Intangible assets

€m	Exploration	Other intangible assets	Goodwill	Total
At cost of acquisition and production				
1 January 2017	862	259	122	1,243
Additions	42	64	-	106
Transfers	-66	47	-	-19
Currency translation adjustments	-38	-7	-9	-54
Disposals	-103	-53	-	-156
31 December 2017	697	310	113	1,120
Accumulated amortisation and impairment losses				
1 January 2017	-485	-191	-	-676
Amortisation	-	-7	-	-7
Transfers	-	-	-	-
Currency translation adjustments	16	1	-	17
Disposals	82	52	-	134
Impairment losses	-1	-	-	-1
Reversal of impairment losses	1	-	-	1
31 December 2017	-387	-145	-	-532
Carrying amount 31 December 2017	310	165	113	588
At cost of acquisition and production				
1 January 2016	892	254	116	1,262
Additions	50	16	-	66
Transfers	-92	0	-	-92
Currency translation adjustments	31	1	6	38
Disposals	-19	-12	-	-31
31 December 2016	862	259	122	1,243
Accumulated amortisation and impairment losses				
1 January 2016	-460	-199	-	-659
Amortisation	-	-13	-	-13
Transfers	0	0	-	-
Currency translation adjustments	-11	-1	-	-12
Disposals	8	12	-	20
Impairment losses	-29	-4	-	-33
Reversal of impairment losses	7	14	-	21
31 December 2016	-485	-191	-	-676
Carrying amount 31 December 2016	377	68	122	567

Property, plant and equipment

€m	Land and buildings	Oil and gas assets	Other plant, machinery and equipment	Fixtures and fittings and office equipment	Total
At cost of acquisition and production					
1 January 2017	102	7,985	92	57	8,236
Additions	1	914	9	2	926
Transfers	0	20	0	0	20
Currency translation adjustments	0	-418	-	-1	-419
Disposals	-1	-62	-8	-3	-74
31 December 2017	102	8,439	93	55	8,689
Accumulated depreciation and impairment losses					
1 January 2017	-70	-5,517	-79	-43	-5,709
Depreciation	-3	-275	-1	-4	-283
Transfers	0	0	0	0	0
Currency translation adjustments	0	312	-	1	313
Disposals	1	38	0	3	42
Impairment losses	-	-125	-	-	-125
Reversal of impairment losses	-	25	-	-	25
31 December 2017	-72	-5,542	-80	-43	-5,737
Carrying amount 31 December 2017	30	2,897	13	12	2,952
At cost of acquisition and production					
1 January 2016	104	7,139	155	56	7,454
Additions	0	595	1	1	597
Transfers	1	151	-60	1	93
Currency translation adjustments	0	274	-	1	275
Disposals	-3	-174	-4	-2	-183
31 December 2016	102	7,985	92	57	8,236
Accumulated depreciation and impairment losses					
1 January 2016	-68	-4,785	-129	-40	-5,022
Depreciation	-3	-477	-2	-5	-487
Transfers	0	-50	50	0	0
Currency translation adjustments	-	-199	-	-	-199
Disposals	2	51	2	2	57
Impairment losses	-1	-57	-	-	-58
Reversal of impairment losses	-	-	-	-	-
31 December 2016	-70	-5,517	-79	-43	-5,709
Carrying amount 31 December 2016	32	2,468	13	14	2,527

Capitalised borrowing costs

In connection with the acquisition and production of qualified assets, in the year under review borrowing costs amounting to €45m (previous year: €13m) were capitalised as part of acquisition and production costs. In the year under review the financing cost rate applied in this context was between 3.1 % and 3.5 % (previous year: between 2.6 % and 2.8 %) as well as between 6.4 % and 6.7 % for qualified assets of DEA Norge AS.

Impairment losses and reversal of impairment losses

For the impairment tests conducted, the recoverable amount was determined on the basis of the fair value less costs of disposal. The assumptions regarding oil and gas prices are based on forward prices for the first 3 years. From the 4th year a transition to a consensus price is applied. The consensus price is inflated by 2 % p. a. for the following years. The interest rates used for discounting future cash flows after tax range between 6.5 % and 9.5 % (previous year: 7.0 - 12.0 %).

The net impairment of assets in the reporting period relates primarily to cash generating units in the following countries:

€m	Impairment	Reversal of impairment	Recoverable amount
Cash generating units in Egypt	13	-	153
Cash generating units in Algeria	24	-	264
Cash generating units in Norway	89	26	101
	126	26	

The impairments had to be carried out because of portfolio measures as well as lower profitability of assets. The reversals of impairment losses mainly arose from higher profitability.

The goodwill is allocated to the producing licences in Norway. For the impairment test an interest rate of 7.0 % (previous year: 7.0 %) was applied. As in the previous year, there was no need for impairment.

(9) Financial receivables

€m	31-12-2017		31-12-2016	
	non-current	current	Non-current	current
Loans to related companies and participations	2,021	22	2,207	0
Other loans	-	-	2	-
	2,021	22	2,209	-

The non-current loans to related companies and participations mainly relate to a USD loan which was granted in 2015 by DEA Deutsche Erdoel AG to L1E Funding GmbH in return for a debt assumption (see note 15). The loan carries floating interest rates (LIBOR plus margin).

(10) Trade accounts receivable/other receivables and other assets

€m	31-12-2017		31-12-2016	
	non-current	current	non-current	current
Trade accounts receivable	-	279	-	336
Other receivables and other assets				
Derivatives	-	1	1	9
Prepayments	-	5	-	19
Prepaid expense	5	11	12	38
Receivables from finance lease	61	6	67	6
Receivables from working interest reductions	15	12	15	13
Receivables from production underlift	-	17	-	27
Miscellaneous other assets	-	17	-	44
	81	69	95	156
	81	348	95	492

The carrying amounts of the financial assets largely correspond to their fair values.

The receivables from finance lease refer to the lease of two gas storage facilities. Nominal values of leasing agreements amount to €83m (previous year: €92m) and are broken down as follows at the present value of minimum lease payments:

€m	31-12-2017	31-12-2016
Nominal value	83	92
unrealised interest income	16	19
present value of minimum lease payments	67	73

Minimum lease payments for receivables from finance lease agreements have the following terms of maturity:

€m	31-12-2017			31-12-2016		
	Nominal value	Present value	Difference from discounting	Nominal value	Present value	Difference from discounting
Due in up to 1 year	9	9	0	9	9	0
Due in 1 - 5 years	37	32	5	37	32	5
Due after more than 5 years	37	26	11	46	32	14
	83	67	16	92	73	19

Rental income recorded in the fiscal year amounted to €9m (previous year: €9m).

The fair value of receivables from finance leases is at least equal to the book value. Detailed amounts are not stated because assumptions with regard to the calculation of different variables over an extended period would be required.

(11) Inventories

€m	31-12-2017	31-12-2016
Raw materials, supplies and merchandise	82	89
Finished goods	1	1
	83	90

In the year under review, impairment losses amounting to €1m (previous year: €0m) had to been taken into account.

(12) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and bank deposits with original maturities of up to three months. There are no restraints on disposal of cash and cash equivalents.

(13) Equity

The subscribed capital and capital reserves relate to DEA Deutsche Erdoel AG. The subscribed capital is divided up into 13,440,000 shares with full voting rights. The shares in the company are completely held by L1E Acquisitions GmbH. A domination and profit and loss transfer agreement exists with L1E Acquisitions GmbH as controlling enterprise.

Non-controlling interests relate to Speicher Breitbrunn/Eggstätt DEA & Storengy GbR.

(14) Provisions

The following discount rates are applied to determine the present value of non-current provisions:

	31-12-2017	31-12-2016
Decommissioning provisions	2.50 - 6.25 %	3.50 - 8.00 %
Provisions for anniversaries	1.25 %	1.25 %
Provisions for early retirement benefits/ severance payments/performance plan	0.00/0.25 and 0.60 %	0.00 and 0.80 %
Other provisions		
with terms of 5 – 10 years	2.25 %	3.25 %
with terms of 1 – 4 years	1.25 and 2.00 %	2.50 and 3.50 %

€m	Decommissioning provisions	Other provisions	Pension Provisions	Total
As at 01-01-2017	458	212	155	825
Addition	139	66	16	221
Release	-36	-18	-6	-60
Interest component	34	0	3	37
Other changes	-22	-3	-3	-28
Amounts used	-2	-49	-8	-59
As at 31-12-2017	571	208	157	936
Non-current	539	32	157	728
Current	32	176	-	208
	571	208	157	936

€m	Decommissioning provisions	Other provisions	Pension Provisions	Total
As at 01-01-2016	569	218	120	907
Addition	7	70	16	93
Release	-131	-15	0	-146
Interest component	20	1	3	24
Other changes	15	1	25	41
Amounts used	-22	-63	-9	-94
As at 31-12-2016	458	212	155	825
Non-current	432	29	155	616
Current	26	183	-	209
	458	212	155	825

Decommissioning provisions

The addition was mainly owing to lower discount rates year-on-year and to additional shares in one concession. With regard to reversal of provisions, life extensions for some concessions and lower cost estimates have taken effect. The change in discount rates had a total impact on the provision amounting to €123m (previous year: €-130m). The expected settlement date of the provision depends on the ratio of produced reserves to expected reserves and varies within a range of less than one year up to approx. 30 years.

Pension provisions

The company pension plan consists of defined-benefit and defined-contribution schemes. Defined-benefit schemes exist in Germany and Norway.

DEA Deutsche Erdoel AG has transferred assets to Towers Watson Treuhand e. V. within the framework of Contractual Trust Arrangements (CTA) and to Willis Towers Watson Pensionsfonds AG for insolvency insurance of parts of the company pension plan.

Willis Towers Watson Pensionsfonds AG falls under the scope of the Act on Supervision of Insurance Undertakings and Oversight by the Federal Financial Supervisory Agency (BaFin). Insofar as a regulatory deficit occurs in the pension fund, supplementary payment shall be requested from the employer. Independently of the aforementioned rules, the liability of the employer shall remain in place. The bodies of Towers Watson Treuhand e. V. and Willis Towers Watson Pensionsfonds AG are responsible for ensuring that the funds under management are used in compliance with the contract and thus fulfil the requirements for recognition as plan assets.

Within the scope of the Contractual Trust Arrangement (CTA), €8m (previous year: €9m) were transferred to Towers Watson Treuhand e. V. in the year under review.

The amount of the provision for defined-benefit pension schemes was determined by actuarial methods on the basis of the following underlying assumptions.

	31-12-2017		31-12-2016	
	Germany	Norway	Germany	Norway
Discount rate	1.75 %	2.40 %	1.75 %	2.50 %
Salary growth rate	2.35 %	2.25 %	2.35 %	2.25 %
Pension growth	1.00 and 1.60 %	0 - 2.25 %	1.00 and 1.60 %	1.50 %

As of 31 December 2017, the actuary has been changed and, in this connection, the determination of the discount rate for Germany is now based on the accepted determination procedure of the new actuary. In comparison with the determination procedure applied in the previous year, the change results in an increase of the pension obligation amounting to €21m.

Composition of plan assets (fair value) €m	31-12-2017				31-12-2016			
	Germany	thereof active market	Norway	thereof active market	Germany	thereof active market	Norway	thereof active market
Equity instruments	118	118	-	-	129	129	-	-
Interest-bearing instruments	285	285	-	-	291	291	-	-
Assets held by insurance company	-	-	15	-	-	-	23	-
Alternative investments	13	13	-	-	-	-	-	-
Other	3	3	-	-	2	-	-	-
	419	419	15	-	422	420	23	-

Pension assets are continuously monitored and managed from a risk and earnings perspective. Broad diversification of the investments contributes to risk reduction. In order to further increase diversification, the asset allocation was further refined by the addition of two new asset classes in 2017.

The focus of the strategic investment policy is still on European government and corporate bonds with investment grade ratings. The portfolio also includes higher yielding investments such as high-yield corporate bonds and emerging-market bonds. The proportion of global equities in the portfolio is lower than that of bonds. The investment in equities is intended to earn a risk premium over bonds over the long term.

The allocation of funds to the asset-classes is based on detailed analysis of the plan assets and pension obligations and of the relation of these two to each other (Asset-Liability-Management-Study/ALM-Study). A comprehensive update of the ALM-Study prepared in 2015 will be conducted at the beginning of 2018 (as of 31-12-2017). As a target value, several asset key figures are

considered relative to the amount of pension obligations in various scenarios. The sensitivities of the obligation and of the pension assets in relation to a change in the market interest rate are taken into account with particular attention. By comparing different asset allocations, those portfolios are identified that achieve the best target value within the given risk. On the basis of these efficient portfolios, the strategic asset allocation is derived and the associated risk is analysed in detail. The results of the ALM-Study will show whether there will be strategic shifts and optimisations of the existing allocation.

€m	Present value of defined benefit obligations	Fair value of plan assets	Total
As at 01-01-2017	**600**	**-445**	**155**
Current service cost	16	-	16
Past service cost	-6	-	-6
Interest expense/(income)	10	-7	3
	20	**-7**	**13**
Remeasurements			
Return on plan assets, excluding amounts already recognised in interest income	-	-15	-15
Gains/losses from changes in financial assumptions	2	-	2
Experience gains/losses	11	-	11
	13	**-15**	**-2**
Effect of exchange rate differences	-2	1	-1
Transfers	-	-	-
Contribution to the funded plans:			
Employer	-	-8	-8
Employee	-	-	-
Benefit payments	-39	39	0
As at 31-12-2017	**592**	**-435**	**157**
As at 01-01-2016	**558**	**-438**	**120**
Current service cost	19	-	19
Past service cost	-3	-	-3
Interest expense/(income)	13	-10	3
	29	**-10**	**19**
Remeasurements			
Return on plan assets, excluding amounts already recognised in interest income	-	-22	-22
Gains/losses from changes in financial assumptions	57	-	57
Experience gains/losses	-12	-	-12
	45	**-22**	**23**
Effect of exchange rate differences	3	-2	1
Transfers	1	-	1
Contribution to the funded plans:			
Employer	-	-9	-9
Employee	0	0	-
Benefit payments	-36	36	0
As at 31-12-2016	**600**	**-445**	**155**

The present value of the defined benefit obligations less plan assets measured at fair value results in the net defined benefit obligation arising from funded and unfunded plans and is recognised as provisions for pensions and similar obligations in the balance sheet. Of the present value of defined benefit obligations €562m (previous year: €556m) refer to benefit obligations in Germany and €30m (previous year: €44m) to benefit obligations in Norway.

Domestic company pensions are subject to an obligation to review for adjustment every three years pursuant to the Act on the Improvement of Company Pensions (Sec 16 of the German Company Pension Act (BetrAVG)). Additionally, some commitments grant annual adjustments of pensions, which may exceed the legally mandated adjustment obligation.

The weighted average duration of the pension obligations is 16 years in Germany (previous year: 15 years) and 15 or 27 years in Norway (previous year: 20 or 26 years).

An increase or decrease in the discount rate and in salary and pension growth would have the following impact on the defined benefit obligations:

	Change in actuarial assumptions	Impact on defined benefit obligations 31-12-2017		31-12-2016	
€m		in Germany	in Norway	in Germany	in Norway
Discount rate	Increase by 0.5 percentage points	-42	-4	-41	-5
	Reduction by 0.5 percentage points	48	4	47	6
Salary growth	Increase by 0.5 percentage points	6	1	8	1
	Reduction by 0.5 percentage points	-6	-1	-8	-2
Pension growth	Increase by 0.5 percentage points	28	2	32	4
	Reduction by 0.5 percentage points	-26	-2	-28	-3
Life expectancy	Increase by 1 year	26	1	28	2

The sensitivity analyses are based on a change in one assumption, with all other assumptions remaining unchanged. Actual developments will probably be different from this. The methods for calculating the aforementioned sensitivities and for calculating the pension provisions are in agreement.

The dependence of pension provisions on market interest rates is limited by an opposite effect. The background to this is that the commitments stemming from company pension plans are primarily covered by funds, and plan assets mostly exhibit a negative correlation with the market yields of fixed-interest securities. Consequently, declines in market interest rates are typically reflected in an increase in plan assets, and vice-versa.

For defined-contribution plans, expenses of €1m (previous year: €1m) were incurred in the year under review.

In the financial year 2018 contributions into the CTA will be processed in a magnitude that achieve a constant funding level. The amount to be contributed will depend on i.a. plan-asset performance and interest rate developments.

(15) Debt to banks and financial debt

€m	31-12-2017		31-12-2016	
	non-current	current	non-current	current
Debt to banks	1,334	0	1,494	3
Financial debt to related companies	1,013	116	1,018	16
	2,347	116	2,512	19

With effect from 2 April 2015, DEA Deutsche Erdoel AG assumed the rights and obligations of a senior secured reserve-based lending facility (RBL facility), which had been concluded between L1E Funding GmbH and a banking syndicate as of 30 December 2014. The RBL is a revolving USD2,300m credit facility with a term ending in December 2021. The amount available under the facility is recalculated on an annual basis or if certain triggering events occur and is mainly based on the reserves of the underlying licences. The RBL does not require repayment in the initial four years, after which commitments under the RBL will start reducing as scheduled.

In the year under review DEA Deutsche Erdoel AG repaid an net amount of USD50m on a voluntary basis. Meanwhile, an amount of USD75m was drawn by DEA Norge AS. As of 31 December 2017 a loan amount of USD1,600m or €1,334m (previous year: USD1,575m or €1,494m) had been utilised by DEA Deutsche Erdoel AG and DEA Norge AS. The floating interest rate was Libor plus a margin of 2.5 % during the reporting period (previous year: 2.25 %).

The RBL facility is secured by a pledge over the shares of certain group companies and by a charge over some of the bank accounts of the pledged companies and over all existing hedging transactions within the DEA AG Group. Regarding the unrealised market values of our derivatives we refer to note 17. The pledged amount of the shares is represented by the accounting value of net assets of the respective group companies.

The financial debt to related companies breaks down as follows:

	31-12-2017				31-12-2016			
	Carrying amount [1] €m	Currency	Term	Interest rate	Carrying amount [1] €m	Currency	Term	Interest rate
Shareholder loan from 25 February 2015	460	EUR	2024	LIBOR plus margin	448	EUR	2024	LIBOR plus margin
Revolving shareholder loan [2]	161	USD	2024	LIBOR plus margin	178	USD	2024	LIBOR plus margin
Total shareholder loans	621				626			
Loan from DEA Finance SA [3]	398	EUR	2022	7.55 %	399	EUR	2022	7.55 %
Liability from net profit transfer	110	EUR	-	-	9	EUR	-	-

1) Including accrued interest
2) Credit facility of USD400m, thereof not utilised USD214m
3) The financing fees (€8m) have been capitalised as a reduction of the loan amount and are being amortised over the term of the loan applying the effective interest method.

In October 2016 DEA Finance SA issued Senior unsecured Notes with a principal amount of €400m and a term until 2022. The proceeds of the notes were onlent to DEA Norge AS with the same maturity.

The carrying amounts are close to their fair values.

Liabilities arising from financing activities reconcile to the cash flows in the cash flow statement as follows:

€m	01-01-2017	Cash flows from repayments/ proceeds	Foreign currency valuation	Changes in accrued interest	Other changes	31-12-2017
Debt to banks	1,497	22	-182	-3	-	1,334
Financial debt	1,034	-9	-22	18	108	1,129

€m	01-01-2016	Cash flows from repayments/ proceeds	Foreign currency valuation	Changes in accrued interest	Other changes	31-12-2016
Debt to banks	2,026	-569	42	-2	-	1,497
Financial debt	1,062	285	2	18	-333	1,034

(16) Trade accounts payable/other liabilities

€m	31-12-2017		31-12-2016	
	non-current	current	non-current	current
Trade accounts payable	-	304	-	308
Other liabilities				
Derivatives	9	30	8	19
Liabilities arising from other taxes	-	5	-	7
Prepayments	6	8	6	23
Liabilities from production overlift	-	5	-	14
Accrued future overlifts oil	-	21	-	29
Accrued insurance reimbursement	-	150	-	-
Other miscellaneous liabilities	-	13	-	8
	15	232	14	100
	15	536	14	408

Trade accounts payable and financial instruments reported under other liabilities generally have short residual terms of maturity. The carrying amounts accounted for therefore are close to their fair values. The derivatives are recorded at fair value.

(17) Reporting on financial instruments

The financial instruments comprise both primary and derivative financial instruments.

Financial instruments on the assets side chiefly comprise financial assets, receivables and cash and cash equivalents. Financial assets in the category “available for sale” are recognised at fair value, and other primary financial assets at amortised cost. On the liabilities side, the primary financial instruments include liabilities recorded at amortised cost. The primary financial instruments are stated in the balance sheet, with the carrying amounts of financial assets reflecting the maximum risk of default. Wherever default risks are apparent in the financial assets, they are covered by impairments.

Fair values of derivatives are determined using customary market valuation methods taking into account the market data available on the measurement date as well as the counterparty default risk.

The following overview represents the financial instruments to be recognised at fair value and the essential parameters on which the measurement is based. The individual levels are defined as follows:

Level 1: Measurement at (unadjusted) prices quoted for identical assets or liabilities on active markets.

Level 2: Measurement based on inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3: Measurement on the basis of unobservable inputs.

Fair value hierarchy	31-12-2017			
€m	Total	Level 1	Level 2	Level 3
Financial investments	4			4
Derivative financial assets	1		1	
Derivative financial liabilities	39		39	

Fair value hierarchy	31-12-2016			
€m	Total	Level 1	Level 2	Level 3
Other receivables	1			1
Derivative financial assets	10		10	
Derivative financial liabilities	27		27	

No transfers between the levels occurred during the period under review or during the previous year.

The following overview shows the development of level 3 financial instruments to be recognised at fair value:

Development of level 3 financial instruments € m	As of 01-01-2017	Changes recognised in profit or loss	Changes not recognised in profit or loss	Changes with a cash effect	As of 31-12-2017
Financial investments	1			3	4

Development of level 3 financial instruments €m	As of 01-01-2016	Changes recognised in profit or loss	Changes not recognised in profit or loss	Changes with a cash effect	As of 31-12-2016
Financial investments	1				1
Other receivables	15	-4	-11		-

The other receivable ("available for sale") measured at fair value through equity was derecognised in 2016 since the contractual conditions did not occur. An amount of €4m was recognised as general and administrative expenses in profit or loss.

In the year under review, trade accounts payable amounting to €20m (previous year: €25m) were netted with trade accounts receivable amounting to €22m (previous year: €24m) on the basis of an unconditional netting agreement.

Impairment losses and financial assets in the category "loans and receivables" have developed as follows:

€m	Trade accounts receivable	Other receivables and other assets	Total
As at 01-01-2017	106	-	106
Impairment (+)/reversal of impairment (-) in the year under review	-75		-75
Disposals			
Currency translation adjustments			
As at 31-12-2017	31	-	31

€m	Trade accounts receivable	Other receivables and other assets	Total
As at 01-01-2016	36	4	40
Impairment (+)/reversal of impairment (-) in the year under review	70		70
Disposals		-4	-4
Currency translation adjustments			
As at 31-12-2016	106	-	106

Impairments on trade accounts receivable mainly relate to overdue receivables. The staggered impairment rates for these receivables have been adjusted in the reporting period due to lower potential default risks. This results in a reversal of impairments in the amount of €27m.

Financial assets that are overdue and not impaired exist as at the balance sheet date within the scope of IFRS 7 in the category of “loans and receivables”:

€m	Trade accounts receivable		Other receivables and other assets	
	31-12-2017	31-12-2016	31-12-2017	31-12-2016
Up to 30 days	15	12	0	1
31 to 60 days	10	8	0	1
61 to 90 days	2	11	0	1
91 to 120 days	3	22	0	1
More than 120 days	70	66	1	2

Financial assets and liabilities have been assigned to valuation categories with the following carrying amounts:

	31-12-2017							
€m	Available for sale	Held for trading	Loans and receivables	Valued at amortised cost	In hedge relationship	Finance lease	Beyond the scope of IFRS 7	Total
Financial assets	4	-	-	-	-	-	-	4
Financial receivables	-	-	2,043	-	-	-	-	2,043
Trade accounts receivable	-	-	279	-	-	-	-	279
Other accounts receivable and other assets	-	1	16	-	-	67	66	150
Cash and cash equivalents	-	-	116	-	-	-	-	116
Debt to banks	-	-	-	1,334	-	-	-	1,334
Financial liabilities	-	-	-	1,129	-	-	-	1,129
Trade accounts payable	-	-	-	304	-	-	-	304
Other liabilities	-	-	-	179	39	-	29	247

	31-12-2016							
€m	Available for sale	Held for trading	Loans and receivables	Valued at amortised cost	In hedge relationship	Finance lease	Beyond the scope of IFRS 7	Total
Financial assets	1	-	-	-	-	-	-	1
Financial receivables	-	-	2,209	-	-	-	-	2,209
Trade accounts receivable	-	-	336	-	-	-	-	336
Other accounts receivable and other assets	-	10	31	-	0	73	137	251
Cash and cash equivalents	-	-	101	-	-	-	-	101
Debt to banks	-	-	-	1,497	-	-	-	1,497
Financial liabilities	-	-	-	1,034	-	-	-	1,034
Trade accounts payable	-	-	-	308	-	-	-	308
Other liabilities	-	-	-	33	27	-	54	114

Net losses on assets and liabilities in the category "held for trading" amount to €10m (previous year: €112m). Impairments and reversals on impairment losses for the category "loans and receivables" are shown in the development of impairment losses above.

Derivative financial instruments

Derivative financial instruments are measured at fair value. In interpreting positive or negative fair values, it has to be considered that they are offset by underlying transactions with compensating risks. All derivative financial instruments are reported as assets or liabilities. Measurement of the fair values of financial derivatives is performed by using current market price quotations within a trading system developed externally for the commodity markets. On this basis commodity price swaps are valued by means of internal computations of the relevant swap curves and subsequent discounting as at the balance sheet date.

The following hedging transactions exist in the form of cash flow hedges for the purpose of hedging commodity price risks arising from future sales revenues:

	Nominal volume		Maturity > 1 year		Fair value (liabilities)	
€m	31-12-2017	31-12-2016	31-12-2017	31-12-2016	31-12-2017	31-12-2016
Oil-price swaps	347	371	176	200	39	27

The nominal amounts allow conclusions on the extent to which derivatives are used, but do not reflect the risks the DEA AG Group incurs from their use. Financial hedging transactions are exposed to default risks in the amount of their positive fair values. These risks are minimised because deals are made only with partners of the highest credit standing.

The future sales currently hedged by cash flow hedges will fall due with an effect on profit or loss within the next two years. The terms of the commodity derivatives are thus also of a short-term nature. Ineffectiveness occurs only as a result of the consideration of the counterparty default risk and was not recognised in profit or loss for reasons of materiality.

With regard to cash flow hedges an amount of €17m (previous year: €27m) was recognised in other comprehensive income and a loss amounting to €5m (previous year: net gain of €40m) was reclassified from equity to profit or loss for the period. Reclassifications were solely made against sales revenues. In the previous year, reclassification were made against sales revenues amounting to €46m and against financial expenses amounting to €6m.

Moreover, non-financial gas forward sales contracts are recognised at fair values in the amount of €1m (previous year: €10m). They are classified as "held for trading". The nominal volume amounts to €12m (previous year: €96m); of this, €-m (previous year: €12m) has a remaining term of more than one year.

Financial risks and sensitivity analysis

As an E&P enterprise operating on an international scale, the DEA AG Group is exposed to credit, liquidity, interest rate and market risks (price and currency risks) within the ordinary course of its business. Our subsidiaries are subject to a strict risk management regime. The scope of action, responsibilities and controls is enshrined in binding, internal corporate instructions. Financial derivatives are used exclusively to hedge the risk related to underlying operations, not for speculative purposes.

Market risks

Market risks result in particular from changes in oil and gas commodity prices, changes in USD/EUR and USD/NOK exchange rates and corresponding unexpected negative changes regarding planned incoming and outgoing payments. In addition, currency risks arising from financial transactions between companies in the DEA AG Group may result if the functional currencies of the two partners do not match.

These risks are mitigated in the DEA AG Group using systematic risk management methods. In addition to physical forward sales in the gas sector, the risks are also countered by deploying financial derivatives. Financial derivatives are used only to hedge oil price risks arising from payments received for future sales revenues. The instruments used are oil price swaps. Currently parts of our oil sales are hedged until 2019.

To quantify the risk relating to market price fluctuations and financial instruments deployed, we use the sensitivity method. In quantifying market prices using the sensitivity method, a statement is made concerning the impact on earnings of a percentage-based change in market prices. The sensitivity figures shown below in accordance with the regulations of IFRS 7 refer only to financial instruments

recognised in the balance sheet. Therefore, the reporting of the risk position of the DEA AG Group is incomplete.

The following table presents changes in the market values of concluded commodity hedge instruments that would have resulted from a 10 % increase or decline in the oil price. The underlying transactions are not taken into account. The calculation of oil price sensitivities is based on Brent quotations. Moreover, changes to the market values of loan assets and liabilities in USD as well as USD receivables arising from Egyptian activities that would have occurred both in the event of an increase and a decline by 10 % in the USD forward curve in relation to the EUR or NOK, respectively, are presented. The presentation of market value changes is in each case shown after taxes. The corporate tax rate of 30.55 % (previous year: 30.14 %) is applied.

	January - December 2017		January - December 2016	
€m	Changes impacting on profit and loss	Impacts on other comprehensive income	Changes impacting on profit and loss	Impacts on other comprehensive income
Increase in USD by 10 %	58		57	
Decrease in USD by 10 %	-69		-68	
Increase in oil price by 10 %		-28		-33
Decrease in oil price by 10 %		25		29

Credit risk

Credit risk is defined as an unexpected loss in financial instruments if the contractual partner fails to discharge its obligations in full and on time. As regards original and derivative financial instruments, there is no substantial counterparty default risk because the contractual partners generally have a high credit standing. Existing past due payments are subject to permanent monitoring by management. The maximum risk of default corresponds to the carrying amounts of the financial assets accounted for.

Liquidity risk

Our liquidity risk management ensures that the required liquidity to meet financial obligations is available at all times and that the liquidity position of the DEA AG Group is optimised. Centralised financial planning for the DEA AG Group is the basis of the liquidity risk management. Financial planning for the respective currencies is effected for the following twelve months on a monthly basis and for the following three months on a daily basis.

We monitor our liquidity risk by reviewing our cash flow requirements on a regular basis taking into consideration our funding sources, existing bank facilities and cash flow generation from our producing asset base. Specifically, we ensure that we have sufficient liquidity to meet our operational funding requirements and debt servicing. As part of the liquidity risk management, we also carry out sensitivity analyses and monitor compliance with the financial covenants defined in the RBL facility.

In particular, the ratio of net debt to EBITDAX should not exceed a factor of 3 : 1. The calculation is based on definitions determined in the agreement. In the event of non-compliance with the financial covenants - if not cured through additional equity ("equity cure") - the lenders are allowed to declare that the loan is immediately due and payable. The financial covenants were complied with at all times during the reporting period.

Financial liabilities within the scope of application of IFRS 7 in the next several years are expected to result in the following amortisation payments:

		Amortisation payments		
€m	Carrying amounts 31-12-2017	1st succeeding year	2nd - 5th succeeding year	from 6th succeeding year
Debt to banks	1,334	0	1,334	
Other financial debt	1,129	116	400	621
Commodity derivative financial liabilities	39	30	9	
Miscellaneous financial liabilities	333	333		

		Amortisation payments		
€m	Carrying amounts 31-12-2016	1st succeeding year	2nd - 5th succeeding year	from 6th succeeding year
Debt to banks	1,497	3	1,494	
Other financial debt	1,034	16		1,026
Commodity derivative financial liabilities	27	19	8	
Miscellaneous financial liabilities	341	341		

Interest rate risk

As of 31 December 2017, the DEA AG Group has similar amounts of financial debt and financial receivables that bear floating interest rates. Therefore, a change in the floating rate element would have only a minor impact on our interest payments in 2018. An increase/decrease by 50 basis points would result in a change in our interest result (after tax) of €-/+1m, respectively.

(18) Capital management

The capital management system of DEA Deutsche Erdoel AG is determined by the DEA AG Group’s strategic objectives and focuses on increasing the value of the business over the long term. To achieve this goal, the DEA AG Group endeavours to constantly improve its existing operations, to safeguard its market position and to optimise its portfolio via value-creating acquisitions and divestments.

One of the strategic objectives of the DEA AG Group is the optimisation of the capital structure with a two-tier capital base. The reserves-based lending facility provides immediate drawdown options at lower costs, whereas the unsecured capital from the Bond proceeds provides non-amortising longer-term debt. In addition, the shareholder has provided various subordinated loans to the DEA AG Group (refer to note 15). In this way, DEA increases its financial flexibility and diversifies the investor base.

(19) Contingent and financial liabilities

Commitments regarding the former chemical business are subject to joint and several liability for a limited period of time (until 2018). The probability of a claim under joint and several liability is considered to be low. With regard to participations in various joint ownerships, the DEA AG Group is subject to statutory liability.

In the course of their regular business activities, DEA AG Group companies are involved in legal disputes. Irrespective of the outcome of such legal disputes, we do not expect any significant negative effects on the economic and financial position of the DEA AG Group.

As of 31 December 2017, commitments based on rental, lease and similar commitments relate to operating leases, primarily for offices and for transport and production vessels. Minimum operating lease payments under non-cancellable operating leases are due as follows:

€m	31-12-2017	31-12-2016
Due within 1 year	16	24
Due within 1 – 5 years	65	75
Due after more than 5 years	26	41
	107	140

The DEA AG Group has commitments from firm contracts for property, plant and equipment and from field development projects amounting to €626m (previous year: €1,232m) and exploration commitments in the context of concession agreements amounting to €106m (previous year: €57m).

(20) Related party disclosures

The DEA AG Group is controlled by L1E Acquisitions GmbH (incorporated in Germany) which owns 100 % of the shares in DEA Deutsche Erdoel AG. The Group's ultimate parent is LetterOne Holdings S.A. (incorporated in Luxembourg). Related companies are all companies in which LetterOne Holdings S.A. or their controlling shareholders have at least a significant holding.

€m	LetterOne Group affiliated companies	
	31-12-2017/ Jan. - Dec. 2017	31-12-2016/ Jan. - Dec. 2016
Financial receivables	2,043	2,207
Trade accounts receivable	3	0
Financial debt	1,019	1,025
Liabilities from net profit transfer	110	9
Trade accounts payable	9	18
Cost of sales	-	0
General and administrative expenses	9	4
Interest income	83	75
Interest expenses	49	26
Other financial expenses	4	-

All transactions are subject to market terms and conditions.

Related persons are the members of the Board of Management and Supervisory Board of DEA Deutsche Erdoel AG and of the parent company. No business relations exist with members of the Board of Management and of the Supervisory Board or individuals close to them.

In accordance with the by-laws, the members of the Supervisory Board of DEA Deutsche Erdoel AG received an amount of €250k for 2017 (previous year: €256k). Each Supervisory Board member receives fixed remuneration to an unchanged amount of €20k per calendar year for his or her activities. The Chairman receives double this amount, and his Deputy one-and-a-half times the annual fixed remuneration. In addition, expenses incurred are refunded. Some employee representatives on the Supervisory Board have labour contracts with individual Group companies. Remuneration occurs in accordance with relevant contractual conditions.

Remuneration paid to members of the Board of Management consists of a fixed and a performance-related variable component as current remuneration components. The remuneration paid to the Board of Management of DEA Deutsche Erdoel AG for the fiscal year amounted to €3m (previous year: €2m), including variable remuneration of €1m (previous year: €1m). In addition, the fixed remuneration component for members of the Board of Management includes non-cash and other perquisites essentially comprising the values to be recognised subject to tax directives for the use of company cars and insurance premiums for accident insurance.

Furthermore, (direct) pension commitments have been granted to the members of the Board of Management, entitling them to life-long pensions and benefits for their surviving dependants. The present value of the overall commitment (defined benefit obligation) amounts to €7m as at 31 December 2017 (previous year: €8m). Pension service costs total €368k (previous year: €351k).

The Members of the Board also receive a remuneration component with a long-term incentive effect in the form of a performance cash plan with an overall 5-year performance period and deferred annual cash payments after performance periods of 3, 4 and 5 years. The key performance indicator is a defined increase in the net asset value of the DEA AG Group (calculated as an annualised "internal rate of return"). The annually-determined net asset value is based primarily on the discounted cash flow method and has to be reviewed by the Personnel Committee and approved by the Supervisory Board. As of 31 December 2017, the fair value of the long-term performance plan amounts to €301k. In the reporting period, additions to provisions amounting to €199k were recognised as expenses.

(21) Joint Operations

The following joint operations are structured as separate entities:

Name	Nature of the joint arrangements	Principal place of business	Ownership interest/ voting rights %
SUEZ OIL COMPANY (Suco)	Operating company for the development and production phase	Cairo, Egypt	50.00
DEMINEX EGYPT OIL COMPANY (Deoco)	Operating company for the development and production phase; performed by Suco as a service	Cairo, Egypt	50.00
DISOUQ PETROLEUM COMPANY (DISOUCO)	Operating company for the development and production phase; performed by Suco as a service	Cairo, Egypt	50.00
Petro Delta [1)]	Operating company for the development and production phase	Cairo, Egypt	12.50
Groupement Reggane	Operating company for the development and production phase	Algiers, Algeria	19.50

1) in the process of liquidation

(22) Auditor's fees

DEA AG Group recognised the following fees as expenses for the services rendered by the auditors of the consolidated financial statements, PricewaterhouseCoopers GmbH Wirtschaftsprüfungs-gesellschaft (PwC) and companies belonging to PwC's international network:

€k	Jan. - Dec. 2017	Jan. - Dec. 2016
Audit services	704	661
Tax services	139	85
Other services	42	201

Thereof attributable to PwC Germany:

€k	Jan. - Dec. 2017	Jan. - Dec. 2016
Audit services	384	437
Tax services	48	71
Other services	38	159

The fees for audit services primarily contain the fees for the audit of the consolidated financial statements and for the audits of the financial statements of DEA Deutsche Erdoel AG and its subsidiaries. In particular, the fees for tax services include compensation for consultation in the preparation of tax returns and other national and international tax-related matters. The fees for other services mainly comprise project-specific advisory and assurance services.

(23) Events after the balance sheet date

No events subject to mandatory disclosure occurred after the balance sheet date.

(24) List of holdings of DEA Deutsche Erdoel AG according to Section 313 Para. 2 of the German Commercial Code (HGB)

	Share of capital %
Affiliated companies which are included in the consolidated financial statements	
DEA Cyrenaica GmbH, Hamburg 1)	100.00
DEA E&P GmbH, Hamburg 1)	100.00
DEA Global Limited, London/Great Britain	100.00
DEA Guyana GmbH, Hamburg 1)	100.00
DEA Idku GmbH, Hamburg 1)	100.00
DEA International GmbH, Hamburg 1)	100.00
DEA Nile GmbH, Hamburg 1)	100.00
DEA Norge AS, Stavanger/Norway	100.00
DEA North Africa/Middle East GmbH, Hamburg 1)	100.00
DEA Speicher GmbH, Hamburg	100.00
DEA Speicher Holding GmbH & Co. KG, Schechen	100.00
DEA Speicher Management GmbH, Hamburg	100.00
DEA Suez GmbH, Hamburg 1)	100.00
DEA Suriname GmbH, Hamburg 1)	100.00
DEA Trinidad & Tobago GmbH, Hamburg	100.00
DEA UK Upstream Limited, London/Great Britain (in liquidation)	100.00
DEA Upstream Polska Sp. z o.o., Warsaw/Poland	100.00
DEA WND GmbH, Hamburg (formerly DEA Speicher Betriebs-GmbH, Hamburg)	100.00
Speicher Breitbrunn/Eggstätt DEA & Storengy GbR, Hamburg	80.28
Affiliated companies which are not included in the consolidated financial statements	
DEA Petróleo e Gás do Brasil Ltda., Rio de Janeiro/Brazil	100.00
DEA Ukraine LLC, Kiev/Ukraine	100.00
Deutsche Erdoel México S. de R.L. de C.V., Santa Fe/Mexico	100.00

1) Application of Section 264 Para. 3 of the German Commercial Code (HGB)

Supervisory Board, Management Board

Supervisory Board

Lord Edmund John Phillip Browne of Madingley, London (Chairman)
Executive Chairman, L1 Energy (UK) LLP

Günther Prien, Hamburg (Deputy Chairman)
Chairman of the Joint Works Council, DEA Deutsche Erdoel AG

Daniela Freise, Hamburg
Manager Risk Controlling & Back Office, Treasury, DEA Deutsche Erdoel AG

Mikhail Fridman, London/Moscow
Chairman, LetterOne Holdings S.A.

Andreas J. Goss, Duisburg
Executive Chairman, ThyssenKrupp Steel Europe AG

Franz-Gerd Hörnschemeyer, Hanover
Political Union Secretary, Union of the Mining, Chemical and Energy Industries

German Khan, London/Moscow
Director, LetterOne Holdings S.A.

Dr Jan Konerding, Hamburg
Auditor, Tax Advisor, Lawyer

René Pawel, Hamburg
Vice President Reservoir Management, DEA Deutsche Erdoel AG

Rajko Pientka, Hamburg
Political Union Secretary, Union of the Mining, Chemical and Energy Industries

Andreas Schöpf, Lachendorf
Chairman of the Works Council Betriebe Wietze, DEA Deutsche Erdoel AG

Alf Henryk Wulf, Stuttgart
Executive Chairman, GE Power AG

Board of Management

Maria Moræus Hanssen (Chairwoman) (since 4 January 2018)
Responsible for: Chairing the Board

Thomas Rappuhn (Chairman) (until 3 January 2018)
Responsible for: Chairing the Board

Dmitry Avdeev
Responsible for: Finance

Dr Johannes Karlisch (until 31 October 2017)
Responsible for: Commercial

Dirk Warzecha
Responsible for: Operations

Hamburg, 6 February 2018

The Board of Management



The following auditor's report (Bestätigungsvermerk) has been issued in accordance with Section 322 German Commercial Code (Handelsgesetzbuch) on the consolidated financial statements and group management report (Konzernlagebericht) of DEA Deutsche Erdoel AG, Hamburg as of and for the fiscal year ended December 31, 2017. The group management report is neither included nor incorporated by reference in this Offering Memorandum.

Independent **Auditor's Report**

To DEA Deutsche Erdoel AG, Hamburg

Audit Opinions

We have audited the consolidated financial statements of DEA Deutsche Erdoel AG, Hamburg, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at December 31, 2017**,** and the consolidated statement of comprehensive income, consolidated statement of profit or loss, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from January 1 to December 31, 2017, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In addition, we have audited the group management report of DEA Deutsche Erdoel AG for the financial year from January 1 to December 31, 2017. We have not audited the content of the statement on corporate governance pursuant to § [Article] 289f HGB [Handelsgesetzbuch: German Commercial Code] and § 315d HGB in accordance with the German legal requirements.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to § 315e Abs. [paragraph] 1 HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at December 31, 2017, and of its financial performance for the financial year from January 1 to December 31, 2017, and

- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the content of the above mentioned statement on corporate governance referred to above.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in

accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Other Information

The executive directors are responsible for the other information. The other information comprises the statement on corporate governance pursuant to § 289f HGB and § 315d HGB.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.

- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Hamburg, 15 February 2018

PricewaterhouseCoopers GmbH

Wirtschaftsprüfungsgesellschaft

Thorsten Dzulko	sgd. Helge Schäper
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Audited Consolidated Financial Statements of Wintershall (prepared in accordance with IFRS as adopted by the EU) as of and for the financial year ended 31 December, 2018



CONSOLIDATED FINANCIAL STATEMENTS

Wintershall Holding GmbH

Consolidated statement of financial position

€ thou.	Note	Dec. 31, 2018	Dec. 31, 2017
Intangible assets	[13]	2,283,557	2,307,787
Property, plant and equipment	[14]	6,508,012	6,360,832
Investments accounted for using the equity method	[15]	2,566,397	2,556,542
Other financial investments		1,883	73,492
Deferred tax assets		128,729	152,611
Other assets	[17]	896,174	517,926
Non-current assets		**12,384,752**	**11,969,190**
Inventories	[16]	136,588	84,359
Trade receivables	[17]	669,783	502,106
Miscellaneous receivables and other assets	[17]	254,369	283,129
Cash and cash equivalents		218,958	110,326
Current assets		**1,279,698**	**979,920**
Assets		**13,664,450**	**12,949,110**
Share capital	[18]	105,000	105,000
Capital reserve	[18]	1,265,543	415,543
Retained earnings and net retained profit	[18]	3,133,956	3,693,020
Other comprehensive income	[18]	-1,173,903	-1,071,791
Third-party interests	[19]	136,260	71,678
Equity		**3,466,856**	**3,213,450**
Provisions for pensions	[20]	307,039	312,680
Other provisions	[21]	1,605,018	1,289,406
Deferred tax liabilities		1,320,993	1,294,782
Non-current financial liabilities	[22]	499,417	501,459
Miscellaneous non-current liabilities	[22]	517,880	1,380,363
Non-current liabilities		**4,250,347**	**4,778,690**
Trade payables	[22]	348,011	286,756
Provisions		77,213	131,800
Tax liabilities		222,433	133,877
Current financial liabilities	[22]	10,396	100,150
Miscellaneous current liabilities	[22]	5,289,194	4,304,387
Current liabilities		**5,947,247**	**4,956,970**
Equity & liabilities		**13,664,450**	**12,949,110**

Consolidated income statement

€ thou.	Note	2018	2017
Net revenue	[5]	**4,707,203**	**3,661,704**
Cost of conversion and purchase costs of the services rendered to generate the revenue		-2,910,502	-2,715,752
Gross earnings from revenue		**1,796,701**	**945,952**
Distribution costs		-94,346	-79,537
General administrative expenses		-67,579	-81,311
Research costs		-26,210	-44,704
Exploration costs		-111,522	-104,282
Other operating income	[6]	118,437	387,080
Other operating expenses	[7]	-450,356	-336,971
Equity result	[8]	128,464	247,609
Result from operating activities		**1,293,589**	**933,836**
Income from other participating interests		3,675	3,991
Expenses from other participating interests		-415	-2,927
Net investment income		**3,260**	**1,064**
Interest income		71,869	56,787
Interest expenses		-67,744	-106,053
Net interest income		**4,125**	**-49,266**
Miscellaneous financial income		251,102	39,377
Miscellaneous financial expenses		-304,677	-40,226
Miscellaneous financial result		**-53,575**	**-849**
Financial result	[9]	**-46,190**	**-49,051**
Earnings before income taxes		**1,247,399**	**884,785**
Income taxes	[10]	-576,580	-157,885
Net income for the year		**670,819**	**726,900**
Non-controlling interests	[11]	-54,731	-41,280
Net income after non-controlling interests		**616,088**	**685,620**

Statement of comprehensive income

	2018			2017		
€ thou.	Total	BASF	Non-controlling interests	Total	BASF	Non-controlling interests
Net result for the period	**670,819**	**616,088**	**54,731**	**726,900**	**685,620**	**41,280**
Actuarial gains/losses	10,187	10,173	14	7,853	7,846	7
Deferred taxes	-2,821	-2,817	-4	-2,804	-2,802	-2
Income and expenses that will not be reclassified to the statement of income at a later date, recognized directly in equity	**7,366**	**7,356**	**10**	**5,049**	**5,044**	**5**
Unrealized gains/losses on currency translation	-76,998	-76,998	-	-315,800	-315,800	-
Measurement of securities at market value	328	328	-	-2,641	-2,641	-
Gains/losses after taxes from investments accounted for using the equity method that are eligible for reclassification	-32,808	-32,808		-13,262	-13,262	-
Income and expenses that will be reclassified to the statement of income at a later date, recognized directly in equity	**-109,478**	**-109,478**	**-**	**-331,703**	**-331,703**	**-**
Total comprehensive income	**568,707**	**513,966**	**54,741**	**400,246**	**358,961**	**41,285**

Development of income and expenses recognized directly in equity

€ thou.	**Actuarial gains/ losses**	**Asset ceiling for defined benefit pension plans**	**Unrealized gains/ losses from currency translation**	**Measurement of securities at market value**	**Hedging of future cash flows (cash flow hedge)**	**Total of all income and expenses recognized in equity**
As of Jan. 1, 2018	-126,046	15	-896,498	-328	-48,934	-1,071,791
Changes	10,187	-	-120,396	328	10,590	-99,291
Deferred taxes	-2,821	-	-	-	-	-2,821
As of Dec. 31, 2018	-118,680	15	-1,016,894	-	-38,344	-1,173,903

€ thou.	**Actuarial gains/ losses**	**Asset ceiling for defined benefit pension plans**	**Unrealized gains/ losses from currency translation**	**Measurement of securities at market value**	**Hedging of future cash flows (cash flow hedge)**	**Total of all income and expenses recognized in equity**
As of Jan. 1, 2017	-131,095	15	-550,120	2,313	-66,250	-745,137
Changes	7,853	-	-346,378	-2,641	17,316	-323,850
Deferred taxes	-2,804	-	-	-	-	-2,804
As of Dec. 31, 2017	-126,046	15	-896,498	-328	-48,934	-1,071,791

Consolidated statement of cash flows

€ thou.	2018	2017
Net income for the year after non-controlling interests	**616,088**	**685,620**
Amortization of intangible assets, depreciation of property, plant and equipment and impairment of financial investments	1,080,114	1,024,486
Changes in inventories	-52,498	-13,081
Changes in receivables	-161,931	13,165
Changes in business-related liabilities and other provisions	199,320	-137,229
Change in provisions for pensions, in assets from overfunded pension plans and other items	101,881	131,084
Gains (-) from the disposal of non-current assets	-20,268	-49,660
Cash flow from operating activities	**1,762,706**	**1,654,385**
Payments for property, plant and equipment	-587,821	-876,270
Payments for intangible assets	-34,336	-14,834
Payments for financial investments	-330,146	-351,786
Proceeds from the disposal of non-current assets	56,847	324,257
Payments for acquisitions	-135,100	-
Cash flows from investing activities	**-1,030,556**	**-918,633**
Payments to company owners	-1,298,892	-824,685
Proceeds from company owners	850,000	400,000
Raising of financing-related liabilities BASF Group	2,176,666	2,317,751
Repayment of financing-related liabilities BASF Group	-2,236,535	-1,568,227
Raising of financial liabilities	44,693	123,288
Repayment of financial liabilities	-137,352	-1,158,224
Cash flows from financing activities	**-601,420**	**-710,097**
Changes in cash and cash equivalents affecting liquidity	**130,730**	**25,655**
Change in cash and cash equivalents		
due to currency translation effects	-22,098	-7,228
due to changes in the scope of consolidation	-	-820
Cash and cash equivalents at the beginning of the period	**110,326**	**92,719**
Cash and cash equivalents at the end of the period	**218,958**	**110,326**
Composition of cash and cash equivalents		
Cash and cash equivalents	**218,958**	**110,326**

Consolidated statement of changes in equity

€ thou.	Subscribed capital	Capital reserves	Retained earnings and net retained profit	Other comprehensive income	Non-controlling interests	Total
Dec. 31, 2017	**105,000**	**415,543**	**3,693,020**	**-1,071,791**	**71,678**	**3,213,450**
IFRS 9 adjustment	-	-	-810	-	-	**-810**
Jan. 1, 2018	**105,000**	**415,543**	**3,692,210**	**-1,071,791**	**71,678**	**3,212,640**
Changes in the scope of consolidation (Gullfaks)	-	-	-595	-	-	**-595**
Capital increase by means of the "pay out and claw back" procedure	-	850,000	-	-	-	**850,000**
Result for the year before profit transfer	-	-	616,088	-	54,731	**670,819**
Result of natural gas transport companies accounted for using the equity method	-	-	-	-	57,187	**57,187**
Profit transferred under profit and loss transfer agreement	-	-	-323,711	-	-	**-323,711**
Dividend distribution	-	-	-	-	-47,346	**-47.346**
Withdrawal	-	-	-850,000	-	-	**-850,000**
Actuarial gains/losses	-	-	-10	7,366	10	**7,366**
Market valuation of cash flow	-	-	-	10,918	-	**10,918**
Translation adjustment	-	-	-	-120,396	-	**-120,396**
Other	-	-	-26	-	-	**-26**
Dec. 31, 2018	**105,000**	**1,265,543**	**3,133,956**	**-1,173,903**	**136,260**	**3,466,856**
Jan. 1, 2017	**105,000**	**15,543**	**3,796,944**	**-745,137**	**-42,606**	**3,129,744**
Changes in the scope of consolidation	-	-	11,670	-	-	**11,670**
Capital measure W & G Infrastruktur Finanzierungsgruppe, Kassel	-	-	-	-	69,960	**69,960**
Result for the year before profit transfer	-	-	685,620	-	41,280	**726,900**
Result of natural gas transport companies accounted for using the equity method	-	-	-	-	62,683	**62,683**
Profit transferred under profit and loss transfer agreement	-	-	-401,546	-	-	**-401,546**
Dividend distribution	-	-	-	-	-59,639	**-59,639**
Withdrawal	-	-	-400,000	-	-	**-400,000**
Deposit	-	400,000	-	-	-	**400,000**
Actuarial gains/losses	-	-	-	5,049	-	**5,049**
Market valuation of cash flow	-	-	-	14,675	-	**14,675**
Translation adjustment	-	-	-	-346,378	-	**-346,378**
Other	-	-	332	-	-	**332**
Dec. 31, 2017	**105,000**	**415,543**	**3,693,020**	**-1,071,791**	**71,678**	**3,213,450**

Group notes

Principles and scope of consolidation

1. Summary of accounting policies

1.1 General information

Wintershall Holding GmbH (registration court: Local Court (*Amtsgericht*) of Lüneburg; entry no.: HRB 200519) has its registered office in Celle, Lower Saxony, Germany. The address is Friedrich-Ebert-Strasse 160, 34119 Kassel, Germany.

The consolidated financial statements of Wintershall Holding GmbH as of December 31, 2018 were prepared in accordance with the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB) as they applied on the balance sheet date, and in accordance with the supplementary provisions to be applied pursuant to section 315a (1) of the German Commercial Code (HGB). As a matter of principle, IFRSs are only applied after they have been adopted by the European Union. All IFRSs and pronouncements of the International Financial Reporting Interpretations Committee (IFRIC) that are binding for the 2018 fiscal year have been applied.

The consolidated financial statements have been prepared in euros. As a general rule, all amounts, including the previous year's figures, are stated in thousands of euros (€ thou.). Exceptions to this rule are specially marked in the text (individual figures are shown in millions of euros - € million).

The annual financial statements of the consolidated companies were prepared as of the balance sheet date of the consolidated financial statements. The accounting policies applied essentially correspond to those applied in 2017. This does not apply to changes resulting from the application of new or revised accounting standards.

1.2 Basic group accounting principles

Scope of consolidation: The scope of consolidation is based on the application of IFRS 10 and 11.

According to IFRS 10, a group consists of a parent company and its subsidiaries, which are controlled by the parent company. "Control" over an investee requires all of the three criteria set out below to be fulfilled at the same time:

- Decision-making power of the parent company over the relevant activities of the investee,
- Variable returns from the investee flow to the parent company, and
- The ability of the parent company to use its decision-making power to influence the variable returns.

On the basis of corporate governance and any existing supplementary agreements, the relevant activities of companies, variable returns and the relationship between the ability to influence the relevant activities and the variable returns are analyzed.

Pursuant to IFRS 11, which governs the accounting of joint arrangements, a distinction is made between joint ventures and joint operations. In the case of joint ventures, the partners participate in the net assets of a jointly controlled, legally independent company on the basis of their shareholder status. In joint opera-

tions, the parties that have joint control of the arrangement have direct rights to the assets, and obligations for the liabilities, relating to the arrangement. This requirement is met, in particular, if the production of the joint arrangement is almost completely sold to the partners and the partners thereby secure the ongoing financing of the joint arrangement.

Companies whose corporate governance structures classify them as joint arrangements are analyzed to determine whether they meet the criteria for joint ventures or joint operations in accordance with IFRS 11. Should the arrangement be structured through a separate vehicle, its legal form, contractual arrangements and all other facts and circumstances are reviewed.

In addition to Wintershall Holding GmbH, the consolidated financial statements include all material subsidiaries in full, and one joint operation on a pro rata basis. Companies whose business is dormant or of low volume, and are of minor importance for the presentation of a true and fair view of the net assets, financial position and results of operations, are not consolidated, but rather are reported under "Other shareholdings". Due to the lack of market liquidity, these companies are carried at amortized cost and are written down in the event of an impairment. The aggregate assets and equity of these companies amount to less than 2.5% of the corresponding value at Group level.

Joint ventures and associated companies are accounted for using the **equity method** in the consolidated financial statements. Associates are defined as companies over which significant influence can be exerted over operating and financial policy and which are not subsidiaries, joint ventures or joint operations. In general, this applies to companies in which the Wintershall Group has an investment of between 20% and 50%. Equity-accounted income is reported as part of the result from operating activities (EBIT).

Methods of consolidation: The assets and liabilities of the companies included in the consolidated financial statements are recognized and measured uniformly in accordance with the principles described herein. In the case of companies accounted for using the equity method, material valuation differences resulting from the application of different accounting principles than those that apply to Wintershall are adjusted.

Transactions between consolidated companies, as well as intercompany profits resulting from trade between consolidated companies, are eliminated in full; elimination is performed on a pro rata basis for joint operations. With regard to revenue, these are eliminated in full. Material intercompany profits are eliminated in the case of companies accounted for using the equity method.

Capital consolidation is conducted at the acquisition date according to the purchase method. Initially, all assets, liabilities and additional intangible assets that are to be capitalized are measured at fair value. The acquisition cost of the participating interests is then offset against the proportionate share of the newly measured equity. The resulting positive differences are capitalized as goodwill. Negative differences are reviewed once more before being recognized directly in the income statement.

The incidental acquisition costs associated with a business combination are recognized in "Other operating expenses".

Profit and loss transfer agreement: Wintershall Holding GmbH is a direct (10.29%) and also an indirect (89.71% as a subsidiary of BASF Handels- und Exportgesellschaft mbH) subsidiary of BASF SE, Ludwigshafen am Rhein. However, Wintershall only has one profit and loss transfer agreement which has been concluded with BASF Handels- und Exportgesellschaft mbH. The agreement was concluded in 2006 and can be terminated after a five-year term by giving one month's notice to the end of the fiscal year.

With regard to the third-party shares of WIGA Transport Beteiligungs-GmbH & Co. KG, the results are transferred to the shareholders via withdrawals.

Translation of foreign currency items: The acquisition costs of assets acquired in foreign currencies and the proceeds from sales in foreign currencies are calculated using the exchange rates prevailing at the time the transactions are posted. Receivables and liabilities in foreign currencies are valued at the exchange rates that apply on the balance sheet date. The translation-related changes in assets and liabilities are recognized in profit or loss and are generally reported under other operating expenses or income. The "Miscellaneous financial result" only shows the effects of microhedges on earnings.

Translation of annual financial statements in foreign currencies: Currency translation is based on the functional currency of the consolidated companies. For those companies whose functional currency is not the euro, amounts are translated into the reporting currency using the closing rate method: balance sheet items are translated into euros at the closing rates that apply on the balance sheet date, while expenses and income are translated at the average monthly rates and accumulated over the course of the year. The difference between the companies' equity converted at historical rates on the date of contribution or retention and their equity converted at closing rates on the balance sheet date is shown separately under "Other comprehensive income" (translation adjustment) in equity and is not recognized in profit or loss until the company is derecognized.

For some companies outside of the euro or US dollar area, the euro or US dollar is the functional currency. In these cases, the financial statements prepared in local currency terms are translated into the functional currency using the temporal method: all non-monetary assets, as well as the depreciation/amortization and equity attributable to them, are translated at the applicable transaction rate. All other balance sheet items are translated using the closing rates that apply on the balance sheet date, and all other income and expenses are translated at average monthly rates. The resulting translation differences are recognized in "Other operating income" or "Other operating expenses". If necessary, financial statements denominated in the functional currency are subsequently translated into the reporting currency using the closing rate method.

Selected exchange rates

€1 =	Closing rates		Average rates	
	Dec. 31, 2018	Dec. 31, 2017	2018	2017
Argentina (ARS)	43.07	22.64	32.97	18.74
UK (GBP)	0.89	0.89	0.88	0.88
Norway (NOK)	9.95	9.84	9.60	9.33
Russia (RUB)	79.72	69.39	74.04	65.92
USA (USD)	1.15	1.2	1.18	1.13

1.3 Accounting changes

➔ Accounting standards applied for the first time in 2018

IFRS 9 "Financial Instruments"

IFRS 9 "Financial instruments" was adopted by the European Union in the fourth quarter of 2016 and was applied by the Wintershall Group for the first time on January 1, 2018.

In particular, IFRS 9 contains new rules on classifying and measuring financial assets, fundamental changes regarding accounting for impairment losses on certain financial assets and revised rules on the recognition of hedging relationships. With regard to the measurement of financial instruments, IFRS 9 adheres to the previous standards of "amortized cost" and "fair value" and continues to distinguish between the recognition of changes in fair value through profit or loss and recognition directly in equity.

The classification and measurement of financial assets in accordance with IFRS 9 are based, on the one hand, on what is known as the cash flow condition (exclusively cash flows from interest and principal repayments), i.e. the specific structure of the contractually agreed cash flows from an individual financial asset. On the other hand, they also depend on the business model based on which portfolios of financial assets are managed.

Under IFRS 9, impairment losses on financial assets that are not measured at fair value through profit or loss are not recognized only when there is objective evidence of impairment, as is the case under IAS 39. Instead, impairments also have to be taken into account for expected credit losses. Their extent is determined, on the one hand, by the credit risk associated with a financial asset, but also by the change in its credit risk: if the credit risk of the financial asset has increased significantly since its initial recognition in the balance sheet, expected credit losses are generally recognized over the entire term of the asset. If, however, the credit risk has not increased significantly in the period mentioned, only the credit losses expected within the next twelve months are recognized as an impairment. Deviating from these requirements, the credit losses expected over the entire term are always recognized as an impairment, in accordance with the above-mentioned simplified approach, for example for receivables from leasing transactions and trade receivables.

IFRS 9 also contains new rules on the application of hedge accounting to better present an entity's risk management activities, particularly with regard to managing non-financial risks.

IFRS 9 was applied for the first time in the Wintershall Group in accordance with the modified retrospective method, i.e. without adjusting comparative information from previous periods, which is still presented in accordance with IAS 39.

At the Wintershall Group, the introduction of the cash flow condition led to a change in the subsequent measurement of other receivables measured at amortized cost in accordance with IAS 39. These are now measured in the balance sheet at fair value, unless the payments resulting from them relate exclusively to payments of interest and principal. Changes in the fair value of these other receivables are recognized in profit or loss in earnings after taxes.

In the case of the Wintershall Group, the recognition of impairment losses based on expected losses has a particular impact on the carrying amount of trade receivables. It also has an impact on the carrying amounts of other receivables that represent financial instruments. The following table shows the effects of the transition from IAS 39 to IFRS 9 on the carrying amounts as of December 31, 2017 by category of financial instrument:

Reconciliation of carrying amounts of financial assets

			Changes in € thou. due to				
IAS 39 as of Dec. 31, 2017	**Carrying amounts in € thou.**	**Measurement categories[1]**	**Changes in measurement category**	**Changes in measurement parameters**	**Carrying amounts in € thou.**	**IFRS 9 as of Jan. 1, 2018**	**Measurement categories[1]**
Participating interests	73,492	AfS	-	-	73,492	Participating interests	aFVTPL
Trade receivables	502,106	LaR	-	-1,108	500,998	Trade receivables	aAC
Derivatives	4,422	aFVTPL	-	-	4,422	Derivatives	aFVTPL
of which forward foreign exchange transactions	4,422	-	-	-	4,422	of which forward foreign exchange transactions	-
of which forward transactions on commodities	-	-	-	-	-	of which forward transactions on commodities	-
Loan and interest receivables	495,591	LaR	-	-900	494,691	Loan and interest receivables	aAC
Miscellaneous receivables and other assets	301,042	LaR	-	-372	300,670	Miscellaneous receivables and other assets	aAC
Cash and cash equivalents	110,326	LaR	-	-	110,326	Cash and cash equivalents	aAC
Total financial assets	**1,486,979**	-	**-**	**-2,380**	**1,484,599**	**Total financial assets**	-

[1] AfS: Available-for-Sale financial assets
aAC: at Amortized Cost
aFVTOCI: at Fair Value through Other Comprehensive Income
aFVTPL: at Fair Value through Profit or Loss
LaR: Loans and Receivables

Within the Wintershall Group, the credit risk associated with a financial asset is assessed both on the basis of internal estimates as part of the credit management process, and on the basis of external rating information relating to the counterparty concerned. The counterparty's credit risk is assumed to have increased significantly when its rating has been downgraded by a defined number of notches. The significance of the increase in credit risk is not reviewed for assets subject to the simplified approach.

The Wintershall Group calculates expected credit losses on a financial asset as the probability-weighted present value of the expected payment defaults. Three main parameters are taken into account in this regard: the probability of default of the counterparty, the loss rate in the event of counterparty default and the amount at risk of default. In cases involving receivables from banks, expected credit losses are determined primarily on the basis of default probabilities derived from credit default swaps for the counterparty concerned.

The effects of the changes in the impairment model on the impairments recognized in accordance with IAS 39 as of December 31, 2017 are shown in the following table. The main impairment losses affected were those recognized on financial assets classified as loans and receivables under IAS 39. The consideration of expected credit losses increased the impairment losses recognized. This was counteracted by the fact that IFRS 9 no longer requires impairments to be recognized due to transfer risks in certain countries, or staggered impairments depending on past due status.

Reconciliation of impairment losses on financial assets

€ thou.		Changes due to		
	Cumulative impairments as of Dec. 31, 2017 (in accordance with IAS 39)	Changes in measurement category	Changes in measurement parameters	Impairments as of Jan. 1, 2018 (pursuant to IFRS 9)
Available for sale	-	-	-	-
Held to maturity	-	-	-	-
Loans and receivables	75,341	-	2,380	77,721
Total impairment losses on financial assets	**75,341**	**0**	**2,380**	**77,721**

The Wintershall Group has elected to apply the provisions of IFRS 9 for hedge accounting on a prospective basis only as of January 1, 2018. This option does not apply to changes in the fair value component of options where only their intrinsic value is designated as a hedging instrument in a hedging relationship. In such cases, IFRS 9 requires changes in the fair value of the fair value component to be recognized in "Other comprehensive income" during the term of the hedge, and the cumulative amounts recognized in other comprehensive income to be reversed either as an adjustment to the cost of the hedged item or directly through profit or loss. In accordance with IAS 39, by contrast, the change in fair value of these fair value components was recognized directly in profit or loss.

Changeover effects resulting from the first-time application of IFRS 9 were recognized cumulatively in equity at the time of first-time application. Taking deferred taxes into account, the first-time application of IFRS 9 resulted in a reduction in equity of €810 thousand, which was attributable, in particular, to the increase in impairments on trade receivables and to a loan granted. The reclassification of earnings components recognized in "Other comprehensive income" under IAS 39 to retained earnings had no impact on the amount of equity.

The following table shows the effects of the first-time application of IFRS 9 on retained earnings and other comprehensive income:

First-time adoption effects of IFRS 9 on equity

€ thou.	
Effects on retained earnings	
Retained earnings and net retained profit as of Dec. 31, 2017 (before adoption of IFRS 9)	**3,213,450**
Changes in impairments relating to trade receivables	-1,108
Changes in impairments relating to other financial instruments	-1,272
Reclassifications to/from other comprehensive income	-
Deferred taxes on first-time adoption effects	+1,570
Retained earnings and net retained profit as of Jan. 1, 2018 (after adoption of IFRS 9)	**3,212,640**
Effects on other comprehensive income	
Other comprehensive income after tax, including non-controlling interests (before adoption of IFRS 9)	**-1,071,791**
Reclassification of retained earnings, change in measurement category	-
Reclassifications of retained earnings, other	-
Deferred taxes on first-time adoption effects	-
Other comprehensive income after tax, including non-controlling interests (after adoption of IFRS 9)	**-1,071,791**
First-time adoption effects of IFRS 9 on equity	**-810**

IFRS 15 "Revenue from Contracts with Customers"

IFRS 15 "Revenue from Contracts with Customers" was adopted by the European Union in the third quarter of 2016 and was applied by Wintershall Group for the first time on January 1, 2018.

Under IFRS 15, revenue is measured at the amount of the consideration that the entity expects to receive when the customer obtains control of the agreed goods and services and is able to obtain benefits from them. For the purposes of determining revenue recognition, the standard provides for a five-step system that includes the following steps:

Step 1: Determination of the relevant contract
Step 2: Identification of separate performance obligations in the contract
Step 3: Determination of the total consideration
Step 4: Allocation of total consideration to identified performance obligations
Step 5: Revenue recognition upon fulfillment of a performance obligation

The transfer of control can take place at a specific time or over a period of time. The performance obligations resulting from contracts with customers of the Wintershall Group are fulfilled, almost without exception, at a specific point in time. This is also assumed for ongoing gas deliveries, which are usually invoiced on a monthly basis.

The Wintershall Group transitioned to IFRS 15 as of January 1, 2018 using the modified retrospective method. Based on this method, the comparative information for 2017 is not adjusted and, in accordance with IFRS 15.C7, only contracts that had not yet been fulfilled at the time of initial application are taken into account. Contractual changes that occurred prior to first-time application (IFRS 15.C7 A(b)), did not have to be taken into account.

As part of the adoption of the new standard, new balance sheet items, "Contract assets" and "Contract liabilities", have to be introduced and reported separately if such goods or services have been provided or received by the Wintershall Group. In 2018, there were no corresponding "contract assets" or "contract liabilities" at any time.

The first-time application of the new standard did not lead to any changes in the presentation of the balance sheet or income statement. The adoption of the new standard did not result in any adjustments to retained earnings or the reported revenue either.

Improvements to IFRSs 2014-2016

IAS 28 clarifies that the election to measure an investment in an associate or a joint venture that is held by an entity that is a venture capital organization, or other qualifying entity, can be exercised differently for each investment. The short-term exemptions in IFRS 1, Appendix E (IFRS 1.E3 – E7) were also deleted for entities applying the IFRS for the first time. The changes have no effect on the Wintershall Group.

Amendments to IFRS 2 "Classification and Measurement of Share-based Payment Transactions"

The amendments deal with individual issues relating to the accounting treatment of cash-settled share-based payment transactions. The amendment relates to the determination of the fair value of obligations arising from share-based payments. Further provisions relate to the effects of tax withholdings on the classification of remuneration programs and the presentation of options with regard to the type of remuneration to be received or granted (cash or equity settlement). The amendments are to be applied to remuneration granted/amended in fiscal years beginning on or after January 1, 2018. The changes have no effect on the Wintershall Group.

Amendments to IFRIC 22 "Foreign Currency Transactions and Advance Consideration"

IFRIC 22 addresses a question relating to the application of IAS 21 "The Effects of Changes in Foreign Exchange Rates". The Interpretation clarifies the time at which the exchange rate is to be calculated for the translation of foreign currency transactions that include the receipt or payment of advance consideration. According to the standard, the exchange rate used for the translation of the underlying asset, income or expense is the exchange rate that applied on the date of initial recognition of the asset or liability resulting from the advance consideration. The changes have no effect on the Wintershall Group.

German Accounting Standards Committee (ASCG) Interpretation (IFRS) No. 4 "Accounting treatment of ancillary income tax payments" (*Bilanzierung ertragsteuerlicher Nebenleistungen*)

The interpretation addresses the recognition of ancillary tax payments within the meaning of section 3 (4) of the German Tax Code (AO) which relate to current income taxes within the meaning of IAS 12.5. The interpretation establishes the application of IAS 37 to ancillary tax payments within the meaning of section 3 (4) AO and the resulting consequences for the recognition, measurement and reporting of ancillary tax payments. Interest expenses/income in connection with income taxes in accordance with IAS 12.5 and tax penalties are therefore no longer reported in the Wintershall Group's tax result for the first time in 2018, but rather in its "Miscellaneous financial result" or "Other operating expenses". The change in presentation represents a change in methodology within the meaning of IAS 8. As the effects were not material, no prior-year figures were adjusted in accordance with IAS 8. The interpretation is effective for the first time for fiscal years beginning on or after January 1, 2018.

➔ IFRSs & IFRICs not yet to be taken into account – already endorsed in EU law

The effects of the IFRSs and IFRICs that did not yet come into force in 2018, but have already been adopted by the European Union, on the annual financial statements of the Wintershall Group were examined and are explained below.

IFRS 16 "Leases"

The IASB published the new leasing standard IFRS 16 on January 13, 2016. The rules and definitions of IFRS 16 will replace the contents of IAS 17, IFRIC 4, SIC-15 and SIC-27 in the future. The standard provides for an accounting model for the lessee in which all rights to use assets (right-of-use assets) and liabilities under leases are to be recognized in the balance sheet unless the lease term is twelve months or less or the asset is of low value. For lessors, the accounting model does not differ significantly from that provided for in IAS 17 "Leases", i.e. lessors continue to classify leases as finance or operating leases. The new standard was adopted by the European Union on October 31, 2017. IFRS 16 is mandatory for fiscal years beginning on or after January 1, 2019.

The Wintershall Group has largely completed its assessment of the effects on its consolidated financial statements and intends to make use of the exemption regulations in connection with leases with a term of up to twelve months and low-value assets. There will be no reassessment of lease agreements that were already in place as of December 31, 2018.

The Wintershall Group will generally apply a value limit of €5,000 for the purposes of identifying low-value assets. Nevertheless, a significant number of leases which currently represent operating leases will, in the future, be recognized in the balance sheet as right-of-use assets with corresponding liabilities. When the new standard is applied for the first time on January 1, 2019, the Wintershall Group will measure the lease liabilities from operating leases with a remaining term of more than twelve months at the present value of the remaining lease payments, taking into account the current incremental borrowing rate. The capitalized

right-of-use asset will be recognized in the same amount as the lease liability. Existing finance leases will continue unchanged.

The Wintershall Group introduced new software for data management and the valuation of lease agreements in which most lease agreements were recorded in 2018. On the basis of the available data, a simulation was carried out as of December 31, 2018 on which the following statements on the effects of IFRS 16 are based.

As well as increasing the total assets of the Wintershall Group by around €110 million, the amount disclosed in expenses associated with operating leases will change. As far as 2019 is concerned, the Wintershall Group expects to see amortization expenses of around €35 million for right-of-use assets and interest expenses of around €5 million for lease liabilities. In addition, the Wintershall Group's equity ratio is expected to decrease by around 1% due to the additional debt positions.

The Wintershall Group will report the interest portion from the compounding of lease liabilities in cash flow from operating activities, and the repayment portion in cash flow from financing activities. Lease payments in connection with short-term agreements, agreements involving low-value assets or variable services will be reported in cash flow from operating activities. For more information on leasing, see Note 26.

Amendments to IFRS 9 "Prepayment Features with Negative Compensation" (IFRS 9)

The adjustments relate to the assessment criteria relevant to the classification of financial assets. Financial assets with a negative prepayment penalty can be recognized, subject to certain requirements, at amortized cost or at fair value through other comprehensive income, instead of at fair value through profit or loss. The amendments are to be applied for the first time as of January 1, 2019. The changes have no effect on the Wintershall Group.

IFRIC 23 "Uncertainty over Income Tax Treatments"

IFRIC 23 supplements the provisions set out in IAS 12 regarding how to deal with uncertainty surrounding the income tax treatment of scenarios and transactions with regard to both current and deferred taxes. IFRIC 23 is effective for the first time for fiscal years beginning on or after January 1, 2019. The supplementary provisions have no material impact on the Wintershall Group.

Amendments to IAS 28 "Investments in Associates and Joint Ventures"

On October 12, 2017, the IASB published amendments to the accounting treatment of investments in associates and joint ventures. The amendments to IAS 28 clarify that IFRS 9 is to be applied to investments in associates or joint ventures that are not accounted for using the equity method. The amendment was adopted in EU law in the first quarter of 2019 and its application is mandatory as of January 1, 2019. The effects are described under "IFRS 9 – Financial Instruments" in this note.

➔ IFRSs and IFRICs not yet to be taken into account – subject to endorsement in EU law

The IASB has issued further amendments to standards and interpretations whose application is not yet mandatory and which have not yet been endorsed by the EU. These changes are not expected to have any material impact on the Wintershall Group's reporting. The Wintershall Group does not plan to apply the changes early.

Amendments to IFRS 10 and IAS 28 – "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"

The IASB published amendments to IFRS 10 and IAS 28 on September 11, 2014. The amendments address a known inconsistency between the provisions in IFRS 10 and those in IAS 28 (2011) in the event of the sale of assets to an associate or joint venture and/or the contribution of assets to an associate or joint venture.

Initial application of the amendments has been postponed for an indefinite period of time by the IASB.

Improvements to IFRSs 2015-2017

The "Annual Improvements to IFRSs (2015–2017)" amended four IFRSs.

IFRS 3 clarifies that, when an entity obtains control over a business operation in which it previously held an interest as part of a joint operation, the principles governing successive business combinations are to be applied. The interest previously held by the acquirer is to be remeasured.

IFRS 11 states that a company does not remeasure its previously held interest in a joint operation when it obtains joint control of the business.

IAS 12 was amended in such a way that a company is to account for all income tax consequences of dividend payments in the same way as the income on which the dividends are based.

Finally, IAS 23 states that if a company has generally borrowed funds to purchase qualifying assets, the costs associated with debt taken out specifically in connection with the qualifying assets are not to be included in the calculation of the capitalization rate until the asset is completed.

Subject to adoption into EU law, the amendments need to be applied for the first time in the first reporting period in a fiscal year starting on or after January 1, 2019.

Improvements to IAS 19 "Plan Amendment, Curtailment or Settlement"

The changes include the measurement of pension obligations in the event of plan amendment, curtailment and settlement on the basis of updated assumptions. After such an event, past service cost and any gains and losses are to be determined on the basis of existing actuarial assumptions and a subsequent comparison of the pension commitment before and after the change. Within the context of subsequent measurement, the periods before and after the plan amendment, curtailment or settlement are considered separately. Subject to adoption into EU law, the amendments need to be applied for the first time in the first reporting period in a fiscal year starting on or after January 1, 2019.

Conceptual Framework

The Conceptual Framework published on March 29, 2018 replaces the previous Conceptual Framework from 2010. Key changes relate, in particular, to the definition, recognition and measurement of assets and liabilities, as well as the distinction between the profit/loss for the period and other total comprehensive income. The amendments are to be applied as of January 1, 2020, subject to their endorsement in EU law.

Amendments to References to the IASB Conceptual Framework

The amendments relate to updated references to quotations from the Conceptual Framework. Subject to adoption into EU law, the amendments need to be applied for the first time in the first reporting period in a fiscal year starting on or after January 1, 2020.

Amendments to IFRS 3 “Business Combinations“

The amendment published on October 22, 2018 clarifies that a business includes a set of activities and assets that must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. Outputs are defined as the provision of goods and services to customers. The reference to cost reduction has been omitted. In addition, the new provisions also include an optional "concentration test", that permits a simplified assessment of what constitutes a business. The amended definition is to be applied to business combinations for which the acquisition date is January 1, 2020 or later.

Amendments to IAS 1 "Presentation of Financial Statements" and IAS 8 “Accounting Policies, Changes in Accounting Estimates and Errors”

The amendments published on October 31, 2018 create a uniform and more precise definition of the materiality of the information provided in financial statements, and supplement it to include corresponding examples. In this context, the definitions used in the Conceptual Framework, IAS 1, IAS 8 and IFRS Practice Statement 2 (Making Materiality Judgements) are harmonized. The amendments are to be applied as of January 1, 2020.

1.4 Accounting policies

➔ Oil and gas exploration

Exploration and production costs are accounted for using the successful efforts method. This method means that expenses for successful exploratory drilling, as well as successful and dry development wells, are capitalized.

An exploration well is a well located outside of an area with proven oil and gas deposits. A development well is a well which is sunk to the depth of a deposit of oil or gas within an area with proved reserves.

Exploratory drilling is generally reported under construction in progress until its success can be determined. When the presence of hydrocarbons is proved such that the economic development of the field is probable, the costs remain capitalized as suspended well costs. At least once a year, all suspended wells are assessed from an economic, technical and strategic viewpoint to see if development is still intended. If this is not the case, the capitalized expenses for the well concerned are written off. When economically viable reserves are proven, the exploration wells are reclassified as technical equipment and machinery when production starts.

Production costs include all costs incurred to operate, repair and maintain the well and the associated plant and ancillary equipment, as well as any associated depreciation.

The unit of production method is used to depreciate assets from oil and gas exploration at the field or deposit level. As a matter of principle, depreciation is calculated on the basis of production during the period in relation to the proven, developed reserves. Depreciation on producing fields is reflected in production costs, while depreciation on exploration potential is reflected in exploration costs. Impairment losses/reversals of impairment losses on other non-current assets are included in other operating income/expenses.

Exploration expenses include all costs connected with non-proven oil and gas deposits. They include costs for the exploration of areas with possible oil or gas reserves. Costs for geological and geophysical investigations are, as a matter of principle, reported under exploration expenses. In addition, this item includes impairment losses on capitalized expenses for exploration wells for which no reserves could be proven. Scheduled depreciation on successful exploration wells is part of the cost of conversion.

Expenses and income from the exploration, development and production phases of oil and gas concessions are often allocated based on defined formulae via exploration and production sharing agreements between the state and one or more development and production companies. The proceeds to which Wintershall is entitled under these contracts are reported as revenue.

The intangible asset from the marketing agreement for natural gas from the Yuzhno Russkoye natural gas field is amortized in accordance with Wintershall's share of the volume produced and marketed.

Intangible assets mainly comprise exploration and production rights. During the exploration phase, these are not subject to scheduled depreciation, but rather are tested annually for impairment. In the event of an economically successful strike, the rights are amortized using the unit-of-production method.

➔ Revenue recognition

Expenses and income from the exploration, development and production phases of oil and gas concessions are often allocated based on defined formulae via exploration and production sharing agreements between the state and one or more development and production companies. The proceeds due under these contracts are reported as revenue.

Revenue from contracts with customers is recognized when control of the goods or services is transferred to the customer in the amount of the consideration expected to be received by the Wintershall Group in exchange for the goods or services.

Services rendered to customers are invoiced on an ongoing basis and recognized as revenue accordingly.

If the consideration in a contract contains variable components, the Wintershall Group estimates the amount of consideration to which it is entitled in return for delivery of the goods to the customer. The variable consideration is estimated and is only recognized when it is highly probable that a significant reversal of the revenue will not occur when the related uncertainty regarding the variable consideration has been resolved. Expected rebates and other discounts are accrued based on the principles of item-by-item measurement to cover probable risks and other claims.

As it applies the simplification rule set out in IFRS 15, the Wintershall Group does not adjust the amount of the agreed consideration to reflect the effects of a material financing component if, on the contract start date, it is expected that the period between the transfer of the goods or services to the customer and the date on which the customer is expected to pay for those goods or services will be one year or less.

➔ Assets

Acquired intangible assets (excluding goodwill) with determinable useful lives are generally measured at cost less straight-line amortization. The useful life is measured based on the term of the underlying contract or the expected utilization of the intangible asset's economic benefits.

Impairment losses are recognized if the recoverable amount is less than the carrying amount. The recoverable amount is the higher of the fair value less costs to sell and value in use. The value in use is calculated on the basis of future cash inflows and outflows and the weighted average cost of capital after taxes, depending on tax rates and country risks. If the reasons for impairment no longer apply, the impairment loss is reversed up to the amount that would have arisen if no impairment loss had been recognized. Depending on the type of intangible asset, amortization is included in the cost of conversion, distribution costs, research and development expenses or other operating expenses.

Internally generated intangible assets are measured at their cost of conversion less scheduled amortization over the average useful life of the asset. Impairment losses are recognized if the net carrying amount of the asset exceeds its recoverable amount. In addition to directly attributable costs, the cost of conversion of internally generated intangible assets also includes an appropriate share of overheads.

Intangible assets of the WIHO Group mainly comprise exploration and production rights. During the exploration phase, these are not subject to scheduled depreciation, but rather are tested annually for impairment. In the event of an economically successful strike, the rights are amortized using the unit-of-production method.

The intangible asset from the marketing agreement for natural gas from the Yuzhno Russkoye natural gas field is amortized in accordance with Wintershall's share of the volume produced and marketed.

Emission rights: Certificates issued free of charge by the German Emissions Trading Authority (DEHSt) or a comparable authority in other countries are carried at zero in the balance sheet. Emission rights purchased on the market are capitalized at cost as intangible assets. The emissions caused give rise to the obligation to surrender emission rights. Purchased intangible assets are subsequently measured at market prices up to a maximum of the acquisition cost. In the event of a lower fair value on the balance sheet date, the asset is written down to this value.

Goodwill is only written down in the event of impairment. Goodwill is tested for impairment once a year and also if there is any indication of impairment. Impairment losses on goodwill are not reversed.

Property, plant and equipment is measured at cost, less depreciation over the average useful life and impairment losses. The revaluation method is not applied. Low-value assets are expensed in the year of acquisition.

In addition to directly attributable costs, the cost of conversion of internally generated assets includes an appropriate share of material and production overheads, as well as general administrative expenses for the areas involved in constructing the assets.

The costs of maintenance and repair in the ordinary course of business are recognized as an expense.

Movable and immovable fixed assets are largely depreciated using the straight-line method, with the exception of production licenses and plants, which are primarily depreciated based on use in accordance with the unit of production method. The estimated useful lives and depreciation methods of property, plant and equipment are based on historical values, plans and estimates. The depreciation methods, useful lives and residual values are reviewed at each balance sheet date. The weighted average depreciation periods were as follows:

Weighted average depreciation in years	2018	2017
Buildings and structural installations	29	32
Technical equipment and machinery	13	9
Operating equipment and other fixtures	7	6

Impairment losses are recognized if the recoverable amount is less than the carrying amount. Measurement is based on the fair value less costs to sell or the value in use. The value in use is calculated on the basis of future cash inflows and outflows and the weighted average cost of capital after taxes, depending on tax rates and country risks. The impairment is recognized in the amount of the difference between the previous carrying amount and the recoverable amount. If the reasons for impairment no longer apply, the impairment loss is reversed up to the amount that would have arisen if no impairment loss had been recognized.

Investment properties held to realize capital gains or rental income are immaterial. They are valued at the lower of fair value or acquisition cost less depreciation.

Leases: A lease is an agreement whereby the lessor conveys to the lessee the right to use an asset for an agreed period of time in return for a payment or series of payments. Leases are classified as operating leases or finance leases.

Assets subject to operating leases are not capitalized. The lease payments to be made are recognized in the income statement in the period they are incurred.

Leases can be embedded within other contracts. If separation is required under IFRS, the embedded lease is recorded separately from its host contract and each component of the contract is carried and measured in accordance with the applicable regulations.

Borrowing costs: Borrowing costs directly incurred as part of the acquisition, construction or production of a qualifying asset are capitalized as part of the acquisition cost or cost of conversion of that asset. A qualifying asset is an asset for which the time period necessary to make it ready for its intended use or sale is longer than one year. Borrowing costs are capitalized up to the date the asset is ready for its intended use. The borrowing costs were calculated based on a rate of 1.5% (previous year: 2.0%) and adjusted on a coun-

try-specific basis, if necessary. All other borrowing costs are recognized as an expense in the period in which they are incurred.

Investments accounted for using the equity method: The carrying amounts of these companies are increased/reduced annually based on the pro rata share of net income, dividends and other changes in equity. Should there be indications of a reduction in the value of an investment that is not only temporary, an impairment is recognized in the income statement.

Inventories are measured at acquisition cost or cost of conversion based on the average-value method. If the stock market/market price or the fair value of the sales products, which are based on the net realizable values, is lower, then the sales products are written down to this lower value. The net realizable value is the price that can be achieved in the ordinary course of business less the estimated costs of completion and distribution that will be incurred up until the time of sale.

In addition to direct costs, cost of conversion includes an appropriate allocation of production overhead costs based on normal utilization rates of the production plants concerned, provided that they are related to the production process. Company retirement provision, social facilities within the company and voluntary social benefits provided by the company are also included, as are allocations for general administrative costs, provided they relate to production. Borrowing costs are not included in cost of conversion.

Inventories can be written down if the prices for the sales products decline, or in cases of a high rate of days of sales in inventories (DSI). Write-downs on inventories are reversed if the reasons for them no longer apply.

➔ Taxes

In the Wintershall Group, taxes incurred are reported from an economic perspective and are shown as liabilities to the parent company, BASF SE, whose taxable entity includes the German group companies, on the basis of the allocation agreements.

Deferred taxes: Deferred taxes are recognized for temporary differences between the IFRS and tax balance sheets, as well as for tax loss carryforwards and unused tax credits. This also comprises temporary differences arising from business combinations, with the exception of goodwill. Deferred tax assets and liabilities are calculated using the country-specific tax rates applicable for the period in which the asset is realized or the liability settled. Tax rate changes enacted or substantively enacted on or before the balance sheet date are taken into consideration.

Deferred tax assets are offset against deferred tax liabilities provided they are related to the same tax authority and have the same maturities. Surpluses of deferred tax assets are only recognized provided that the tax benefits are likely to be realized. The valuation of deferred tax assets is based on the probability of a reversal of the valuation differences and the assessment of the ability to utilize tax loss carryforwards and unused tax credits. This depends on whether future taxable profits will arise during the period in which temporary differences are reversed and in which tax loss carryforwards and unused tax credits can be claimed. The valuation of deferred tax assets is based on internal projections of the future earnings of the group company concerned.

Changes in deferred taxes in the balance sheet are recognized as deferred tax expense/income if the underlying transaction is not to be recognized directly in equity or in income and expenses recognized in equity. For those effects which have been recognized in equity, changes to deferred tax assets and tax liabilities are also recognized directly in equity.

➔ Financial instruments

Financial assets and financial liabilities are recognized in the consolidated balance sheet when Wintershall becomes a party to a financial instrument. Financial assets are derecognized when Wintershall no longer has a contractual right to the cash flows from the financial asset or when the financial asset is transferred together with all material risks and rewards of ownership. Financial liabilities are derecognized when the contractual obligations expire, are discharged or canceled. Regular-way purchases and sales of financial instruments are accounted for using the settlement date as a general rule.

The fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. If pricing on an active market is available, for example in the form of share prices, these are used as the basis for the measurement. Otherwise, the measurement is based on internal measurement models using current market parameters or external measurements, for example, from banks. These internal measurements predominantly use the net present value method and option pricing models.

The Wintershall Group has been applying IFRS 9 since January 1, 2018. Except for financial assets measured at fair value through profit or loss, this requires the recognition of impairments for expected credit losses, independent of whether there are any actual default events, and specific valuation allowances if there is evidence of a permanent need for impairment. If this evidence no longer exists, the impairment is reversed in the statement of income up to the carrying amount of the asset had the default event not occurred. Valuation allowances are generally recognized in separate accounts.

The classification and measurement of financial assets are based, on the one hand, on what is known as the cash flow condition (exclusively cash flows from interest and principal repayments), i.e. the specific structure of the contractually agreed cash flows from an individual financial asset. On the other hand, they also depend on the business model based on which portfolios of financial assets are managed. Based on these two criteria, the Wintershall Group uses the following measurement categories for financial assets:

– **Financial assets recognized at fair value through profit or loss** include all financial assets whose cash flows are not solely payments of principal and interest in accordance with the cash flow condition established in IFRS 9. Within the Wintershall Group, derivatives are allocated to this measurement category, for example. The Wintershall Group does not generally exercise the fair value option in IFRS 9, which permits the allocation of financial instruments not to be measured at fair value through profit or loss on the basis of the cash flow condition or the business model criterion to the above category under certain circumstances.

– **Financial assets measured at amortized cost** include all assets with contractual terms that give rise to cash flows on specific dates, provided that these cash flows are solely payments of principal and interest on the principal amount outstanding in accordance with the cash flow condition in IFRS 9, to the extent that the asset is held with the intention of collecting the expected contractual cash flows over its term. Within the Wintershall Group, this measurement category includes trade receivables, for example, as well as receivables reported under "Miscellaneous receivables and other assets".

Initial measurement of these assets is generally at fair value, which usually corresponds to the transaction price at the time of acquisition. Subsequent measurement effects are recognized in income using the effective interest method.

Impairments are recognized for expected credit losses in both initial and subsequent measurement, even before the occurrence of any default event. If the counterparty is considered as having defaulted, a specific

valuation allowance is generally recognized for the financial assets measured at amortized cost. In addition, a valuation allowance must be recognized when the contractual conditions that form the basis for the receivable are changed through renegotiation in such a way that the present value of the future cash flows decreases. Their extent of expected credit losses is determined, on the one hand, by the credit risk associated with a financial asset, but also by the change in its credit risk: if the credit risk of the financial asset has increased significantly since its initial recognition in the balance sheet, expected credit losses are generally recognized over the entire term of the asset. If, however, the credit risk has not increased significantly in the period mentioned, only the credit losses expected within the next twelve months are recognized as an impairment. By contrast, under the simplified approach for determining expected credit losses permitted by IFRS 9, impairments for receivables such as lease receivables and trade receivables always cover the lifetime expected credit losses of the receivable concerned.

Within the Wintershall Group, the credit risk associated with a financial asset is assessed both on the basis of internal information and on the basis of external rating information relating to the counterparty concerned. The counterparty's credit risk is assumed to have increased significantly when its rating has been downgraded by a defined number of notches. The significance of the increase in the credit risk is not reviewed for trade receivables or lease receivables. Furthermore, it is generally assumed that the credit risk for a counterparty with a high credit rating will not have increased significantly.

Regional and, in certain circumstances, industry-specific factors and expectations are taken into account when assessing the need for a valuation allowance as part of the calculation of expected credit losses and specific valuation allowances. In addition, Wintershall uses internal and external ratings and the assessments of debt collection agencies and credit insurers, when available. Specific valuation allowances are also based on experience relating to customer solvency and customer-specific risks. Factors such as credit insurance, which covers a portion of receivables measured at amortized cost, are likewise considered when calculating valuation allowances. Bank guarantees and letters of credit are used to an immaterial extent. Expected credit losses and specific valuation allowances are only calculated for those receivables that are not covered by insurance or other collateral. The valuation allowances for receivables whose insurance includes a deductible are not recognized in excess of the amount of the deductible.

A decrease in valuation allowances due, for example, to a reduction in the credit risk of a counterparty or an objective event occurring after the valuation allowance is recorded in profit or loss. Reversals of valuation allowances may not exceed amortized cost, less any expected future credit losses.

- **Financial liabilities that are measured at amortized cost** generally include all financial liabilities, provided these do not represent derivatives. They are generally measured at fair value at the time of initial recognition, which usually corresponds to the value of the consideration received. Subsequent measurement is recognized in profit or loss at amortized cost using the effective interest method. Within the Wintershall Group, liabilities to banks reported under financial liabilities, for example, are measured at amortized cost.
- Financial liabilities recognized at fair value through profit or loss contain derivative financial liabilities. These are likewise measured at the value of the consideration received as the fair value of the liability on the date of initial recognition. The latter also represents the measurement basis for these liabilities in subsequent measurement. The option to subsequently measure financial liabilities at fair value is not exercised.

Derivative financial instruments can be embedded within other contracts, creating a hybrid financial instrument. If IFRS requires separation, the embedded derivative is accounted for separately from its host contract and measured at fair value. If IFRS 9 does not provide for separation, the hybrid instrument is accounted for at fair value in its entirety.

Financial guarantees of the Wintershall Group are contracts that require compensation payments to be made to the guarantee holder if a debtor fails to make payment when due under the terms of a transaction entered into with the holder of the guarantee. Financial guarantees issued by the Wintershall Group are measured at fair value upon initial recognition. In subsequent periods, these financial guarantees are carried at the higher of amortized cost or the best estimate of the present obligation as of the reporting date.

The Wintershall Group applied IAS 39 in the 2017 fiscal year. It required recognition of an impairment loss if there was evidence of a permanent impairment of a financial instrument not measured at fair value through profit or loss. If the reason for the impairment of loans and receivables, as well as held-to-maturity financial instruments ceased to exist, the impairment was reversed up to the amortized cost and recognized in the income statement. Impairments on financial instruments were recognized in separate accounts.

Financial assets and liabilities were divided into the following measurement categories:

- **Financial assets and liabilities at fair value recognized in the income statement** consisted of derivatives and other trading instruments. At Wintershall, this measurement category included derivatives only. Derivatives were reported in "Miscellaneous receivables and other assets" or "Miscellaneous liabilities". Wintershall did not make use of the fair value option under IAS 39. The calculation of fair values was based on market parameters or measurement models based on such parameters. In some exceptional cases, the fair value was calculated using parameters that are not observable on the market.
- **Loans and receivables** comprised financial assets with fixed or determinable payments which were not quoted on an active market and were not derivatives or classified as available-for-sale. This measurement category included trade receivables, as well as other receivables and loans reported under "Miscellaneous receivables and other assets". Initial measurement was at fair value, which generally corresponded to the nominal value of the receivable or loan. Interest-free and low-interest long-term loans and receivables were recorded at present value. Subsequent measurement recognized in income was generally at amortized cost using the effective interest method. If there was objective evidence for an impairment of a receivable or loan, a specific valuation allowance was recognized. When assessing the need for a valuation allowance, regional and sector-specific conditions were considered. In addition, Wintershall used internal and external ratings, as well as the assessments of debt collection agencies and credit insurers, when available. Valuation allowances were only recognized for those receivables not covered by credit insurance or other collateral. The valuation allowances for receivables whose insurance included a deductible were not recognized in excess of the amount of the deductible. Write-downs were based on historical values relating to customer solvency and the age, period overdue, insurance policies and customer-specific risks. In addition, a valuation allowance had to be recognized when the contractual conditions forming the basis for the receivable were changed through renegotiation in such a way that the present value of the future cash flows decreased. If the contractual amendment was material, the old asset was derecognized and a new asset recognized.

  If, in a subsequent period, the amount of the impairment decreased, and the decrease could be objectively attributed to an event occurring after the valuation allowance was made, it was reversed in the income statement. Reversals of valuation allowances did not exceed amortized cost. Loans and receivables were derecognized when they were found to be uncollectible with definitive effect.
- **Held-to-maturity financial assets** consisted of nonderivative financial assets with fixed or determinable payments and a fixed term, for which there was the intent and ability to hold until maturity, and which did not fall under other measurement categories. They were initially recognized at fair value, which corresponded to the nominal value in most cases. Subsequent measurement was at amortized cost using

the effective interest method. Wintershall did not have any material financial assets that fell under this category.

- **Available-for-sale financial assets** comprised financial assets that were not derivatives and did not fall under any of the above valuation categories. This measurement category comprised shareholdings reported under the item "Other financial investments", which were not accounted for using the equity method, as well as current and non-current securities. Measurement was at fair value. Changes in fair value were initially recognized in OCI and were only recognized in the income statement when the assets had been disposed of or impaired. Subsequent reversals were generally recognized directly in equity (Other comprehensive income). In the case of debt instruments only, reversals were recognized in the income statement up to the amount of the original impairment; reversals above this amount were recognized directly in equity. If the fair value of available-for-sale financial assets fell below acquisition costs, the assets were impaired if the decline in value was considered permanent or was significant. The fair values were determined using market prices. Shareholdings whose fair value could not be reliably determined were carried at cost and written down in the case of impairment. This category included investments in other shareholdings, provided that these shares were not publicly traded. There were no plans to sell significant shares in these shareholdings.
- **Financial liabilities measured at amortized cost** were measured at fair value upon initial recognition. This amount usually corresponded to the amount received. Subsequent measurement was at amortized cost using the effective interest method.
- **Cash and cash equivalents** consisted primarily of cash-in-hand and bank balances with maturities of less than three months.

Derivative financial instruments can be embedded within other contracts. If IFRS requires separation, the embedded derivative was accounted for separately from its host contract and measured at fair value.

Revenue from interest-bearing assets is recognized according to the outstanding receivables as of reporting date using the effective interest method. Dividend income from participations not accounted for under the equity method are recognized when the legal right to receive payment is established.

➔ Other comprehensive income

The expenses and income shown in other comprehensive income are divided into two categories: Items that will be recognized in the income statement in the future (known as "recycling") and items that will not be reclassified to the income statement in the future. The first category includes translation adjustments, changes in the fair value of derivatives held to hedge future cash flows and net investments in foreign operations. Items in other comprehensive income that will not be reclassified to the income statement at a future date include effects from the remeasurement of defined benefit plans.

➔ Liabilities

Provisions for pensions and similar obligations: Provisions for pensions are calculated on an actuarial basis in accordance with the projected unit credit method using assumptions relating to the following valuation parameters, among others: future developments in salaries, pensions and inflation, staff turnover and the life expectancy of beneficiaries. Obligations are discounted based on the market yields on high-quality corporate fixed-rate bonds rated between "AA" to "AA+".

Actuarial expert opinions are used to calculate the amount of pension provisions.

Actuarial gains and losses from changes in estimates relating to the actuarial assumptions used to calculate defined benefit obligations, the difference between standardized and actual returns on plan assets, as well as the effects of the asset ceiling are recognized directly in equity as other comprehensive income.

Other provisions: Other provisions are set up when there is a present obligation as a result of a past event and when there is a probable outflow of resources whose amount can be reliably estimated. Provisions are recognized at the probable settlement value.

Provisions for German trade income tax, German corporate income tax and similar income taxes are calculated and recognized based on the expected taxable income of the consolidated companies less any prepayments that have been made. Other taxes to be assessed are considered accordingly.

Provisions are set up for certain environmental protection measures and risks if there is a present legal or constructive obligation arising from a past event, and the expected cash outflow can be estimated with sufficient reliability.

Provisions for the filling of wells and the removal of production facilities upon the termination of production (restoration obligations) are set up for the first time when the facility is commissioned at the present value of the future restoration costs. Discounting to the present value is based on the country-specific/currency-specific market interest rate that applies on the balance sheet date in question. An asset of the same value is capitalized as part of the carrying amount of the plant concerned and together they are depreciated. Interest on the provision is accrued annually until the time of the planned restoration. The financing costs resulting from the accrued interest in subsequent periods are recognized under "Miscellaneous financial result".

Provisions are recognized for expected severance payments or similar personnel expenses, as well as for demolition or closure expenses related to restructuring measures that have been planned and publicly announced by management.

Provisions for long-service and anniversary bonuses are predominantly calculated based on actuarial principles. For contracts signed under phased-in early retirement programs, approved supplemental payments are accrued in installments until the end of the period in which the employee is released from his/her duties at the latest. Accounting and measurement follow the German Accounting Standards Committee's Implementation Guidance 1 (IFRS) dated December 2012.

Other provisions also cover risks resulting from legal disputes and proceedings, provided the criteria for recognizing a provision are fulfilled. In order to determine the amount of the provisions, the company takes into consideration the facts related to each case, the size of the claim, claims awarded in similar cases and independent expert advice, as well as assumptions regarding the probability of a successful claim and the range of possible claims. Actual costs can deviate from these estimates.

➔ Other accounting policies

Business combinations: In business combinations, the acquired assets and liabilities are recognized at fair value on the date the acquirer effectively obtains control for the first time. The fair value of acquired assets and assumed liabilities at the date of acquisition, as well as the useful lives of the acquired assets, are determined on the basis of assumptions. Measurement is largely based on projected cash flows. Actual cash flows can deviate significantly from those. Independent external appraisals are used for the purchase price allocation of material business combinations. Valuations in the course of business combinations are based on existing information as of the acquisition date.

➔ Use of estimates and assumptions in preparing the consolidated financial statements

The carrying amount of assets, liabilities and provisions, contingent liabilities and other financial obligations reported in the consolidated financial statements depends on the use of estimates, assumptions and use of discretionary scope. Specific estimates or assumptions used in individual accounting policies are disclosed in the respective sections. They are based on the circumstances and estimates on the balance sheet date and thus affect the amounts of income and expenses shown for the fiscal years presented. These assumptions primarily relate to the determination of discounted cash flows in the context of impairment tests and purchase price allocations, the useful lives of property, plant and equipment and intangible assets, the carrying amount of shareholdings and the measurement of provisions for items such as pension benefits, warranties, price discounts, environmental protection or taxes. The calculation of provisions for restoration obligations (under mining law) essentially requires assumptions and estimates regarding maturities, exchange rates, costs to be taken into account and discount rates. The assumptions are reviewed on a regular basis. Although uncertainty is given appropriate consideration when calculating values, actual results can differ from these estimates.

The assumptions regarding the long-term development of oil and gas prices are significant for the impairment tests. This is particularly relevant for plant (oil and gas fields) and goodwill. The company's in-house forecasts are based on empirically sound analyses of global oil and gas supply and global oil and gas demand. Short-term estimates for periods of up to three years also take current price quotations or forward transactions into account. Long-term estimates also include assumptions on inflation, production volumes and costs, as well as energy efficiency and substitution of energy sources. Oil and gas price estimates are regularly checked for plausibility on the basis of external sources and studies.

As far as 2019 is concerned, Wintershall projects an average oil price of US$70/bbl (Brent) and a gas price of around €19.49/MWh (around US$6.85/mmBtu).

In line with global economic growth, demand for oil and gas will continue to rise. Higher marginal production costs and the current reluctance to invest should lead to a significant increase in prices in the medium and long term. Due to what are currently high oil inventories and assumptions of a higher oil supply from the US in the longer term, the oil price scenario has been adjusted compared to the previous year and is now based on the assumption that an oil price of around US$100 will only be achieved again in 2022. The WIHO Group's gas price scenario assumes only a moderate increase in European gas prices in the coming years due to excess capacity in gas liquefaction (LNG). Based on this scenario, a significant increase to around €30/MWh (around US$11/mmBTU) is expected by 2025 due to the further increase in demand for natural gas and the higher costs associated with new production and liquefaction projects.

Impairment tests on assets are carried out whenever certain triggering events indicate potential impairment. External triggering events include, for example, changes in oil and gas prices and in the estimated reserves. Changes in production processes or physical damage to assets constitute internal indicators of impairment.

Impairment tests are based on a comparison of the amortized carrying amount and the recoverable amount of the assets. The recoverable amount is the higher of fair value less costs to sell and the value in use. As a rule, value in use is determined using the discounted cash flow method. The estimation of cash flows and the assumptions used consider all information available on the balance sheet date on the future development of the operating business. Actual future developments may vary from these estimates. Impairment testing relies upon the cash-generating unit’s long-term earnings forecasts, which are based on macroeconomic trends. The forecasts for the market prices of oil and gas, as well as the weighted average cost of

capital (WACC) based on the capital asset pricing model play an important role in impairment testing. Its components comprise a risk-free rate, the market risk premium and the spread for the credit risk.

Impairment losses are recognized if the recoverable amount is less than the carrying amount. The impairment relating to the asset (excl. goodwill) is recognized in the amount of the difference between the previous carrying amount and the recoverable amount.

The goodwill impairment test is based on cash-generating units. At Wintershall, these correspond to the operating segments. If there is a need for a valuation allowance, the existing goodwill is, if necessary, completely written off as a first step. If there is further need for a valuation allowance, this is allocated to the remaining assets of the cash-generating unit. Goodwill impairments are reported under "Other operating expenses".

2. Scope of consolidation

2.1 Changes in the scope of consolidation

In 2018, a total of 18 companies (16 companies in 2017) were included in the consolidated financial statements. Two of these companies (Wintershall do Brasil Exploração e Produção Ltda and Gullfaks AS) were included in the scope of consolidation for the first time.

In the same period of 2017, one company was included in the scope of consolidation for the first time, while one company left the consolidated group as a result of a merger.

Although Wintershall does not hold the majority of the shares in ZAO Gazprom YRGM Trading, it is entitled to the company's results on the basis of the profit distribution agreements, meaning that the company is fully consolidated in the consolidated financial statements.

The list of companies included in the consolidated financial statements and the total shareholdings in accordance with section 313 (2) HGB is shown in the list of shareholdings.

Scope of consolidation	Europe	of which: Germany	Russia	South America
As of Jan. 1	**13**	**8**	**2**	**1**
of which proportionately consolidated	-	-	1	-
First-time consolidations	1	-	-	1
of which proportionately consolidated	-	-	-	-
Deconsolidation	-	-	-	-
of which proportionately consolidated	-	-	-	-
As of Dec. 31	**14**	**8**	**2**	**2**
of which proportionately consolidated	-	-	1	-

Overview of impact of changes to the scope of consolidation (excluding acquisitions and divestitures)

	2018		**2017**	
	€ thou.	**%**	**€ thou.**	**%**
Revenue	**945**	**0.0**	**2,034**	**0.1**
Non-current assets	99,215	0.8	343,590	2.9
of which property, plant and equipment	64,990	1.0	151	0
Current assets	14,562	1.1	15,443	1.6
of which cash and cash equivalents	6,185	2.8	188	0.2
Assets	**113,777**	**0.8**	**359,033**	**2.8**
Equity	-13,457	0.4	11,267	0.4
Non-current liabilities	8,885	0.2	108	0.0
Current liabilities	6,125	0.1	117	0.0
Capital	**1,553**	**0.0**	**11,492**	**0.1**

2.2 Joint operations

A large part of the activities in the Exploration & Production business area are carried out in the context of joint operations which are not managed in separate companies. These are mainly activities in Germany, Norway and Argentina. These are generally accounted for as joint operations in accordance with IFRS 11.

The proportionately consolidated joint operation relates to AO Achimgaz, Novy Urengoy/Russia, which is operated jointly with Gazprom for the production of natural gas and condensate. Wintershall holds a 50% interest in the company and controls the company jointly with Gazprom. The company sells its products

exclusively to Gazprom, which ensures the company's ongoing financing. As a result, the company was classified as a joint operation within the meaning of IFRS 11.

2.3 Joint ventures and associated companies

➔ Significant joint ventures accounted for using the equity method

The main joint ventures accounted for using the equity method are W & G Infrastruktur Finanzierungs-GmbH, Kassel (50% interest) and Wintershall Noordzee B.V., Rijswijk/Netherlands (50% interest), both of which are operated with the partner Gazprom.

Financial information of W & G Infrastruktur Finanzierungs- GmbH, Kassel (Group)		
€ m	**Dec. 31, 2018**	**Dec. 31, 2017**
Balance sheet		
Non-current assets	1,553	1,181
Current assets	458	721
of which marketable securities, cash and cash equivalents	0	2
Assets	**2,011**	**1,902**
Equity	445	461
Non-current liabilities	1,393	1,342
thereof financial indebtedness	924	923
Current liabilities	173	99
thereof financial indebtedness	1	-
Capital	**2,011**	**1,902**
Statement of income		
Revenue	841	560
Depreciation and amortization	-121	-147
Interest income	-	1
Interest expenses	-10	-8
Income taxes	-14	-23
Net income for the year	99	114
Carrying amount according to the equity method as of the beginning of the year	**657**	**-**
Proportional net income for the year	49	57
Proportional change in other comprehensive income	**-**	**-**
Total comprehensive income	**49**	**57**
Capital measures/withdrawals/changes in the scope of consolidation/other adjustments	-57	608
of which withdrawals (includes profit transfer)	-57	-62
Other adjustments recognized in profit or loss	-19	-8
Carrying amount according to the equity method as of the end of the year	**630**	**657**

The figures also include the effects of the transfer of GASCADE Gastransport GmbH and NEL Gastransport GmbH to W & G Infrastruktur Finanzierungs-GmbH

Financial information of Wintershall Noordzee B.V. Rijswijk/Netherlands		
€ m	**Dec. 31, 2018**	**Dec. 31, 2017**
Balance sheet		
Non-current assets	1,082	1,148
Current assets	96	127
of which marketable securities, cash and cash equivalents	45	75
Assets	**1,178**	**1,275**
Equity	593	614
Non-current liabilities	528	594
thereof financial indebtedness	49	162
Current liabilities	57	67
Capital	**1,178**	**1,275**
Statement of income		
Revenue	197	149
Depreciation and amortization	-154	28
Interest expenses	-1	-2
Income taxes	30	46
Net loss (income) for the year	-14	157
Carrying amount according to the equity method as of the beginning of the year	**307**	**228**
Proportional net loss (income) for the year	-7	79
Total comprehensive income	**-7**	**79**
Capital measures/dividends/changes in the scope of consolidation/other adjustments	-3	-
of which dividends (includes profit transfer)	-3	-
Carrying amount according to the equity method as of the end of the year	**297**	**307**

➔ **Material associated companies accounted for using the equity method**

- OAO Severneftegazprom, Krasnoselkup/Russia (Wintershall's share 25%, economic participation 35%)

Financial information of OAO Severneftegazprom, Krasnoselkup/Russia		
€ m	**Dec. 31, 2018**	**Dec. 31, 2017**
Balance sheet		
Non-current assets	743	886
Current assets	204	196
of which marketable securities, cash and cash equivalents	75	109
Assets	**947**	**1,082**
Equity	696	791
Non-current liabilities	170	190
Current liabilities	81	101
thereof financial indebtedness	-	15
Capital	**947**	**1,082**
Statement of income		
Revenue	645	748
Depreciation and amortization	-70	-78
Interest income	6	13
Interest expenses	-7	-8
Income taxes	-11	-25
Net income for the year	45	88
Carrying amount according to the equity method as of the beginning of the year	**309**	**380**
Proportional net income for the year	13	34
Proportional change in other comprehensive income	-37	-28
Total comprehensive income	**-24**	**6**
Capital measures/dividends/changes in the scope of consolidation/other adjustments	-14	-77
of which dividends (includes profit transfer)	-14	-77
Carrying amount according to the equity method as of the end of the year	**271**	**309**

- Nord Stream AG, Zug/Switzerland (Wintershall's share 15.5%)

Financial information of Nord Stream AG, Zug/Switzerland (100%)		
€ m	**Dec. 31, 2018**	**Dec. 31, 2017**
Balance sheet		
Non-current assets	5,362	5,656
Current assets	801	696
of which marketable securities, cash and cash equivalents	226	337
Assets	**6,163**	**6,352**
Equity	2,471	2,258
Non-current liabilities	3,300	3,713
thereof financial indebtedness	2,979	3,311
Current liabilities	392	381
thereof financial indebtedness	379	19
Capital	**6,163**	**6,352**
Statement of income		
Revenue	1,074	1,076
Depreciation and amortization	-295	-293
Interest income	-	1
Interest expenses	-170	-181
Income taxes	-12	-15
Net income for the year	466	443
Carrying amount according to the equity method as of the beginning of the year	**366**	**322**
Proportional net income for the year	73	68
Proportional change in other comprehensive income	11	17
Total comprehensive income	**84**	**85**
Capital measures/dividends/changes in the scope of consolidation/other adjustments	-52	-41
of which dividends (includes profit transfer)	-52	-41
Carrying amount according to the equity method as of the end of the year	**398**	**366**

- Wintershall AG, Kassel, in which Libyan exploration and production activities are carried out jointly with Gazprom Libyen Verwaltungs GmbH (Wintershall's share 51%)

Financial information of Wintershall AG, Kassel (100%)		
€ m	**Dec. 31, 2018**	**Dec. 31, 2017**
Balance sheet		
Non-current assets	632	598
Current assets	231	241
of which marketable securities, cash and cash equivalents	1	3
Assets	**863**	**839**
Equity	190	190
Non-current liabilities	528	541
Current liabilities	145	108
Capital	**863**	**839**
Statement of income		
Revenue	154	152
Depreciation and amortization	-44	-34
Interest expenses	-	-3
Income taxes	45	-68
Net income for the year	-	8
Carrying amount according to the equity method as of the beginning of the year	**97**	**93**
Proportional net income for the year	-	4
Total comprehensive income	**-**	**4**
Carrying amount according to the equity method as of the end of the year	**97**	**96**

- Wintershall Wolga Petroleum GmbH, Kassel (Wintershall's share 100%)

Financial information of Wintershall Wolga Petroleum GmbH, Kassel (50% shareholder of Wolgodeminoil LLC)		
€ m	**Dec. 31, 2018**	**Dec. 31, 2017**
Balance sheet		
Non-current assets	13	26
Current assets	43	53
of which marketable securities, cash and cash equivalents	25	28
Assets	**56**	**79**
Equity	23	32
Non-current liabilities	3	3
Current liabilities	29	44
thereof financial indebtedness	15	21
Capital	**56**	**79**
Statement of income		
Revenue	76	68
General administrative expenses	-7	-7
Other interest and similar income	1	2
Income taxes	-5	-6
Net income for the year	16	15
Carrying amount according to the equity method as of the beginning of the year	**30**	**38**
Proportional net income for the year	18	15
Proportional change in other comprehensive income	-6	-2
Total comprehensive income	**12**	**13**
Capital measures/dividends/changes in the scope of consolidation/other adjustments	-15	-21
of which dividends (includes profit transfer)	-15	-21
Carrying amount according to the equity method as of the end of the year	**27**	**30**

The joint stock company Achim Trading, Moscow/Russia (Wintershall's share 18.01%, economic participation 25.01%, partner Gazprom), is used to market the production of blocks IV/V of the Achimov Formation. The investment carrying amount of €768 million, unchanged as against the previous year, resulted from the fair value measurement following the exchange of assets with Gazprom as of September 30, 2015. The company will not commence its economic activity until the start of production of blocks IV/V, which is scheduled for 2020. As a result, no relevant financial information has to be presented for 2018 in accordance with IFRS 12.

2.4 Acquisitions and divestitures

➔ Acquisitions

Ghasha Concessions United Arab Emirates

On November 25, 2018, Wintershall Middle East GmbH signed an accession agreement to the concession agreement with the Abu Dhabi National Oil Company (ADNOC) and the Supreme Petroleum Council of the United Arab Emirates to acquire a 10% stake in the Ghasha concession in the United Arab Emirates. This acquisition will allow the Wintershall Group to further expand its activities in Abu Dhabi. The purchase price of $151.2 million had not been allocated to the acquired assets and liabilities by the time the consolidated financial statements were prepared.

Wintershall DEA merger

In September 2018, BASF and LetterOne signed a binding agreement to merge their respective oil and gas businesses. The joint venture will operate under the name Wintershall DEA. In the medium term, BASF and LetterOne are aiming for an initial public offering of Wintershall DEA. The transaction is likely to be concluded in the first half of 2019. Up until this date, Wintershall and DEA will continue to operate as independent companies. The merger will be completed by LetterOne transferring all its shares in DEA Deutsche Erdöl AG to Wintershall Holding GmbH and receiving new shares from the latter. The company will then be renamed Wintershall DEA and will have its head offices in Kassel and Hamburg. BASF's share in Wintershall DEA's ordinary shares will initially be 67%, with LetterOne to hold a stake of 33%. These shares reflect the value of the respective exploration and production activities of Wintershall and DEA. In order to reflect the value of Wintershall's gas transport business, BASF will receive additional preferential shares. These preference shares are to be converted into ordinary shares in Wintershall DEA no later than 36 months after the merger and in any event before the IPO. This will increase BASF's stake in Wintershall DEA to 72.7%.

➔ **Divestitures**

Argentina

At the beginning of 2018, Wintershall reduced its stake in the block Aguada Pichana Este (East) by selling its shares in Total Austral S.A., Buenos Aires/Argentina.

3. List of shareholdings of the Wintershall Group pursuant to section 313 (2) HGB

The list of companies included in the consolidated financial statements and the total shareholdings in accordance with section 313 (2) HGB is shown in the list of shareholdings below. The information on the exemption of subsidiaries from accounting and disclosure requirements is part of the audited 2018 consolidated financial statements of BASF SE, which are filed in the electronic Federal Gazette (*Bundesanzeiger*).

I. Companies fully and proportionately consolidated in the consolidated financial statements and included using the equity method

1. Fully consolidated subsidiaries

Company	Registered office	Share of capital (%)
Europe		
Wintershall Holding GmbH	Kassel	100.00
E & A Internationale Explorations- und Produktions-GmbH	Kassel	100.00
WIGA Transport Beteiligungs-GmbH & Co. KG	Kassel	50.02
W & G Transport Holding GmbH	Kassel	49.97
Untertage-Speicher-Gesellschaft mbH	Kassel	100.00
Wintershall Vermögensverwaltungsgesellschaft mbH	Kassel	100.00
Wintershall Middle East GmbH	Kassel	100.00
OPAL Gastransport GmbH & Co. KG	Kassel	49.97
Wintershall Nederland Transport & Trading B.V.	Rijswijk, Netherlands	100.00
Wintershall Oil AG	Zug, Switzerland	100.00
Wintershall Nederland B.V.	Rijswijk, Netherlands	100.00
Wintershall Petroleum (E&P) B.V.	Rijswijk, Netherlands	100.00
Wintershall Norge AS	Stavanger, Norway	100.00

Gullfaks AS	Stavanger, Norway	100.00
Russia		
ZAO Gazprom YRGM Trading	Krasnoselkup, Russian Federation	25.00 [1]
South America		
Wintershall Energía S.A.	Buenos Aires, Argentina	100.00
Wintershall do Brasil Exploração e Produção Ltda	Rio de Janeiro, Brazil	100.00

1) Fully consolidated in accordance with IFRS 10

2. Proportionately consolidated joint operations

Company	Registered office	Share of capital (%)
Russia		
AO Achimgaz	Novy Urengoy, Russian Federation	50.00

3. Joint ventures accounted for using the equity method

Company	Registered office	Share of capital (%)
Europe		
Wintershall Noordzee B.V.	Rijswijk, Netherlands	50.00
W & G Infrastruktur Finanzierungs-GmbH	Kassel	49.97

4. Associated companies accounted for using the equity method

Company	Registered office	Share of capital (%)
Europe		
Wintershall Wolga Petroleum GmbH (50% shareholder of Wolgodeminoil LLC)	Kassel	100.00
NEL Gastransport GmbH	Kassel	49.97
Wintershall AG	Kassel	51.00
GASCADE Gastransport GmbH	Kassel	49.97
Nord Stream AG	Zug, Switzerland	15.50 [2]
Russia		
Limited Liability Company Achim Development	Novy Urengoy, Russian Federation	25.01
OAO Severneftegazprom	Krasnoselkup, Russian Federation	25.00 [3]
Joint Stock Company Achim Trading	Moscow, Russian Federation	18.01 [2]

2) Wintershall exerts a significant influence over financial and corporate policy
3) Share of results totals 35% via an additional preference share

II. Investees not included due to minor significance

1. Subsidiaries not consolidated due to minor significance

Company	Registered office	Share of capital (%)
Europe		
Wintershall Libyen Oil & Gas GmbH	Kassel	100.00
Wintershall Exploration and Production International C.V.	Rijswijk, Netherlands	100.00
Wintershall Global Support B.V.	Rijswijk, Netherlands	100.00
Wintershall Russland GmbH	Kassel	100.00
Nordkaspische Explorations- und Produktions GmbH	Kassel	100.00
WIGA Verwaltungs-GmbH	Kassel	50.02
Wintershall Lenkoran GmbH	Kassel	100.00
OPAL Verwaltungs-GmbH	Kassel	49.97
AWIAG Limited	Birkirkara, Malta	100.00
South America		
Wintershall do Brasil Servicos Ltda.	Rio de Janeiro, Brazil	100.00
Wintershall BM-C-19 Ltda.	Rio de Janeiro, Brazil	100.00
Wintershall BM-ES-1 Ltda.	Rio de Janeiro, Brazil	100.00
Wintershall Chile Ltda.	Santiago de Chile, Chile	100.00

2. Joint venture not accounted for using the equity method due to minor significance

Company	Registered office	Share of capital (%)
Europe		
Erdgas Münster GmbH	Münster	28.76
Russia		
Limited Liability Company Joint Venture "Wolgodeminoil"	Volgograd, Russian Federation	50.00

Notes to the statement of income

4. Functional costs

Functional costs incurred by the operating functions are determined, based on the cost of sales method, on the basis of cost center accounting. In particular, functional costs include the personnel costs incurred by the final cost centers allocated, depreciation and amortization and the cost categories derived from cost and service allocations. Operating expenses that cannot be allocated to the functional costs are reported as other operating expenses

Cost of conversion

The cost of conversion includes all production and purchase costs of the company's own products, as well as merchandise, that have been sold in the period, particularly plant, energy and personnel costs.

Distribution costs

Distribution costs primarily include marketing and advertising costs, freight costs, packaging costs, distribution management costs, commission and licensing costs.

General administrative expenses

General administrative expenses primarily include the costs of the central units, the costs of managing business units and costs of general management and the Board of Directors.

Research and development costs

Research and development expenses include the costs resulting from research projects, as well as the necessary license fees for research activities.

5. Revenue

€ thou.	2018	2017
Own products	2,435,868	1,946,996
Merchandise	1,440,713	1,063,839
Commission	243,538	144,786
Other	587,084	506,083
Revenue	**4,707,203**	**3,661,704**

Other mainly includes services rendered.

6. Other operating income

€ thou.	2018	2017
Income from the translation of transactions denominated in foreign currencies	5,710	10,288
Reversals of impairment losses on non-current assets	-	165,020
Gains from the disposal of non-current assets	30,486	75,176
Income from refunds, compensation and settlement payments	44,209	110,013
Income from the adjustment and reversal of provisions recognized under other operating expenses.	7,398	2,879
Income from other non-typical transactions	11,835	10,270
Miscellaneous income	18,799	13,434
Other operating income	**118,437**	**387,080**

Income from the translation of transactions denominated in foreign currencies included income from the translation of companies for which the local currency differs from the functional currency.

In 2018, in contrast to 2017, there were no **reversals of impairment losses on non-current assets**. Accordingly, these amounted to €0 thousand (2017: €165,020 thousand).

Gains from the disposal of non-current assets amounted to €30,486 thousand, down by €44,690 thousand on 2017. They resulted from the sale of shares in oil and gas concessions in Argentina.

Income from refunds, compensation and settlement payments decreased by €65,805 thousand and was mainly based on compensation payments in Norway and Argentina.

Income from other non-typical transactions in the amount of €11,835 thousand (2017: €10,270 thousand) arose from the charging of internal services, from rental and lease agreements, as well as proceeds from the canteen area.

Miscellaneous income includes income from the reversal of provisions, reversals of value adjustments on receivables and bills of exchange, gains from other asset disposals – except financial investments and other income.

Income from the reversal of provisions mainly related to restoration and remediation, the BOP program (BASF share option program) and personnel obligations. Provisions are reversed or adjusted if circumstances on the balance sheet date indicate that they will no longer be used or will only be used in a reduced amount. In 2018, the figure includes income from the reversal of provisions for the BOP program in the amount of €5,076 thousand. In 2017, income from the BOP program amounted to €1,367 thousand.

7. Other operating expenses

€ thou.	2018	2017
Expenses from foreign currency and hedging transactions	121,262	143,008
Losses from commodity derivatives	26,909	-
Amortization, depreciation and impairments of non-current assets	191,219	82,693
Cost of production for other non-typical transactions	10,395	8,207
Expenses for project costs not requiring capitalization	18,292	22,539
Expenses from the addition of valuation allowances for trade receivables	9,296	10,310
Expenses for fees, charges, expenses and other services	18,693	27,771
Miscellaneous expenses	54,290	42,444
Other operating expenses	**450,356**	**336,971**

Expenses from foreign currency and hedging transactions fell from €143,008 thousand in 2017 to €121,262 thousand in 2018. The majority is attributable to expenses in Norway.

Losses from commodity derivatives resulted from pending gas purchase and supply agreements that were recognized for the first time in this reporting period.

Amortization, depreciation and impairments of non-current assets resulted from impairment losses in Norway relating exclusively to property, plant and equipment.

The cost of production for other non-typical transactions increased by €2,188 thousand compared to the previous year.

Expenses for project costs not requiring capitalization and **expenses from the addition of valuation allowances for trade receivables** remained on a par with 2017.

Expenses for fees, charges, expenses and other services arose primarily in Germany and were down by €9,078 thousand year-on-year.

Miscellaneous expenses included losses from other asset disposals (excluding financial investments) (€1,983 thousand; previous year: €544 thousand), additions to/the reversal of write-downs on inventories (€9,048 thousand; previous year: €1,338 thousand), the derecognition of inventories (€370 thousand; previous year: €332 thousand), structural measures, reorganization, closure costs (€7,284 thousand; previous year: €2,818 thousand), additions to BOP provisions (€2 thousand; previous year: €88 thousand), other tax expenses (€255 thousand; previous year: €110 thousand) and other expenses (€20,408 thousand; previous year: €30,935 thousand).

8. Income from companies accounted for using the equity method

€ thou.	2018	2017
Proportional net income for the year	147,264	161,639
of which joint ventures	42,270	41,269
of which associated companies	104,994	120,370
Other adjustments recognized in profit or loss	-18,800	85,970
of which joint ventures	-18,800	85,970
Income from companies accounted for using the equity method	**128,464**	**247,609**

Income from companies accounted for using the equity method fell in 2018 compared with 2017. The increase in the previous year was due to write-ups at the joint ventures in the E&P area. The companies accounted for using the equity method in gas transport also recorded a drop in earnings (€-13 million).

9. Financial result

€ thou.	2018	2017
Income from participating interests	3,195	2,582
Income from profit transfer	480	415
Income from the disposal of participating interests	-	994
Income from other participating interests	3,675	3,991
Cost of loss absorption	-415	-2,816
Write-downs/losses on participating interests	-	-111
Expenses from other participating interests	-415	-2,927
Net investment income	**3,260**	**1,064**
Interest income from cash and cash equivalents	14,285	14,572
Interest income from loans	53,036	24,462
Interest income from securities	58	1,474
Miscellaneous interest income	4,491	16,279
Interest and dividend income	71,869	56,787
Interest expenses from financial liabilities	-19,877	-40,380
Miscellaneous interest expenses	-47,867	-65,673
Interest expenses	-67,744	-106,053
Net interest income	**4,125**	**-49,266**
Gains from the disposal of/write-up of securities/loans	1,003	5,426
Capitalization of interest costs during construction	13,474	30,096
Net interest income from overfunded pension plans and similar obligations	628	255
Other financial income	235,997	3,600
Miscellaneous financial income	251,102	39,377
Write-downs/losses from securities and loans	-2,202	-1,284
Accrued interest on other non-current provisions	-25,317	-26,832
Miscellaneous interest expenses from discounting	-3,748	-495
Net interest expenses from overfunded pension plans and similar obligations	-6,285	-6,142
Other financial expenses	-267,125	-5,473
Miscellaneous financial expenses	-304,677	-40,226
Miscellaneous financial result	**-53,575**	**-849**
Financial result	**-46,190**	**-49,051**

As a result of higher **interest income** and lower **interest expenses**, net interest income improved by €53,392 thousand year-on-year from €-49,266 thousand to €4,125 thousand. Interest income resulted primarily from loans in connection with the financing of the Nord Stream 2 project. The drop in interest expenses is attributable to the repayment of financial liabilities in Argentina and the drop in liabilities from cash pooling.

The increase in **other financial income** and other **financial expenses** mainly resulted from hedging transactions for loans executed for the first time in the fiscal year under review and dismantling obligations in Norwegian krone.

10. Income taxes

In Germany, a uniform corporate income tax rate of 15.0%, as well as a solidarity surcharge of 5.5% thereon, are levied on all distributed and retained earnings. In addition to corporate income tax, income generated in Germany is subject to a trade tax that varies depending on the municipality in which the company is represented. The weighted average trade tax rate in 2018 was 15.4% (2017: 15.3 %). The 30% rate used to calculate deferred taxes for German group companies remained unchanged in 2018. The income of foreign group companies are assessed using the tax rates applicable in their respective countries. These are also generally used to calculate deferred taxes to the extent that tax rate adjustments for the future have not yet been enacted.

➔ **Tax expense**

€ thou.	2018	2017
Corporate income tax, solidarity surcharge and trade taxes (Germany)	507,692	256,785
Foreign income tax	65,878	37,978
Taxes for previous years	3,175	7,895
Current income tax expense	576,745	302,658
from changes in temporary differences	-39,615	-187,646
from changes in tax loss carryforwards/unused tax credits	39,484	32,456
from changes in the tax rate	-34	10,419
Income taxes	576,580	157,887
Other taxes, as well as sales and consumption taxes	21,527	16,688
Tax expense	**598,107**	**174,575**

The current tax expense for corporate income tax, solidarity surcharge and trade taxes (Germany) increased as a result of the higher marginal tax rate and higher earnings in Norway at the same time.

The changes in **temporary differences** mainly result from the exchange rate-related adjustment of the tax carrying amounts of fixed assets in Norway and the opposite effect relating to provisions from the adjustment of restoration obligations.

Other taxes, as well as sales and consumption taxes included land tax and other comparable taxes.

Reconciliation to the effective tax expense and the tax rate

	2018		2017	
	€ thou.	%	€ thou.	%
Earnings before taxes	**1,247,399**	**-**	**884,785**	**-**
Expected corporate income tax based on German corporate income tax rate (15%)	187,110	15.00	132,718	15.00
Solidarity surcharge	999	0.08	235	0.03
Trade income tax	17,392	1.39	17,854	2.02
Effect of different tax rates on income of foreign group companies	280,113	22.46	100,247	11.33
Income tax subsidies on investments	-71,897	-5.76	-92,062	-10.41
Tax-neutral translation effects	-25,404	-2.04	19,950	2.25
Effects from hedging transactions	149,436	11.98	2,050	0.23
Balance of tax-exempt income and non-tax-deductible expenses	1,846	0.15	2,908	0.33
Net income from participating interests accounted for under the equity method	-19,270	-1.54	-37,142	-4.20
Taxes for previous years	3,175	0.25	7,895	0.89
Taxes abroad	14,085	1.13	13,041	1.47
Tax rate changes	-34	0.00	10,419	1.18
Other	39,029	3.13	-20,226	-2.29
Effective income taxes/tax rate	**576,580**	**46.22**	**157,887**	**17.84**

The Wintershall Group's tax rate in 2018 was 46.2% (2017: 17.8%).

The impact of different tax rates increased due to improved earnings in countries with high tax rates, particularly Norway.

The income tax subsidies on investments result from additional depreciation on oil and gas production facilities in Norway and led to tax income.

Losses from hedging transactions result from the hedging of loan liabilities and provisions for restoration in Norwegian krone, which are subject to a reduced tax rate.

➔ **Deferred taxes**

Development in 2018

€ thou.	As of Jan. 1, 2018 (net)	Effects recognized in income	Effects recognized in equity (OCI)	Recognized directly in equity	Other	As of Dec. 31, 2018 (net)
Intangible assets	-168,286	15,634	21,227	-	-14	-131,439
Property, plant and equipment	-1,637,618	-128,386	-93,406	-	-398	-1,859,808
Inventories and receivables	69,868	-13,255	-1,522	-	286	13,377
Provisions for pensions	50,660	961	553	-2,821	-3	49,350
Miscellaneous provisions and liabilities	498,165	164,419	30,204	-	-61	692,727
Other	434	242	32	-	57	765
Tax loss carryforwards	44,606	-39,450	-4,392	-	-	764
Total	**-1,142,171**	**165**	**-47,304**	**-2,821**	**-133**	**-1,192,264**

Development in 2017

€ thou.	As of Jan. 1, 2017 (net)	Recognized in profit and loss	Currency effect	Recognized directly in equity	Other	As of Dec. 31, 2017 (net)
Intangible assets	-218,343	30,708	19,342	-	7	-168,286
Property, plant and equipment	-1,928,359	82,922	207,816	-	3	-1,637,618
Financial investments	97	-96	-	-	-1	0
Inventories and receivables	64,730	7,167	-2,026	-	-3	69,868
Provisions for pensions	53,833	851	-1,252	-2,773	1	50,660
Miscellaneous provisions and liabilities	512,328	53,736	-67,867	-31	-1	498,165
Other	114	359	-39	-	-	434
Tax loss carryforwards	81,542	-30,875	-6,073	-	12	44,606
Total	**-1,434,058**	**144,772**	**149,901**	**-2,804**	**18**	**-1,142,171**

Deferred taxes result from temporary differences between the values recognized in the tax balance sheets and the assets and liabilities accounted for in accordance with IFRS, as well as from tax loss carryforwards and unused tax credits.

Deferred tax income in the amount of €165 thousand was recognized in the income statement in 2018 (previous year: €144,772 thousand).

No deferred tax liabilities were recognized for temporary differences from retained profits of subsidiaries in the amount of €818,811 thousand in 2018, as these profits are not subject to corresponding taxation when distributed, or are to be reinvested for an indefinite period.

➔ Tax loss carryforwards

The regional breakdown of deferred tax assets is as follows:

€ thou.	Tax loss carryforwards		Deferred tax assets	
	2018	2017	2018	2017
Germany	2,543	-	764	-
Abroad	-	81,102	-	44,606
Total	**2,543**	**81,102**	**764**	**44,606**

In the fiscal year under review, there were tax loss carryforwards of €2,543 thousand in Germany, on which deferred taxes (€764 thousand) were recognized. Tax loss carryforwards from the previous year were used in Norway in the amount of €81,102 thousand. No deferred tax assets were recognized in the amount of €23,915 thousand.

➔ **Tax liabilities**

Tax liabilities mainly comprise assessed income taxes and other taxes, as well as unassessed income taxes for the current year. In 2018, tax liabilities amounted to €222,433 thousand (2017: €133,877 thousand).

11. Minority interests

Profit attributable to other shareholders

€ thou.	Dec. 31, 2018	Dec. 31, 2017
Profit shares	**54,731**	**41,280**

The €13,451 thousand increase in profit shares in 2018 was mainly due to higher revenues in the gas transport business.

The following table shows information on each subsidiary of the Group with significant non-controlling interests after intercompany eliminations:

	2018			2017		
€ thou.	**WIGA Transport Beteiligungs-GmbH**	**W&G Transp. Holding GmbH**	**OPAL Gas-transport GmbH & Co. KG**	**WIGA Transport Beteiligungs-GmbH**	**W&G Transp. Holding GmbH**	**OPAL Gas-transport GmbH & Co. KG**
Percentage of non-controlling interests	49.98%	49.98%	49.98%	49.98%	49.98%	49.98%
Non-current assets	55	1,544,570	127	55	1,599,885	131
Current assets	3,453	29,602	33,255	2,129	10,546	38,394
Non-current liabilities	-699,463	-82,167	-2,285	-699,046	-65,686	-2,857
Current liabilities	-375,466	-6,664	-9,350	-678,893	-9,117	-10,895
Net assets/liabilities	**-1,071,421**	**1,485,341**	**21,747**	**-1,375,755**	**1,535,628**	**24,773**
Net assets of the non-controlling interests	-535,496	742,373	10,869	-687,602	767,507	12,382
Revenue	348	20,172	216,090	88	20,173	173,284
Profit	15,362	78,516	15,631	10,399	48,025	24,170
Other income	4	-	16	5	-	6
Total comprehensive income	**15,366**	**78,516**	**15,647**	**10,404**	**48,025**	**24,176**
Profit attributable to non-controlling interests	7,676	39,242	7,812	5,197	24,003	12,080
Other comprehensive income attributable to non-controlling interests	2	-	8	3	-	3

12. Personnel expenses and employees

➔ Personnel expenses

In 2018, the Wintershall Group spent a total of €218,802 thousand on wages and salaries, social security contributions and expenses for retirement provision and other benefits (2017: €254,637 thousand). This means that personnel expenses fell by 14.1%.

Personnel expenses

€ thou.	2018	2017
Wages and salaries	187,096	214,569
Social security contributions and expenses for retirement provision and other benefits	31,706	40,068
of which for retirement provision	23,579	23,817
of which for other social security contributions	8,127	16,251
Total	**218,802**	**254,637**

➔ Number of employees

As of December 31, 2018, the Group employed 2,018 people (December 31, 2017: 1,984). The employees of joint operations are included in the number of employees in accordance with the corresponding share of the investment. This relates to a total of 199 employees (2017: 186).

Total employment contracts headcount

	Dec. 31, 2018	Dec. 31, 2017
Headcount	**2,018**	**1,984**
of which trainees	57	58
of which employees on fixed-term contracts	167.5	92

Annual average	2018	2017
Headcount	**2,020**	**1,989**
of which trainees	50	53
of which employees on fixed-term contracts	153	91

Notes on statement of financial position

13. Intangible assets

Wintershall's goodwill is allocated to seven globally managed operating segments.

The annual impairment tests were carried out in the fourth quarter on the basis of the operating segments. The recoverable amount was determined using the value in use. The plans approved by the company management and the corresponding cash flows were used for this purpose. The plans are based on experience gleaned in the past, current business results and the best possible management estimate of the future development of individual influencing factors. Oil and gas prices and the WACC are the key input parameters for forecasting cash flows in the current financial plans. Market assumptions, such as economic trends and market growth, are included, taking into account external macroeconomic and industry-specific sources.

Further information on the oil and gas price scenario can be found in Note 1.4 Accounting policies.

The discounting of cash flows required for impairment testing is performed using the weighted cost of capital, which is determined using the capital asset pricing model. Its components are a risk-free interest rate, the market risk premium and an adjustment for credit risk (spread) determined on the basis of the relevant sector-specific peer group. The calculation takes into account both the capital structure and the beta factor for the peer group concerned. The valuation model uses a field-based approach. The observation period spans the planned license terms or production series of the oil and gas fields included. In addition, the weighted average cost of capital takes into account the relevant country risk; this results in a more precise calculation of the recoverable amount. Taking these parameters into account, the cost of capital varied in 2018 in a range from 9.62% to 30.37% (2017: from 11.32% to 36.99%).

After determining the recoverable amount, it was found that deviations from the material assumptions that were deemed possible would not result in the carrying amounts of 6 business units exceeding their recoverable amounts. This does not apply to the goodwill of the Wintershall Norge business unit with regard to a possible change in the forecast oil and gas prices that was applied as a material assumption. In 2018, the recoverable amount of Wintershall Norge exceeded the carrying amount by €566,132 thousand. For the purposes of the impairment test, the current oil and gas price scenario was used, which forecasts an oil price of US$70/bbl (Brent) and a gas price of around €19.49/MWh (around US$6.85/mmBtu) for 2019. The recoverable amount would correspond to the carrying amount of the business unit if the oil and gas price forecast were approximately 16% lower.

Goodwill of the operating segments

€ thou.	Dec. 31, 2018	Dec. 31, 2017
Wintershall Holding	54,202	51,748
Wintershall Energia	118,032	116,524
Wintershall Middle East	10,198	9,736
Wintershall Petroleum (E&P)	10,080	9,624
Wintershall Norge	966,852	923,076
Achimgaz	232,260	221,744
Gazprom YRGM Trading	179,993	171,843
Total	**1,571,617**	**1,504,295**

Cost of capital

	Dec. 31, 2018	Dec. 31, 2017
Wintershall Holding	9.62%	11.32%
Wintershall Energia	16.07%	20.07%
Wintershall Middle East	15.77%	18.50%
Wintershall Petroleum (E&P)	30.37%	36.99%
Wintershall Norge	27.51%	35.45%
Achimgaz	11.20%	13.65%
Gazprom YRGM Trading	11.20%	13.65%

Development in intangible assets in 2018

€ thou.	Distribution and similar rights	Goodwill	Product rights, licenses and trademarks	Other rights and assets	Total
Cost					
Balance as of Jan. 1, 2018	888,302	1,628,305	369,382	35,216	**2,921,205**
Additions	-	-	32,644	1,692	**34,336**
Disposals	-	-3,771	-3,195	-1,359	**-8,325**
Reclassifications	-	-	-12,298	9	**-12,289**
Translation-related changes in value	-115,037	76,974	8,306	55	**-29,702**
Balance as of Dec. 31, 2018	773,265	1,701,508	394,839	35,613	**2,905,225**
Depreciation and amortization					
Balance as of Jan. 1, 2018	-329,322	-124,010	-135,849	-24,237	**-613,418**
Additions	-34,111	-	-8,738	-3,593	**-46,442**
Disposals	-	-	-	1,359	**1,359**
Translation-related changes in value	45,154	-5,881	-2,401	-39	**36,833**
Balance as of Dec. 31, 2018	-318,279	-129,891	-146,988	-26,510	**-621,668**
Net carrying amount on Dec. 31, 2018	**454,986**	**1,571,617**	**247,851**	**9,103**	**2,283,557**

In addition to goodwill, **intangible assets** include acquired and internally generated intangible assets. They also include rights that are amortized using the unit-of-production method. As of December 31, 2018, their cumulative cost amounted to €857,295 thousand and cumulative amortization to €342,390 thousand; amortization in 2018 amounted to €41,421 thousand.

The concessions for oil and gas production included in the **product rights, licenses and trademarks** category, with a net carrying amount of €247,851 thousand in 2018, entitle the holder to carry out oil and gas exploration and production in certain areas. The rights are returned at the end of the term of a concession.

Additions to intangible assets in the amount of €34,336 thousand are mainly attributable to the acquisition of seven exploration licenses in Brazil, which are reported under product rights, licenses and trademarks.

Translation-related changes in the value of the Russian rouble and the US dollar and the associated contrary effects increased intangible assets by €7,131 thousand. These resulted, in particular, from the appreciation of the Russian rouble against the euro and the depreciation of the US dollar against the euro.

Development in intangible assets in 2017

€ thou.	Distribution and similar rights	Goodwill	Product rights, licenses and trademarks	Other rights and assets	Total
Cost					
Balance as of Jan. 1, 2017	958,648	1,852,600	572,888	63,559	**3,447,695**
Additions	-	-	10,883	3,951	**14,834**
Disposals	-	-	-248	-28,863	**-29,111**
Reclassifications	-	-	-177,439	-	**-177,440**
Translation-related changes in value	-70,346	-224,295	-36,702	-3,430	**-334,773**
Balance as of Dec. 31, 2017	888,302	1,628,305	369,382	35,217	**2,921,205**
Amortization					
Balance as of Jan. 1, 2017	-316,279	-141,092	-106,411	-51,121	**-614,903**
Additions	-38,323	-	-33,396	-5,322	**-77,041**
Disposals	-	-	248	28,851	**29,099**
Translation-related changes in value	25,280	17,082	3,710	3,355	**49,427**
Balance as of Dec. 31, 2017	-329,322	-124,010	-135,849	-24,237	**-613,418**
Net carrying amount on Dec. 31, 2017	**558,980**	**1,504,295**	**233,533**	**10,980**	**2,307,787**

In addition to goodwill, **intangible assets** include acquired and internally generated intangible assets. They also include rights that are amortized using the unit-of-production method. As of December 31, 2017, their cumulative cost amounted to €962,000 thousand and cumulative amortization to €312,000 thousand; amortization in 2017 amounted to €41,000 thousand.

The concessions for oil and gas production included in the **product rights, licenses and trademarks** category, with a net carrying amount of €233,533 thousand in 2017, entitle the holder to carry out oil and gas exploration and production in certain areas. The rights are returned at the end of the term of a concession.

Disposals of intangible assets in the amount of €29,111 thousand are mainly attributable to the derecognition of fully amortized software in Norway.

The **reclassifications** of €177,440 thousand mainly related to the confirmed oil and gas deposits in the Maria field in Norway. Unconfirmed deposits under acquired concessions are reported as intangible assets under product rights, licenses and trademarks.

In 2017, **amortization** included impairment losses on exploration potential for oil and gas production in Norway in the amount of €26,781 thousand.

Translation-related changes in value reduced intangible assets by €285,346 thousand and resulted in particular from the depreciation of the US dollar and Russian rouble against the euro.

14. Property, plant and equipment

Development in property, plant and equipment in 2018

€ thou.	Land and buildings	Technical equipment and machinery	Other equipment, operating and office equipment	Assets under construction	Total
Cost					
Balance as of Jan. 1, 2018	79,537	10,258,717	84,395	1,567,203	**11,989,852**
Additions	584	625,499	4,137	397,174	**1,027,394**
Changes in the scope of consolidation	71,982	-	-	-	**71,982**
Disposals	-3,500	-51,554	-3,956	-126	**-59,136**
Reclassifications	728	1,082,749	366	-1,071,554	**12,289**
Translation-related changes in value	-788	165,307	-136	61,609	**225,992**
Balance as of Dec. 31, 2018	148,543	12,080,718	84,806	954,306	**13,268,373**
Depreciation					
Balance as of Jan. 1, 2018	-47,132	-5,322,355	-65,542	-193,991	**-5,629,020**
Additions	-4,753	-1,022,300	-5,136	-1,483	**-1,033,672**
Changes in the scope of consolidation	-3,214	-	-	-	**-3,214**
Disposals	1,678	28,353	3,513	-	**33,544**
Reclassifications	-	-106,968	-	106,968	**0**
Translation-related changes in value	126	-124,098	-427	-3,600	**-127,999**
Balance as of Dec. 31, 2018	-53,295	-6,547,368	-67,592	-92,106	**-6,760,361**
Net carrying amount on Dec. 31, 2018	**95,248**	**5,533,350**	**17,214**	**862,200**	**6,508,012**

Property, plant and equipment increased by €147,180 thousand to €6,508,012 thousand in 2018 compared to the previous year.

Additions to property, plant and equipment from investment projects amounted to €1,027,394 thousand in 2018. Major investments related to the construction of oil and gas production facilities and wells in Europe and South America. The **changes in the scope of consolidation** amounting to €71,982 thousand result from land and buildings of Gullfaks AS, which was consolidated for the first time in the 2018 fiscal year. Overall, these additions (€1,099,376 thousand) and currency effects (€97,993 thousand) were largely offset by scheduled depreciation and write-downs (€1,033,672 thousand).

Technical equipment and machinery includes oil and gas deposits including associated wells, production facilities and other infrastructure, which are depreciated using the unit-of-production method.

Depreciation in 2018 included impairment losses of €185,159 thousand. These relate to technical equipment and machinery and result, in particular, from updated operating assumptions for the Maria field in Norway. The recoverable amount corresponded to the value in use, and the weighted average cost of capital before taxes was 7.5%.

Reclassifications mainly related to the assumption of exploration expenses in Norway for Aasta Hansten, with reclassification from assets under construction to technical equipment and machinery.

Development in property, plant and equipment in 2017

€ thou.	Land and buildings	Technical equipment and machinery	Other equipment, operating and office equipment	Assets under construction	Total
Cost					
Balance as of Jan. 1, 2017	77,109	9,291,103	90,558	2,472,593	**11,931,363**
Additions	1,236	596,769	3,550	370,617	**972,172**
Changes in the scope of consolidation	-	14,060	-	-	**14,060**
Disposals	-490	-242,617	-9,363	-1,595	**-254,065**
Reclassifications	1,682	1,183,818	1,440	-1,009,373	**177,567**
Translation-related changes in value	-	-584,416	-1,790	-265,039	**-851,245**
Balance as of Dec. 31, 2017	79,537	10,258,717	84,395	1,567,203	**11,989,852**
Depreciation					
Balance as of Jan. 1, 2017	-45,224	-4,929,418	-70,497	-210,908	**-5,256,047**
Additions	-2,276	-1,045,438	-5,453	-59,231	**-1,112,398**
Changes in the scope of consolidation	-	-14,042	-	-	**-14,042**
Disposals	368	228,166	9,272	1,588	**239,394**
Reclassifications	-	53,484	-	-53,484	**0**
Translation-related changes in value	-	325,668	1,136	22,249	**349,053**
Reversal of impairment losses	-	59,225		105,795	**165,020**
Balance as of Dec. 31, 2017	-47,132	-5,322,355	-65,542	-193,991	**-5,629,020**
Net carrying amount on Dec. 31, 2017	**32,405**	**4,936,362**	**18,853**	**1,373,212**	**6,360,832**

Property, plant and equipment decreased by €314,484 thousand to €6,360,832 thousand in 2017 compared to 2016.

One major **disposal** of property, plant and equipment related to the sale of Wintershall's stake in the Aguada Pichana Oeste (West) block in Argentina to Pan American Energy (PAE) and YPF S.A. in July 2017. The sale was executed as a result of the decision made by the partner companies PAN, YPF, Total and Wintershall to divide Aguada Pichana and to develop the two blocks separately.

Additions to property, plant and equipment from investment projects amounted to €972,172 thousand in 2017. Major investments related to the construction of oil and gas production facilities and wells in Europe and South America. Overall, these additions from investments were more than offset by scheduled depreciation and write-downs (€1,112,398 thousand), as well as by currency effects (€502,192 thousand) resulting from the depreciation of the US dollar against the euro.

15. Investments accounted for using the equity method and other financial investments

Investments accounted for using the equity method

€ thou.	2018	2017
As of Jan. 1	2,556,542	2,581,398
Additions	55,408	12,064
Reclassifications	-2,155	-36,920
Translation-related changes in value	-43,398	-
Net carrying amount as of Dec. 31	**2,566,397**	**2,556,542**

The investments accounted for using the equity method showed an increase of €9,855 thousand to €2,566,397 thousand compared with the previous year (€2,556,542 thousand), putting them on a par with the previous year.

€ thou.	Dec. 31, 2018	Dec. 31, 2017
Other financial investments	1,883	73,492
Net carrying amount	**1,883**	**73,492**

Other financial investments of €1,883 thousand (€73,492 thousand) mainly relate to investments in companies or buildings measured at cost. The change in the fiscal year results from the inclusion of Gullfaks AS in the scope of consolidation of the Wintershall Group. Due to a lack of market liquidity, investments are measured at amortized cost instead of fair value.

16. Inventories

Inventories

€ thou.	Dec. 31, 2018	Dec. 31, 2017
Raw materials, consumables and supplies	115,527	61,099
Work in process and finished goods, merchandise	21,061	23,260
Inventories	**136,588**	84,359

Compared to 2017, inventories increased by €52,229 thousand to a total of €136,588 thousand (previous year: €84,359 thousand). The increase relates, in particular, to Argentina and results from a change in the presentation of inventories included in the consortium settlement (recognized under item 17 in previous periods).

17. Receivables and other assets

Miscellaneous receivables and other assets

€ thou.	Dec. 31, 2018		Dec. 31, 2017	
	Non-current	Current	Non-current	Current
Loan and interest receivables	819,535	481	495,309	282
Dividends/profit transfer	-	41,243	-	29,267
Securities	-	-	-	16,682
Derivatives with a positive fair value	-	11,250	-	4,422
Consortium settlements	14,632	27,741	16,611	37,034
Operating receivables	60,530	104,135	4,539	129,824
Entitlements to tax rebates	-	15,976	-	17,275
Receivables from employees	-	1,135	1	448
Prepaid expenses	1,477	47,251	1,466	44,743
Other financial receivables	-	5,157	-	3,152
Total	896,174	254,369	517,926	283,129
Miscellaneous receivables and other assets	**1,150,543**		**801,055**	

The increase in miscellaneous receivables and other assets is primarily due to the increase in the loan provided by Wintershall Nederland Transport und Trading B.V., Rijswijk/Netherlands, to Nord Stream 2 AG.

Valuation allowances for receivables in 2018

€ thou.	Balance as of Jan. 1, 2018	IFRS Restatement	Addition	Reclassification between stages	Reversal	Translation adjustment	Balance as of Dec. 31, 2018
Trade receivables	**15,789**	**1,108**	**6,911**	**-**	**-7,044**	**-3,663**	**13,101**
of which							
stage 2	1,207	676	6,439	4,594	-6,846	-3,006	**3,064**
stage 3	14,582	432	472	-4,594	-198	-657	**10,037**
Miscellaneous receivables	**59,552**	**1,272**	**3,250**	**-**	**-1,462**	**-**	**62,612**
of which							
stage 1	-	1,126	720		-11		**1,835**
stage 2	138	8	1,327	-	-1,451		**22**
stage 3	59,414	138	1,203				**60,755**
Total	**75,341**	**2,380**	**10,161**	**0**	**-8,506**	**-3,663**	**75,713**

Valuation allowances for receivables in 2017

€ thou.	Balance as of Jan. 1, 2017	Addition recognized in income	Reversal recognized in income	Addition not recognized in income	Reversal not recognized in income	Effect from currency translation	Balance as of Dec. 31, 2017
Trade receivables	9,201	10,310	1,555	-	-	-2,167	**15,789**
Miscellaneous receivables	63,870	1,284	5,260	-	342	-	**59,552**
Total	**73,071**	**11,594**	**6,815**	**0**	**342**	**-2,167**	**75,341**

Changes recognized in income include specific valuation allowances. Changes not affecting income result from changes in the scope of consolidation, translation-related changes in value and the derecognition of impaired receivables.

In the current economic environment, there are no signs of any significant changes in the credit quality of receivables. In 2018, specific valuation allowances of €6,911 thousand were recognized on **trade receivables** and specific valuation allowances of €6,846 thousand were reversed. In the previous year, specific valuation allowances of €10,310 thousand were recognized on trade receivables and specific valuation allowances of €1,555 thousand were reversed. A net amount of €1,586 thousand was allocated to **miscellaneous receivables**.

Maturity analysis of loan and interest receivables

€ thou.	Dec. 31, 2018		Dec. 31, 2017	
	Gross value	Valuation allowance	Gross value	Valuation allowance
Not yet due	1,135,946	44,148	548,861	53,392
Past due less than 30 days	3,762	-	-	-
Past due between 30 and 89 days	-	-	-	-
Past due for more than 90 days	**18,262**	**18,262**	**6,160**	**6,010**
Total:	**1,157,970**	**62,410**	**555,021**	**59,402**

Maturity analysis of trade receivables

€ thou.	Dec. 31, 2018		Dec. 31, 2017	
	Gross value	Valuation allowance	Gross value	Valuation allowance
Not yet due	534,434	2,612	499,249	8,287
Past due less than 30 days	35,651	620	10,120	-
Past due between 30 and 89 days	11,284	218	1,481	483
Past due for more than 90 days	34,921	9,849	7,044	7,019
Total:	**616,290**	**13,299**	**517,894**	**15,789**

There were no material overdue and unimpaired miscellaneous receivables that were financial instruments as of December 31, 2018.

18. Capital, reserves and net retained profit

➔ Share capital

€ thou.	Dec. 31, 2018	Dec. 31, 2017
Share capital	105,000	105,000

The share capital of Wintershall Holding GmbH as of December 31, 2018 amounts to €105,000 thousand and is divided into 105,000,000 shares with a nominal value of €1.00 each.

➔ Capital reserve

€ thou.	Dec. 31, 2018	Dec. 31, 2017
Capital reserve	1,265,543	415,543

In the 2018 fiscal year, a contribution made by BASF SE, Ludwigshafen am Rhein, increased the capital reserve, which was previously distributed from net retained profit, by €850,000 thousand.

➔ Retained earnings and net retained profit

€ thou.	Dec. 31, 2018	Dec. 31, 2017
Retained earnings and net retained profit	3,133,956	3,693,020

The IFRS net income for the year amounts to €616,088 thousand (previous year: €685,620 thousand) and was allocated to net retained profit. The 2018 HGB annual result of Wintershall Holding GmbH was transferred to BASF Handels- und Exportgesellschaft mbH in the amount of €323,711 thousand.

➔ Other comprehensive income

€ thou.	Dec. 31, 2018	Dec. 31, 2017
Other comprehensive income	-1,173,903	-1,071,791

The increase in other comprehensive income of €102,112 thousand is due exclusively to translation adjustments.

19. Non-controlling interests

		Dec. 31, 2018		Dec. 31, 2017	
		Capital share		Capital share	
Group company	**Co-shareholder**	%	€ thou.	%	€ thou.
WIGA Transport Beteiligungs-GmbH & Co. KG, W & G Transport Holding GmbH, OPAL Gastransport GmbH & Co. KG	Gazprom Germania GmbH, Berlin	49.97	136,260	49.97	71,678
Capital share in both W & G Transport Holding GmbH and OPAL Gastransport GmbH & Co. KG: 49.97%; share of voting rights and earnings: 50.02%					

20. Provisions for pensions and similar obligations

In addition to entitlements to benefits from the statutory pension scheme, most employees are entitled to benefits from defined contribution or defined benefit plans. Benefits generally depend on the length of service, remuneration or contributions of the eligible employees, and take into consideration the overall labor, tax and social security legislation in the individual countries. To limit the risks of changes in financial market conditions as well as demographic developments, employees have, for a number of years now, been almost exclusively offered defined contribution plans for future years of service.

The Group Pension Committee of BASF SE monitors the risks associated with all of the Group's pension plans. In this context, it issues guidelines regarding the governance and risk management of pension plans, particularly with regard to the financing of pension commitments and the portfolio structure of existing plan assets. The organization, responsibilities, strategy, implementation and reporting requirements are documented for the units involved.

➔ Economic and legal environment of the plans

Particularly in Germany, there are pension obligations that are subject to state supervision or similar legal restrictions. By way of example, there are minimum funding requirements to cover pension obligations, which are based on actuarial assumptions that may differ from those pursuant to IAS 19. Furthermore, qualitative and quantitative restrictions apply to parts of the pension assets regarding investments in individual asset categories. This could result in annual fluctuations in employer contributions, financing requirements and the assumption of obligations in favor of the pension funds to comply with regulatory requirements.

The obligations and any pension assets in the existing pension plans are exposed to demographic, legal and economic risks. Economic risks arise primarily due to unforeseen developments on commodity and capital markets. They affect, for example, pension adjustments based on the level of inflation in Germany, as well as the impact of discount rates on the amount of the pension obligations. In previous years, measures taken to close plans with defined benefits for future service, especially benefits based on final pay promises, led to a reduction in risk with regard to future benefit levels.

The strategy pursued by the Wintershall Group with regard to financing pension commitments is consistent with the country-specific supervisory and tax regulations.

Particularly in Germany, pension benefits have been granted for which the employer has a subsidiary liability. Pension benefits in Germany also include minimum interest guarantees to a limited extent. If the pension fund cannot generate the income needed to provide the minimum guarantee, this has to be provided by the employer under the subsidiary liability. To the extent that recourse to the employer is unlikely based on the structure and execution of the pension benefits, as well as the financial position of the pension fund, these plans have been treated as defined contribution plans.

➔ Description of the defined benefit plans

The typical plan structure in the individual countries is described in the following. Different arrangements may exist, in particular due to the assumption of plans as part of acquisitions; these do not, however, have any material impact on the description of plans in the individual countries.

Germany

For Wintershall Holding GmbH and German group companies, a basic level of benefits is provided by BASF Pensionskasse VVaG, a legally independent plan which is financed by employer and employee contributions, as well as the return on plan assets. Some of the benefits financed via BASF Pensionskasse VVaG are subject to adjustments that must be borne by its member companies to the extent that these cannot be borne by BASF Pensionskasse VVaG due to the regulations imposed by the German supervisory authority. In 2004, the basic benefit plan was closed for newly hired employees at German Wintershall companies and replaced by a defined contribution plan.

Occupational pension commitments that exceed the basic level of benefits are financed via pension provisions at the German group companies. The benefits are largely based on modular plans. Furthermore, employees are given the option of participating in various deferred compensation schemes.

Norway

In Norway, there is a statutory obligation to provide occupational pension benefits. For employees whose remaining length of service until retirement on January 1, 2016 was 15 years or less, a final salary commitment continues to apply after the closure of the plan. Employees whose remaining length of service as of this date was more than 15 years and employees who joined the company after this date are entitled to benefits under a defined contribution pension plan. Both pension plans are funded via Nordea Liv AS.

➔ Actuarial assumptions

The valuation of the pension obligations is based on the following key assumptions:

Assumptions used to determine the present value of the entitlements as of December 31

	Germany		Norway		Switzerland	
	2018	2017	2018	2017	2018	2017
Discount rate	2.00	1.90	2.60	2.30	0.9	0.50
Pension trend	1.50	1.50	0.80	0.40	-	-

Assumptions used to determine pension expenses in the fiscal year in question

	Germany		Norway		Switzerland	
	2018	2017	2018	2017	2018	2017
Discount rate	1.90	1.80	2.30	2.10	0.50	0.60
Pension trend	1.50	1.50	0.40	-	-	-

The assumptions used to determine the present value of the entitlements as of December 31 are used in the following fiscal year to determine the expenses for pension plans.

When it comes to the valuation of the material pension obligations of the Wintershall Group, the discount rates are derived from the yields on corporate bonds in the relevant currency areas with an issue volume of more than 100 million units of the relevant currency with a minimum rating of "AA–" to "AA+" from at least one of the following three rating agencies: Fitch, Moody's, or Standard & Poor's.

The valuation of the defined benefit obligation is generally performed using the most recent actuarial mortality tables as of December 31 of the reporting year in question, which are derived from the BASF Group population in Germany and were last updated in 2015.

Actuarial mortality tables as of December 31, 2018

Germany	Heubeck Richttafeln 2005G (modified)
Norway	K2013
Switzerland	BVG 2015 generational

➔ **Sensitivity analyses**

A change in the material actuarial assumptions would have the following effects on the amount of the pension obligations:

Sensitivity of the pension obligations as of December 31 (€ m)

	Increase by 0.5 percentage points		Decrease by 0.5 percentage points	
	2018	2017	2018	2017
Discount rate	-36	-37	40	42
Pension trend	25	28	-23	-25

An alternative valuation of the pension obligations was performed to determine how changes in the underlying assumptions influence the amount of the pension obligations. A linear extrapolation of these amounts based on alternative changes in the assumptions, as well as an addition of combined changes in the individual assumptions, is not possible

➔ **Explanation of the amounts in the statement of income and the statement of financial position**

Composition of expenses for pension benefits (€ m)	2018	2017
Expenses for defined benefit plans	15	17
Expenses for defined contribution plans	7	7
Expenses for pension benefits (recognized in income from operating activities)	**22**	**24**
Net interest cost	6	6
Expenses for pension benefits (recognized in the financial result)	**6**	**6**

The interest for the net balance sheet amount at the beginning of the year is offset within the financial result. This corresponds to the difference between the interest cost on the present value of the entitlements and the standardized return on the pension assets. The expected contribution payments and benefits paid over the course of the fiscal year are taken into account when determining the interest. The net interest expense for the fiscal year in question is based on the actuarial interest rate and the present value of the entitlements at the beginning of the year.

Development of the present value of the pension obligations (€ million)	2018	2017
Present value of the entitlements as of January 1	489	484
Current service cost	15	15
Interest cost on present value of the entitlements	9	9
Pension payments	-16	-16
Employee contributions	1	1
Actuarial gains/losses		
for adjustments relating to financial assumptions	-14	-
for experience adjustments	-2	-1
Other changes	-	2
Currency effects	-1	-5
Present value of the entitlements as of December 31	**481**	**489**

As of December 31, 2018, the weighted average duration of the obligations amounted to 15.8 years (2017: 16.9 years).

Development of pension assets (€ million)	**2018**	**2017**
Pension assets as of January 1	176	161
Standardized return on pension assets	3	3
Deviation between actual and standardized return on assets	-6	7
Employer contributions	5	11
Employee contributions	1	1
Pension payments	-5	-4
Other changes	-	-
Currency effects	-	-3
Pension assets as of December 31	**174**	**176**

The standardized return on pension assets is calculated by multiplying the pension assets at the beginning of the year by the actuarial interest rate used to discount the existing obligations at the beginning of the year, taking into account pension and contribution payments to be made during the year.

The contribution payments expected for 2019 amount to around €4 million. A special allocation was made in 2017 to improve the funding level at BASF Pensionskasse VVaG. An amount of €6 million was attributable to the Wintershall Group.

Development in net balance sheet amount (€ million)	2018	2017
Net balance sheet amount as of January 1	-313	-323
Current service cost	-15	-15
Interest cost on present value of the entitlements	-9	-9
Standardized return on pension assets	3	3
Deviation between actual and standardized return on assets	-6	7
Actuarial gains/losses on the present value of the entitlements	16	1
Benefits paid without using pension assets	11	12
Employer contributions	5	11
Other changes	-	-2
Currency effects	1	2
Net balance sheet amount as of December 31	**-307**	**-313**
thereof pension provisions	307	313

Regional allocation of defined benefit plans as of December 31 (€ m)	Pension obligations		Plan assets		Net balance sheet amount	
	2018	2017	2018	2017	2018	2017
Germany	440	451	147	149	-293	-302
Norway	39	37	25	26	-14	-11
Switzerland	2	1	2	1	-	-
Total	**481**	**489**	**174**	**176**	**-307**	**-313**

➔ **Explanations regarding plan assets**

The target portfolio structure of the pension plans is defined by using asset liability studies and is reviewed on a regular basis. The investments are aligned with the long-term development of the obligations, taking into consideration the risks associated with the specific asset classes and the regulatory provisions relating to the investment of pension assets. The existing portfolio structure is generally based on the target allocation. In addition, current market assessments are taken into consideration. In order to mitigate investment risks and maximize returns, a widely spread global portfolio of individual assets is held. Hedging measures are used for the existing currency risks depending on the return profile of the individual asset classes.

Structure of plan assets (%)	**2018**	**2017**
Equities	**20%** (100)	**25%** (100)
Debt instruments	**56%** (85)	**57%** (81)
thereof vis-à-vis sovereign debtors	**9%** (91)	**8%** (91)
thereof vis-à-vis other debtors	**47%** (84)	**49%** (82)
Real estate	**8%** (2)	**6%** (-)
Alternative investments	**14%** (-)	**12%** (-)
Cash and money market-related investments	**2%** (100)	**-** (100)
Total	**100%** (70)	**100%** (72)

The amounts shown in brackets denote the part of the asset class for which there is an active market.

The debt instruments asset class comprises promissory notes and covered bonds (*Pfandbriefe*), as well as corporate and government bonds. Government bonds primarily relate to bonds from countries with the highest credit ratings, such as the United States, the United Kingdom, Germany and Switzerland. Corporate bonds mainly comprise bonds from creditworthy debtors, although a conscious decision has been made to also hold high-yield bonds to a limited extent. In connection with the ongoing monitoring of default risk based on a defined risk budget and on the continuous observation of the development of issuer creditworthiness, the pension asset allocation may be adjusted in the event of changes in the market assessment. Alternative investments largely comprise investments in private equity, absolute return funds and secured corporate loans.

A special allocation was made in 2017 to improve the funding level at BASF Pensionskasse VVaG. Beyond this, there were no material transactions between the legally independent pension funds and the companies in the Wintershall Group in 2018 or 2017.

The funding of the plans was as follows:

Current funding situation of the pension plans as of December 31 (€ m)	2018		2017	
	Present value of entitlements	Pension assets	Present value of entitlements	Pension assets
Unfunded pension plans	**233**	-	**236**	-
Funded pension plans	**248**	174	**253**	176
Total	**481**	174	**489**	176

➔ **Defined contribution plans and government pensions**

The contributions to defined contribution plans recognized in income from operations amounted to €7 million in 2018 and €7 million in 2017.

Contributions to government pension plans were made in the amount of €24 million in 2018 and €23 million in 2017.

21. Other provisions

€ thou.	Dec. 31, 2018		Dec. 31, 2017	
Provisions for		**thereof current**		**thereof current**
Contaminated sites/risks affecting landfill sites	1	-	5	-
Emission rights	5,197	5,197	1,041	1,041
Employee obligations	34,935	23,824	31,510	14,777
Litigation risks, damage claims	1,172	972	1,259	1,059
Procurement risks and other pending losses	-	-	3,177	3,177
Restoration obligations under mining law	1,510,877	23,603	1,217,385	10,986
Other restoration obligations	3,430	3,430	6,121	6,121
Miscellaneous	126,619	20,187	160,708	94,639
Total	**1,682,231**	**77,213**	**1,421,206**	**131,800**

Restoration obligations pertain mainly to anticipated costs for filling wells and removing production equipment after production activities have come to an end. The utilization of the **restoration obligations under mining law** is based on the commercial exploitation of the field, which can amount to between one and thirty years. The increase in provisions is mainly due to the changes in discount rates as against the previous year. The change in discount rates had a total effect of €278 million on provisions. In order to determine the present value, discount rates of between 1.6% and 8.6% were applied in the fiscal year (previous year: 2%).

The provisions for **contaminated sites/risks affecting landfill sites** cover expected charges associated with the removal of environmental impairments at existing production or storage facilities and similar measures.

Provisions for **employee obligations** include, in particular, obligations to pay long-service bonuses and anniversary bonuses, variable remuneration including the associated social security contributions and provisions for early retirement and phased-in early retirement models.

The provisions for **litigation, damages, warranty and similar obligations** include expected costs from lawsuits in which Wintershall is the defendant and obligations to pay damages from lawsuits against Wintershall, as well as administrative fines.

The underlying cases are set out in Note 24

The **miscellaneous** category mainly includes non-current tax provisions.

The following table shows the development of other provisions by category. Other changes mainly include changes in value due to translation and changes in the scope of consolidation.

Development of other provisions in 2018

€ thou.	Balance as of Jan. 1, 2018	Addition	Utiliza-tion	Reversal	Com-pounding	Reclassi-fication	Other changes	**Balance as of Dec. 31, 2018**
Cost								
Contaminated sites/risks affecting landfill sites	5	-	-4	-	-	-	-	**1**
Emission rights	1,041	5197	-738	-303	-	-	-	**5,197**
Employee obligations	31,510	24,508	-18,346	-9,534	131	7,167	-501	**34,935**
Litigation risks, damage claims	1,259	406	-	-	-	-	-493	**1,172**
Procurement risks and other pending losses	3,187	-	-2,387	-800	-	-	-	**0**
Restoration obligations under mining law	1,217,385	306,103	-19,835	-27,455	25,182	33	9,464	**1,510,877**
Other restoration obligations	6,121	-	-2,586	-105	-	-	-	**3,430**
Miscellaneous	160,698	58,501	-85,559	-1,270	-	-6,426	675	**126,619**
Total	**1,421,206**	**394,715**	**-129,455**	**-39,467**	**25,313**	**774**	**9,145**	**1,682,231**

Development of other provisions in 2017

€ thou.	Balance as of Jan. 1, 2017	Addition	Utiliza-tion	Reversal	Com-pounding	Reclassi-fication	Other changes	**Balance as of Dec. 31, 2017**
Cost								
Contaminated sites/risks affecting landfill sites	5	-	-	-	-	-	-	**5**
Emission rights	656	1,041	-561	-95	-	-	-	**1,041**
Employee obligations	32,801	17,704	-16,430	-2,125	-	524	-964	**31,510**
Litigation risks, damage claims	1,403	174	-	-	-	-	-318	**1,259**
Procurement risks and other pending losses	5,510	897	-3,220	-	-	-	-	**3,187**
Restoration obligations under mining law	1,217,033	96,029	-27,744	-19,445	26,832	-34	-75,286	**1,217,385**
Other restoration obligations	6,943	-	-501	-321	-	-	-	**6,121**
Miscellaneous	104,390	84,987	-21,689	-1,799	-	-1,506	-3,685	**160,698**
Total	**1,368,741**	**200,832**	**-70,145**	**-23,785**	**26,832**	**-1,016**	**-80,253**	**1,421,206**

22. Liabilities

➔ Trade payables

Trade payables increased by €61,255 thousand to €348,011 thousand. The change is mainly attributable to Germany (€41,250 thousand) and Norway (€14,630 thousand).

➔ Liabilities to banks

In general, the Wintershall Group is financed via BASF group financing, which has been subject to an interest rate of 0.0% over the last two years due to the negative key interest rate.

Maturities of liabilities to banks

€ thou.	2018	2017
Following year 1	10,396	100,150
Following year 2	499,417	2,455
Following year 3	-	499,004
Total	**509,813**	**601,609**

Composition of liabilities to banks

€ thou.	2018	2017
EUR	499,817	499,543
ARS	9,996	102,066
Total	**509,813**	**601,609**

➔ **Miscellaneous liabilities**

Miscellaneous liabilities increased by €122,324 thousand in the period under review, also due to the recognition of existing pending gas purchase and supply contracts which were not recognized in the balance sheet in the previous period as they were subject to the own-use exemption under IAS 39.

€ thou.	2018		2017	
	Non-current	Current	Non-current	Current
Loan and interest liabilities	501,686	1,599,577	1,356,454	1,729,491
Derivatives with a negative fair value	-	86,715	-	1,985
Consortium settlements	7,389	160,807	8,746	155,089
Liabilities to BASF group companies	-	3,341,700	-	2,394,029
Employee liabilities	-	9,197	-	8,441
Deferred income	1,346	295	676	168
Other	7,459	90,903	14,487	15,184
Total	517,880	5,289,194	1,380,363	4,304,387
Miscellaneous liabilities	**5,807,074**		**5,684,750**	

23. Other financial obligations

The following items are carried at nominal value:

€ thou.	Dec. 31, 2018	Dec. 31, 2017
Surety bonds	**-**	**36,952**
Other contingent liabilities	**392**	**18**
Total	**392**	**36,970**

The surety bonds in the previous year related to a financial guarantee issued for an external company, which was redeemed in the reporting period. If the amount of the obligation is unlimited, the amount of the principal liability as of the balance sheet date is decisive. In cases involving joint and several liability, the full amount must be stated; in the case of pro rata liability, the corresponding share is to be stated. Other contingent liabilities relate to legal disputes.

➔ **Obligations from purchase agreements**

The obligations from purchase agreements resulted primarily from long-term purchase commitments for natural gas. The following firm purchase commitments existed as of December 31, 2018:

€ thou.	2018
2019	1,337,182
2020	1,175,096
2021	1,062,515
2022	1,000,796
2023	825,909
2024 and residual maturities extending beyond this	4,704
Total	**5,406,202**

Additional disclosures

24. Risks from legal disputes and proceedings

In the arbitration proceedings against Wintershall Energía S.A., Argentina ("WIAR"), Total Austral S.A., Argentina, and Pan American Energy LLC, Argentina, which have been ongoing since May 2013, Metrogas S.A., Chile, is asserting claims for damages worth approximately €227 million due to insufficient gas supplies. The defendants, as the sellers, concluded a natural gas supply contract with Metrogas in 1997, in which WIAR has a 37.5% share. After the chairman of the arbitration panel resigned in mid-2016, the International Court of Arbitration (ICC) appointed a new arbitration panel, which continued the proceedings in 2017. The oral hearing took place in April 2017. On February 2, 2018, the arbitration panel dismissed Metrogas's claim in its entirety and ordered Metrogas to bear the costs of the proceedings.

W & G Transport Holding GmbH, as the beneficiary of a planning permission decision, is a party to proceedings before the Higher Administrative Court (*Oberverwaltungsgericht*) of Bautzen concerning pending lawsuits in connection with an intersection between the OPAL route and a wind farm for electricity generation in southern Saxony. In the "worst case" scenario, if the action is upheld, a route would have to be built outside the wind farm, which would result in new planning and construction costs of around €10-15 million; this is not expected to interrupt operations. The proceedings are currently suspended because the parties are involved in a mediation process. Bilateral negotiations are currently underway between the operator of the pipeline, OPAL Gastransport GmbH & Co. KG, for the co-ownership association comprising W & G Transport Holding GmbH (80%) and Lubmin-Brandov Gastransport GmbH (20%) and the plaintiffs.

OPAL Gastransport GmbH & Co. KG ("OGT"), Gazprom Export, Gazprom and the German Federal Network Agency concluded a settlement agreement ("OPAL Settlement Agreement") in November 2016 with the approval of the European Commission ("Commission"), which amended the ancillary provisions of the exemption from regulation granted in 2009 for the OPAL pipeline. The main content of the change is the replacement of the restriction currently imposed on Gazprom, which caps the latter's access to the OPAL pipeline's release capacities at 50%, with auxiliary provisions which essentially provide for the allocation of 50% of release capacities in the context of the general capacity auctions.

Several legal remedies are being pursued against this agreement: PGNiG SA ("PGNiG") and PGNiG Supply & Trading GmbH ("PGNiG S&T") have filed an appeal against the OPAL Settlement Agreement with the Düsseldorf Higher Regional Court (OLG), as well as applications for interim relief. At the same time, PGNiG, PGNiG S&T, the Republic of Poland and Naftogaz of Ukraine have brought actions for annulment before the European Union's General Court (EGC) against the Commission's approval of the OPAL Settlement Agreement. PGNiG, PGNiG S&T and the Republic of Poland have also applied to the EGC for interim relief. In July 2017, the President of the EGC rejected the applications for interim relief submitted by PGNiG, PGNiG S&T and the Republic of Poland. In December 2017 and March 2018, respectively, the EGC also dismissed the actions for annulment brought by PGNiG S&T, Naftogaz of Ukraine and PGNiG against the Commission's approval of the OPAL Settlement Agreement as inadmissible. PGNiG S&T has lodged an appeal with the European Court of Justice against the EGC's decision on inadmissibility. On October 23, 2018, the EGC held oral proceedings in the action for annulment brought by the Republic of Poland against the European Commission's decision approving the settlement agreement, which is still pending. The decision on this action is still pending. A decision is expected in the first half of 2019. OGT is currently unable to make a statement regarding the chances of success of the action for annulment brought by the Republic of Poland, as OGT is not involved in the proceedings. In October 2017, the Düsseldorf Higher Regional Court dismissed the applications filed by PGNiG and PGNiG S&T for interim relief as unfounded. At the same time, the Düs-

seldorf Higher Regional Court made it clear that, in its opinion, the effectiveness of the OPAL settlement agreement requires effective approval by the Commission, and said that, as a result, it would not make any decision on the complaints lodged by PGNiG and PGNiG S&T in the main case until the EGC had made a decision on the actions for annulment, ruling against the approval granted by the European Commission. If the action brought by the Republic of Poland is dismissed, the prospects of success of the appeals pending before the Düsseldorf Higher Regional Court are considered to be highly improbable.

In addition, Wintershall Holding GmbH and its participating interests are regularly involved as defendants or other parties in judicial and arbitration proceedings, as well as official proceedings. On the basis of the knowledge available at present, these proceedings have no significant impact on Wintershall's economic situation.

The amount of provisions for litigation, damages, warranty and similar obligations is explained in Note 21.

25. Additional disclosures on financial instruments

Detailed information on Wintershall's financial risks and risk management can be found in the "Opportunity and Risk Report".

25.1 Financial risks

➔ **Currency risks**

Changes in exchange rates could lead to losses in the value of financial instruments and adverse changes in future cash flows. Foreign currency risks from financial instruments result from the translation at the closing rate of financial receivables, loans, cash and financial liabilities into the functional currency of the group company in question. Foreign exchange contracts are used to hedge foreign exchange risks from nonderivative financial instruments and planned transactions.

The foreign currency exposure corresponds to the net amount of the nominal volume of the nonderivative and the derivative financial instruments that are exposed to currency risks. In addition, planned purchase and sales transactions for the subsequent year were included in the 2018 reporting period if they fell under the currency risk management system. Long and short positions in the same currency are offset against each other.

The sensitivity analysis is conducted by simulating a 10% appreciation of the functional currency against the other currencies. The effect on the Wintershall Group's earnings before income taxes would have been €-85,033 thousand as of December 31, 2018, as against €383,553 thousand as of December 31, 2017. The currency exposure as of December 31, 2018 came to €934,258 thousand as against €-2,145,718 thousand as of December 31, 2017. Compared with the previous period, both the currency exposure and the earnings sensitivity were lower due to the full hedging of our NOK loan and restoration obligations using foreign currency forward contracts with matching maturities.

Exposure and sensitivity by currency

€ thou.	Dec. 31, 2018		Dec. 31, 2017	
	Exposure	Sensitivity	Exposure	Sensitivity
RUB	200,924	-18,266	135,573	-12,325
ARS	-86,636	7,876	-	-
USD	488,328	-44,528	-	-
EUR	848,231	-77,091	-	-
GBP	349,368	-31,741	-	-
NOK	-865,957	78,717	-2,281,291	395,878
Total	**934,258**	**-85,033**	**-2,145,718**	**383,553**

In order to hedge against currency risks, linear products with symmetrical sensitivity were used in particular. The options used involve a unilateral risk, as only put options are used.

➔ Interest rate risks

Interest rate risks arise due to potential changes in prevailing market interest rates, which can lead to changes in the fair value of fixed-rate instruments and in interest payment fluctuations for variable-rate instruments. These risks are relevant to Wintershall's financing activities but are not of material significance for Wintershall's operating activities.

Loan exposure and interest rate sensitivity

€ thou.	Dec. 31, 2018		Dec. 31, 2017	
	Exposure	Sensitivity	Exposure	Sensitivity
Loans	-4,857,793	-36,213	-699,920	-4,247
Total	**-4,857,793**	**-36,213**	**-699,920**	**-4,247**

➔ Commodity price risks

Commodity price risks arise in the ordinary course of business for contracted gas purchase and supply agreements. Wintershall counters the specific price risks associated with these trading transactions, which result from the valuation of the gas agreements concluded in the event of an adverse change in market prices, by imposing and constantly monitoring limits on the type and scope of the transactions concluded. Any resulting adverse changes in market prices could have a negative impact on Wintershall's earnings and equity.

Wintershall carries out value-at-risk analyses for the existing commodity derivatives. Using the value-at-risk analysis, we continually quantify market risk and forecast the maximum possible loss within a given confidence interval over a defined period. The value-at-risk calculation is based on a confidence interval of 95% and a holding period of one day. Wintershall uses the exponentially weighted variance-covariance approach. Wintershall uses value at risk in conjunction with other risk management tools. Besides value at risk, BASF sets volume-based limits, as well as exposure and stop-loss limits.

€ thou.	Exposure	Value-at-risk
Natural gas	312	343

The exposure corresponds to the net amount of all long and short positions in the commodity category in question.

➔ **Default or credit risks**

Default or credit risks arise when contractual partners do not fulfill their obligations. Wintershall regularly analyzes the creditworthiness of all major debtors and grants credit limits on the basis of this analysis. Due to the global activities and diversified customer structure of the Wintershall Group, there is no significant concentration of default risk. The carrying amount of all receivables, loans and interest-bearing securities, plus the nominal value of the other financial obligations subject to a default risk, represents the maximum default risk for Wintershall.

➔ **Liquidity risks**

We promptly recognize any risks from cash flow fluctuations as part of our liquidity planning and ongoing earnings monitoring. Any additional cash and cash equivalents that are required are provided by the shareholders if necessary.

25.2 Maturity analysis

The interest and principal payments as well as other payments for derivative financial instruments are relevant for the presentation of the maturities of the contractual cash flows from financial liabilities. Future cash flows are not discounted here.

Derivatives are included based on their net cash flows, provided they have negative fair values and therefore represent a liability. Commodity derivatives that are generally based on future physical delivery and therefore do not result in an outflow of cash are not included. Derivatives with positive fair values are assets and are therefore not taken into account.

Trade payables are essentially non-interest-bearing and due within one year. As a result, the carrying amount of trade payables corresponds to the sum of future cash flows.

Maturities of contractual cash flows from financial liabilities as of December 31, 2018

€ thou.	Liabilities to banks	Derivative liabilities	Other liabilities	Total
2019	10,426	50,134	5,666,190	**5,726,750**
2020	499,587	-	303,983	**803,570**
2021	-	-	1,837	**1,837**
2022	-	-	1,552	**1,552**
2023	-	-	1,029	**1,029**
2024 and beyond	-	-	547	**547**
Total	**510,013**	**50,134**	**5,975,138**	**6,535,285**

Maturities of contractual cash flows from financial liabilities as of December 31, 2017

€ thou.	Liabilities to banks	Derivative liabilities	Other liabilities	Total
2018	100,024	2,003	5,723,613	**5,825,640**
2019	2,868	-	307,650	**310,518**
2020	499,174	-	306,996	**806,170**
2021	-	-	1,541	**1,541**
2022	-	-	1,256	**1,256**
2023 and beyond	-	-	200,961	**200,961**
Total	**602,066**	**2,003**	**6,542,017**	**7,146,086**

25.3 Classes and categories of financial instruments

For trade receivables, miscellaneous receivables and other assets, loans, cash and cash equivalents, as well as trade payables and other liabilities, the carrying amount approximates the fair value. The balance sheet item "Other financial investments" includes investments not listed on an active market whose fair value cannot be reliably determined and which are therefore measured at cost.

Carrying amounts and fair values of financial instruments as of December 31, 2018

€ thou.	Carrying amounts	Total carrying amounts within the scope of IFRS 7	Measure-ment categories in accord-ance with IFRS 9[1]	Fair value	of which fair value level 1[2]	of which fair value level 2[3]	of which fair value level 3[4]
Participating interests	1,883	1,883	FVTPL				
Trade receivables	669,783	669,783	AC	669,783			
Derivatives – no hedge accounting	11,250	11,250	FVTPL	11,250		11,250	
of which forward foreign exchange trans-actions	1,577	1,577		1,577		1,577	
of which forward transactions on commod-ities	9,673	9,673		9,673		9,673	
Loan and interest receivables	820,016	820,016	AC	820,016			
Miscellaneous receivables and other assets[5]	319,267	248,284	AC/FVTPL	248,284			
Cash and cash equivalents	218,958	218,958	AC	218,958	218,958		
Total assets	**2,052,407**						
Liabilities to banks	509,813	509,813	AC	509,813			
Trade payables	348,011	348,011	AC	348,011			
Derivatives – no hedge accounting	86,715	86,715	FVTPL	86,715		86,715	
of which forward foreign exchange trans-actions	50,133	50,133		50,133		50,133	
of which forward transactions on commod-ities	36,582	36,582		36,582		36,582	
Loan and interest liabilities to third parties	2,101,263	2,101,263	AC	2,101,263			
Overnight deposit liabilities, affiliated com-panies	3,341,700	3,341,700	AC	3,341,700			
Miscellaneous liabilities	277,396	254,864	AC	254,864			
Total liabilities	**6,751,613**						

1 [1]AC: amortized cost; FVTPL: fair value through profit or loss;
a detailed description of the categories can be found in Note 1.3 on page 12 onwards.

2 [2] The fair value was determined on the basis of listed unadjusted prices on active markets.

3 [3] The fair value was determined based on parameters for which directly or indirectly quoted prices on active markets were available.

4 [4] The fair value was determined based on parameters for which there was no observable market data.

5 [5] Excluding the derivatives shown separately. If other receivables are measured at fair value through profit or loss, their measurement is generally based on parameters observable on the market. These are adjusted to reflect the valuation-related properties of the individual assets at fair value.

Carrying amounts and fair values of financial instruments as of December 31, 2017

€ thou.	Carrying amounts[6]	Total carrying amounts within the scope of IFRS 7	Measurement categories in accordance with IAS 39	Fair value	of which fair value level 1[7]	of which fair value level 2[8]	of which fair value level 3
Participating interests	73,492	73,492	AfS				
Trade receivables	502,106	502,106	LaR	502,106			
Derivatives	4,422	4,422	aFVtPL	4,422		4,422	
of which forward foreign exchange transactions	4,422	4,422		4,422		4,422	
Loan and interest receivables	495,591	495,591	LaR	495,591			
Miscellaneous receivables and other assets	301,042	132,337	LaR	132,337			
Cash and cash equivalents	110,326	110,326	LaR	110,326	110,326		
Total assets	**1,486,979**						
Liabilities to banks	601,609	601,609	AmC	601,609			
Trade payables	286,756	286,756	AmC	286,756			
Derivatives	1,985	1,985	aFVtPL	1,985		1,985	
of which forward foreign exchange transactions	1,985	1,985		1,985		1,985	
Loan and interest liabilities to third parties	3,085,945	3,085,945	AmC	3,085,945			
Overnight deposit liabilities, affiliated companies	2,394,029	2,394,029	AmC	2,394,029			
Miscellaneous liabilities	202,791	175,681	AmC	175,681			
Total liabilities	**6,573,115**						

Offsetting of financial assets and financial liabilities as of December 31, 2018

€ thou.	Offset amounts			Amounts that cannot be offset		
	Gross amount	Amount offset	Net amount	Due to global netting agreements	Relating to financial collateral	Potential net amount
Derivatives with a positive fair value	24,615	-13,365	11,250	-1,577	-	9,673
Derivatives with a negative fair value	100,080	-13,365	86,715	-1,577	-	85,138

Offsetting of financial assets and financial liabilities as of December 31, 2017

€ thou.	Offset amounts			Amounts that cannot be offset		
	Gross amount	Amount offset	Net amount	Due to global netting agreements	Relating to financial collateral	Potential net amount
Derivatives with a positive fair value	4,440	-18	4,422	-1,976	-	2,446
Derivatives with a negative fair value	2,003	-18	1,985	-1,967	-	18

The table "Offsetting of financial assets and financial liabilities" shows the extent to which financial assets and financial liabilities were offset in the balance sheet, as well as potential effects from the offsetting of instruments subject to a legally enforceable global netting agreement (primarily in the form of EFET agreements for gas purchase and supply agreements that have been concluded) or a similar agreement.

Net gains and losses from financial instruments comprise the results of valuations, premium and discount amortization, the recognition and reversal of impairments, results from the translation of foreign currencies as well as interest, dividends and all other effects on earnings resulting from financial instruments. The line item "Financial instruments measured at fair value through profit or loss" only contains gains and losses from instruments that are not designated as hedging instruments in accordance with IFRS 9.

Net gains and net losses from financial instruments

[6] Investments in companies or buildings which were not sold in the year under review and which will be held in the following year. Due to a lack of market liquidity, these are measured at amortized cost instead of fair value.

[7] The fair value was determined on the basis of listed unadjusted prices on active markets.

[8] The fair value was determined based on parameters for which directly or indirectly quoted prices on active markets were available.

€ m	2018	2017
Receivables and loans	35	-54
thereof interest	76	70
Available-for-sale financial assets	3	10
thereof interest	-	1
Financial liabilities measured at amortized cost	-100	-391
thereof interest	-33	-385
Financial instruments measured at fair value through profit or loss	-73	4

25.4 Derivative instruments and hedge accounting

The use of derivative instruments

Wintershall is exposed to currency, interest rate and commodity price risks during the normal course of business. These risks are hedged using derivative instruments as necessary in accordance with a centrally defined strategy. Hedging is only employed for existing hedged items from the product business, cash investments, restoration obligations and financing, as well as for planned capital measures. The risks associated with the hedged items and the derivatives are constantly monitored. Where derivatives have a positive market value, Wintershall is exposed to credit risks from derivative transactions in the event of nonperformance of the other party. To minimize the default risk on derivatives with positive market values, transactions are exclusively conducted with creditworthy banks and partners and are subject to predefined credit limits.

The contracting and execution of derivative financial instruments for hedging purposes are conducted according to internal guidelines, and are subject to strict control mechanisms.

The fair values of derivative financial instruments are calculated using valuation models that use input parameters observable on the market.

Fair value of derivative instruments

€ thou.	2018	2017
Foreign currency derivatives	-48,556	2,436
Interest rate derivatives	-	-
Commodity derivatives	-26,909	-
Total	**-75,465**	**2,436**

26. Leases

➔ Lease payments from operating leases

Wintershall is a lessee under operating leases. The resulting obligations in 2018 totaling €144,786 thousand (2017: €234,916 thousand) are to be paid in the following years as follows:

Future minimum lease payments from Wintershall under operating leases

€ thou.	2018	2017
Up to 1 year	46,765	42,569
1–5 years	96,064	147,644
more than 5 years	1,957	44,703
Total	**144,786**	**234,916**

Other explanatory information

27. Cash flow statement

The cash flow from operating activities included the following payments:

€ thou.	2018	2017
Income tax payments	**403,209**	**456,075**
Interest payments	**48,726**	**66,642**
Dividends received	**70,277**	**70,687**

Interest payments included €20,167 thousand (2017: €37,727 thousand) in interest received and €68,893 thousand (2017: €104,369 thousand) in interest paid.

As in the previous year, cash and cash equivalents were not subject to any restrictions on disposal due to restrictions.

Reconciliation in accordance with IAS 7:

			Noncash-effective				
€ thou.	**Dec. 31, 2017**	**Cash-effective**	Foreign exchange effects	Change in scope of consolidation	Other Effects	Change in fair value	**Dec. 31, 2018**
Financial liabilities	601,609	-92,659	-14,276	-	15,139	**-**	**509,813**
Loan liabilities	2,678,629	-914,989	-5,693	-	-	**-**	**1,757,947**
Miscellaneous financing-related liabilities	2,827,315	1,010,897	15,649	-425	-160,995	**-**	**3,692,441**
Financial and similar liabilities	**6,107,553**	**3,249**	**-4,320**	**-425**	**-145,856**	**-**	**5,960,201**
Assets/liabilities from hedging transactions	-	-155,777	-	-	-	109,998	-45,779
Total	**6,107,553**	**-152,528**	**-4,320**	**-425**	**-145,856**	**109,998**	**5,914,422**

The reconciliation shows changes in financial liabilities whose payments and disbursements are shown in the cash flow statement under cash flow from financing activities.

The miscellaneous financial liabilities mainly comprise liabilities from accounts used for cash pooling in the consolidated financial statements of BASF companies. They are reported under other liabilities under the balance sheet item miscellaneous liabilities, which represent financial instruments.

The assets/liabilities from hedging transactions are components of the balance sheet items derivatives with positive/negative market values and only comprise transactions that hedge risks resulting from financial liabilities and financial liabilities by means of micro hedges.

The hedging transactions described here are economic hedging transactions.

28. Capital structure management

The aim of capital structure management is to maintain the financial flexibility needed to further develop the business portfolio and take advantage of strategic opportunities. The objectives of the company's financing policy are to ensure solvency, limit financial risks and optimize the cost of capital.

The equity of the Wintershall Group as reported in the balance sheet amounted to €3,466,856 thousand as of December 31, 2018 (December 31, 2017: €3,213,450 thousand); the equity ratio was 25.37% on December 31, 2018 (December 31, 2017: 24.82%).

The Wintershall Group prefers to borrow capital through BASF in the form of group loans and overnight deposits. The latter is realized through cash pooling at BASF SE, in which all major Wintershall Group companies participate to the extent that is technically and legally possible. Within this context, accounts denominated mainly in Russian roubles and Argentine pesos are excluded from pooling.

29. Share price-based compensation program and BASF incentive share program

➔ **Share price-based compensation program**

The share price-based compensation program (BASF: long-term incentive (LTI) program/Wintershall: BASF option program (BOP)) that has been in place since 1999 for executives within the BASF Group was continued in 2018.

In particular, the Board of Directors and senior executives are eligible to participate in the BASF option program (BOP). A total of 27 people participated in the 2018 share program, meaning that they hold entitlements under the option program.

The program provides for the granting of virtual options. The option rights are settled in cash when they are exercised.

Participation in the BOP program is voluntary. In order to take part in the program, a participant must make a personal investment: a participant must hold BASF shares amounting to 10% to 30% of his or her individual variable compensation for a two-year period from the granting of the option (holding period). The number of shares to be held is determined by the amount of variable compensation and the volume-weighted average market price for BASF shares on the first trading day after the Annual Shareholders' Meeting of BASF, which was €85.45 on May 7, 2018.

The participant receives four option rights per invested share in BASF. Each option consists of two parts, right A and right B, which may be exercised if defined thresholds have been met:

The threshold of right A is met if the price of the BASF share has increased by more than 30% in comparison with the base price on the option grant date (absolute threshold). The value of right A is the difference between the market price of BASF shares on the exercise date and the base price; it is limited to 100% of the base price. If the cumulative percentage performance of BASF shares exceeds the percentage performance of the MSCI World Chemicals IndexSM (MSCI Chemicals), right B may be exercised (relative threshold). The value of right B is the base price of the option multiplied by twice the percentage by which the BASF share outperforms the MSCI Chemicals Index on the exercise date. It is limited to the closing price on the date of exercise less the nominal value of the BASF share. From the 2013 BOP program onward, right B may only be exercised if the price of the BASF share equals at least the base price. During the exercise period, there are certain times (closed periods) during which the options may not be exercised. Each option can

only be exercised in full. This means that one of the thresholds must be exceeded. If the other threshold is not exceeded and the option is exercised, the other option right lapses. A participant's maximum gain from exercising an option is limited to five times the original individual investment starting with the 2013 BOP program. The maximum gain from exercising an option is limited to 10 times the original individual investment for programs from previous years. Option rights are nontransferable and are forfeited if the option holders no longer work for the BASF Group or have sold part of their individual investment before the expiry of the two-year vesting period. They remain valid in the event of retirement.

The 2010 to 2017 programs were structured in a similar way to the 2018 BOP program.

The models used in the valuation of the option plans are based on the arbitrage-free valuation model according to Black-Scholes. The fair values of the options are determined using the binomial model.

Fair value of options and parameters used as of December 31, 2018

		Dec. 31, 2018	Dec. 31, 2017
Fair value	EUR	10.5	6.25
Dividend yield	%	5.3	5.3
Risk-free rate	%	0.00	-0.12
Volatility of BASF shares	%	25.32	23.22
Volatility of MSCI Chemicals	%	15.97	14.14
Correlation BASF share price - MSCI Chemicals	%	78.27	75.24

The stated fair values and the valuation parameters as of the balance sheet date of December 31, 2018 relate to the 2018 and 2017 BOP programs. The fair value calculation was based on the assumption that options will be exercised in a manner dependent on their potential gains. For the programs from preceding years, corresponding fair values and valuation parameters were determined/used.

Volatility was determined on the basis of the monthly closing prices over a historical period corresponding to the remaining term of the options.

The number of options held amounted to 292,910 as of December 31, 2018 (previous year: 263,047).

As a result of a resolution passed by the Board of Executive Directors of BASF in 2002 to settle option rights in cash, all outstanding option rights under the 2010 to 2018 BOP programs were measured at fair value as of December 31, 2018. A proportionate provision is recognized for programs in the vesting period. The provision set up for this purpose decreased to €1,092 thousand as of December 31, 2018 due to utilization and lower fair values of the outstanding options (previous year: €6,627 thousand). In 2018, the utilization of the provision amounted to €462 thousand.

➔ BASF employee participation program

The "plus" employee participation program is open to all employees except the executives who are entitled to take part in the BASF option program. The program was launched in 1999. Employees who participate in the "plus" incentive share program acquire shares in BASF from their variable compensation. For every 10 BASF shares purchased as part of the program, a participant receives one BASF share at no cost after one, three, five, seven and ten years of holding these shares. As a rule, the first and second block of ten shares entitles the participant to receive one BASF share at no extra cost in each of the next 10 years.

The right to receive free BASF shares lapses if a participant sells the individual investment in BASF shares, if the participant stops working for a group company or one year after retirement.

The number of free shares to be granted amounted to 12,319 as of the balance sheet date (previous year: 13,507).

The free shares to be provided are measured at the fair value on the date on which the employees acquire the subscription right by way of their investment. Fair value is determined on the basis of the BASF share price, taking into account the present value of dividends, which are not paid during the term of the program. The weighted-average fair value on the grant date amounted to €87.38 for the 2018 program, and €86.02 for the 2017 program.

30. Compensation paid to the Board of Directors and Supervisory Board

The compensation paid to the management amounted to €3,322 thousand in the 2018 fiscal year (2017: €3,242 thousand). In 2018, 23,028 option rights were granted to active members of the Board of Directors under the BASF share option program. The fair market value of these options came to €30.71 as of July 1, 2018. Together with the option rights granted in previous years, active and former members of the Board of Directors hold a total of 112,506 option rights.

€ thou.	2018	2017
Total compensation paid to the Board of Directors	3,322	3,242
Market value of options granted to the Board of Directors in the fiscal year on the grant date	707	535
Total remuneration paid to the Board of Directors	**4,029**	**3,777**
Compensation paid to the Supervisory Board	61	61
Pension expenses for members of the Board of Directors of Wintershall	1,322	1,018
Total compensation paid to former members of the Board of Directors	1,273	911
Pension provisions for former members of the Board of Directors and their surviving dependents	25,249	23,583

31. Related party transactions

A related party is a natural person or legal entity that can exert influence on the Wintershall Group or over which the Wintershall Group exercises control, joint control or a significant influence. In particular, related parties include nonconsolidated subsidiaries, joint ventures and associated companies, as well as BASF SE and its subsidiaries. The following tables show the volume of business with related parties that are included in the consolidated financial statements at amortized cost or accounted for using the equity method.

Revenue with related parties

€ thou.	**Revenue**	
	2018	**2017**
Nonconsolidated subsidiaries	3,291	5,093
Associated companies	152,408	134,963
Joint ventures	7,647	10,828
Sister companies	195,481	121,315
Parent companies	417,957	288,520
Total	**776,784**	**560,719**

Trade receivables from, and trade payables to, related parties

€ thou.	Trade receivables		Trade payables	
	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017
Nonconsolidated subsidiaries	4,203	5,618	2,350	546
Associated companies	12,712	5,243	6	63
Joint ventures	5,173	2,608	3,740	313
Sister companies	16,435	16,039	3,328	3,477
Parent companies	50,344	28,439	2,614	8,112
Trade receivables from, and trade payables to, related parties	**88,867**	**57,947**	**12,038**	**12,511**

Miscellaneous receivables from, and liabilities to, related parties

€ thou.	Miscellaneous receivables		Miscellaneous liabilities	
	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017
Nonconsolidated subsidiaries	27,205	32,890	34	3
Associated companies	1,301	867	132,739	110,781
Joint ventures	168,457	149,350	366,645	675,974
Sister companies	-	49	1,900,892	2,883,955
Parent companies	1,577	4,422	2,892,563	1,611,036
Miscellaneous receivables and other assets	**198,540**	**187,578**	**5,292,873**	**5,281,749**

Liabilities from the profit and loss transfer agreement with BASF Handels- und Export GmbH amounted to €342,865 thousand as of December 31, 2018 and €405,236 thousand as of December 31, 2017.

Revenues with, as well as trade receivables from, and trade payables to, related parties mainly comprised transactions with the company's own products, brokerage and licensing transactions, as well as other typical business transactions.

Miscellaneous receivables and liabilities resulted mainly from financing transactions, outstanding dividend payments and profit and loss transfer agreements, as well as other financing-related and operating transactions and scenarios.

The miscellaneous receivables from joint ventures resulted, in particular, from the transfer of the financing function for the regulated gas transportation activities to the joint venture W & G Infrastruktur Finanzierungs-GmbH, Kassel, which was established in 2017.

The outstanding balances with related parties were not secured in general and were settled in cash. The amount of valuation allowances on trade receivables from associated companies fell from €8,146 thousand as of December 31, 2017 to €0 thousand as of December 31, 2018.

Accordingly, the addition to these valuation allowances recognized as an expense amounted to €0 thousand in 2018 (previous year: €8,146 thousand).

The amount of valuation allowances on miscellaneous receivables from nonconsolidated subsidiaries fell from €53,379 thousand as of December 31, 2017 to €54,374 thousand as of December 31, 2018. The addition to these allowances recognized as an expense in 2017 amounted to €995 thousand. In contrast to the previous year (€5,236 thousand), there was no reversal recognized in the income statement.

In 2018, no reportable transactions were concluded with members of the Board of Directors and their related parties.

The following table shows the remuneration paid to key management personnel.

Remuneration paid to key management personnel

€ thou.	2018	2017
Short-term benefits	3,383	3,303
Post-employment benefits	27,844	25,512
Other long-term benefits	-	-
Termination benefits	-	-
Share-based payment	707	535

32. Services rendered by the auditor of the annual financial statements

Companies in the Wintershall Group have made use of the following services provided by KPMG AG:

€ thou.	2018	2017
Audit of the annual financial statements	784	889
Other assurance services	108	106
Total	**892**	**995**

The auditor's services mainly comprised services for the audit of the financial statements and, to a lesser extent, assurance services.

The audit of the financial statements related to expenses for the audit of the consolidated financial statements of the Wintershall Group, as well as the legally required annual financial statements and the subsidiaries and joint operations included in the consolidated financial statements. Fees for other assurance services mainly comprised project audits in connection with regulatory requirements and other assurance services.

33. Report on post-balance sheet date events

On February 21, 2019, the management announced the planned reduction in the workforce as part of the merger between Wintershall and DEA. Wintershall and DEA currently employ 4,200 people (including joint ventures). The plan is to reduce the number of jobs by 1,100 in a socially responsible manner, with around 800 job cuts affecting Germany, 200 affecting Norway and 100 affecting the rest of the world. A major part of the job cuts will affect the group functions at the Hamburg and Kassel locations. In addition, further job cuts are planned at the production sites, particularly in Germany and Norway. The employee representatives of Wintershall and DEA are currently negotiating a social restructuring plan with the company representatives of both companies. The negotiations are not expected to have been concluded before the end of the first half of 2019. It is not yet possible to quantify the effects on the assets, liabilities, financial position and financial performance of the Wintershall Group.

Kassel, March 29, 2019

Mehren Bachmann Elvermann Wieland

The following independent auditor's report, prepared in accordance with § 322 HGB "Handelsgesetzbuch":"German Commercial Code", refers to the complete consolidated financial statements, comprising the consolidated statement of financial position, consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows and notes to the consolidated financial statements of Wintershall for the financial year as of and for the financial year ended 31 December 2018. The above-mentioned auditor's report and consolidated financial statements are both translations of the respective German-language documents. The group management report is not part of this Offering Memorandum.

Audit opinion of the independent auditor

To **Wintershall Holding GmbH, Celle/Kassel**

Opinion

We have audited the consolidated financial statements of **Wintershall Holding GmbH, Celle/Kassel** and its subsidiaries (the Group) – comprising the consolidated statement of financial position at December 31, 2018, the consolidated statement of income, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the fiscal year from January 1 to December 31, 2018, as well as the notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of **Wintershall Holding GmbH** for the fiscal year from January 1 to December 31, 2018.

In our opinion, based on our audit findings,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRS as adopted by the EU, and the supplementary requirements of German commercial law pursuant to section 315e (1) of the German Commercial Code (HGB) and give a true and fair view of the net assets and financial position of the Group at December 31, 2018, and of its results of operations for the fiscal year from January 1 to December 31, 2018, in accordance with these requirements, and
- the accompanying group management report as a whole provides a suitable view of the Group's position. In all material respects, the group management report is consistent with the consolidated financial statements, complies with German statutory requirements and suitably presents the opportunities and risks of future development.

Pursuant to section 322 (3) sentence 1 HGB, we state that our audit has not led to any reservations with respect to compliance of the consolidated financial statements and the group management report.

Basis for the audit opinions

We conducted our audit of the consolidated financial statements and group management report in accordance with section 317 HGB and the generally accepted standards for the audit of financial statements promulgated by the German Institute of Public Auditors (IDW). Our responsibilities under those regulations and guidelines are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements and group management report" section of our report. We are independent of the group companies in accordance with the requirements of German commercial law and the rules of professional conduct, and we have fulfilled our other ethical responsibilities under German professional law in accordance with these requirements. We believe that the audit evidence we obtained is sufficient and appropriate to provide a basis for our opinion on the consolidated financial statements and group management report.

Responsibilities of the statutory representatives and the supervisory board for the consolidated financial statements and the group management report

The statutory representatives are responsible for the preparation of the consolidated financial statements which, in all material respects, comply with IFRS, as adopted by the EU, and the supplementary requirements of German commercial law pursuant to section 315e (1) HGB, and for ensuring that the consolidated financial statements give a true and fair view of the asset, financial and earnings position of the Group in accordance with these requirements. Furthermore, the statutory representatives are responsible for such internal control as they determine is necessary, in accordance with the generally accepted German accounting principles, to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the statutory representatives are responsible for assessing the Group's ability to continue as a going concern. Furthermore, they are responsible for disclosing, as applicable, matters related to going concern. In addition, they are responsible for using the going concern basis of accounting unless the intention is to liquidate the Group or to cease operations, or there is no realistic alternative to doing so.

Moreover, the statutory representatives are responsible for preparing the group management report, which as a whole provides a suitable view of the Group's position, as well as, in all material respects, is consistent with the consolidated financial statements, complies with German statutory requirements and suitably presents the opportunities and risks of future development. Furthermore, the statutory representatives are responsible for such arrangements and measures (systems) as they determine are necessary to enable the preparation of a group management report in compliance with the applicable requirements of German commercial law and for providing sufficient and appropriate evidence for the assertions in the group management report.

The Supervisory Board is responsible for monitoring the Group's financial reporting process for preparing the consolidated financial statements and the group management report.

Auditor's responsibilities for the audit of the consolidated financial statements and the group management report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatements, whether due to fraud or error, and whether the group management report as a whole provides a suitable view of the Group's position, as well as, in all material respects, is consistent with the consolidated financial statements and our audit findings, complies with German statutory requirements, and suitably presents the opportunities and risks of future development, and to issue an auditor's report that includes our opinion on the consolidated financial statements and the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with section 317 HGB, as well as in compliance with the German generally accepted standards for the audit of financial statements promulgated by the German Institute of Public Auditors (IDW), will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

As part of our audit we exercise professional judgment and maintain professional skepticism throughout the audit. In addition

- we identify and assess the risks of material misstatements of the consolidated financial statements and the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- we obtain an understanding of internal control relevant to the audit of the consolidated financial statements, and of the arrangements and measures relevant to the audit of the group management report, in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- we evaluate the appropriateness of accounting policies used, and the feasibility of accounting estimates and related disclosures made, by the statutory representatives.
- we draw conclusions as to the appropriateness of use of the going concern basis of accounting by the statutory representatives and, based on the audit evidence obtained, whether there is any material uncertainty related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that such material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements and group management report or, if such disclosures are inadequate, to modify our particular opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- we evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that gives a true and fair view of the assets, financial and earnings position of the Group in accordance with IFRS, as adopted by the EU, and the supplementary requirements of German commercial law pursuant to section 315e (1) HGB.
- we obtain sufficient and appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements and the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.
- we evaluate the consistency of the group management report with the consolidated financial statements, its legal compliance and presentation of the Group's position.
- we perform audit procedures on the prospective information presented by the statutory representatives in the group management report. Based on sufficient and appropriate audit evidence, we hereby understand the significant assumptions used by the statutory representatives to be a basis for the prospective information in particular and assess the appropriate derivation of the prospective information from these assumptions. We are not issuing a separate audit opinion on the prospective information or the underlying assumptions. There is a significant, unavoidable risk that future events will deviate significantly from the prospective information.

We communicate with the individuals responsible for monitoring, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Audited Consolidated Financial Statements of Dea
(prepared in accordance with IFRS as adopted by the EU)as of and for the year ended 31 December, 2018

DEA Deutsche Erdoel AG
Consolidated Financial Statements
Fiscal Year
1 January - 31 December 2018

DEA Deutsche Erdoel AG - Consolidated Income Statement

€m	(Notes)	Jan. - Dec. 2018	Jan. - Dec. 1) 2017
Sales and other operating revenues	(2)	1,892	1,427
Cost of sales	(3)	-759	-728
Gross profit		1,133	699
Exploration costs	(4)	-111	-122
General and administration expenses		-125	-123
Net impairment of assets	(9)	-168	-100
Net impairment of operating receivables	(18)	1	-
Operating result		730	354
Financial income	(6)	109	87
Financial expenses	(6)	-89	-260
Net impairment of financial receivables	(18)	9	-
Result from continuing operations before taxes	(7)	759	181
Income taxes	(8)	-478	-174
Result from continuing operations		281	7
Result from discontinued operations	(1)	53	14
Net result		334	21
Thereof attributable to:			
Shareholders of the parent company		330	18
Non-controlling interests		4	3

1) Due to the reporting of discontinued operations, the comparative prior figures have been adjusted.

DEA Deutsche Erdoel AG - Consolidated Statement of Comprehensive Income

€m	Jan. - Dec. 2018	Jan. - Dec. 2017
Net result	334	21
Items that may be reclassified to profit or loss		
Currency translation adjustments	6	-26
Fair valuation of financial instruments in hedge relationship	66	-9
Items that will not be reclassified to profit or loss		
Remeasurement of defined benefit plans	-22	2
Other comprehensive income (after taxes)	**50**	**-33**
Total comprehensive income	**384**	**-12**
Thereof attributable to:		
Shareholders of the parent company	380	-15
Non-controlling interests	4	3

DEA Deutsche Erdoel AG - Consolidated Balance Sheet

Assets (€m)	(Notes)	31-12-2018	31-12-2017
Non-current assets			
Intangible assets	(9)	855	588
Property, plant and equipment	(9)	3,320	2,952
Investment property		2	2
Financial investments		3	4
Financial receivables	(10)	1,916	2,021
Other receivables and other assets	(11)	56	81
Deferred tax assets	(8)	51	116
		6,203	5,764
Current assets			
Inventories	(12)	83	83
Financial receivables	(10)	29	22
Trade accounts receivable	(11)	264	279
Other receivables and other assets	(11)	110	69
Income tax assets	(8)	0	11
Cash and cash equivalents	(13)	305	116
		791	580
		6,994	6,344

Equity and Liabilities (€m)	(Notes)	31-12-2018	31-12-2017
Equity	(14)		
Shareholder's equity		1,840	1,813
Non-controlling interests		-	5
		1,840	1,818
Non-current liabilities			
Provisions	(15)	657	728
Debt to banks	(16)	1,441	1,334
Financial debt	(16)	1,041	1,013
Income tax liabilities	(8)	26	26
Other liabilities	(17)	4	15
Deferred tax liabilities	(8)	739	526
		3,908	3,642
Current liabilities			
Provisions	(15)	185	208
Debt to banks	(16)	6	0
Financial debt	(16)	396	116
Trade accounts payable	(17)	298	304
Income tax liabilities	(8)	124	24
Other liabilities	(17)	237	232
		1,246	884
		6,994	6,344

DEA Deutsche Erdoel AG - Consolidated Cash Flow Statement

€m (16)	**Jan. - Dec. 2018**	**Jan. - Dec. 2017** [1)]
Result from continuing operations	281	7
Depreciation/impairment losses/reversal of impairment losses	486	389
Changes in provisions	-2	23
Changes in deferred taxes	287	103
Gain/losses from disposal of assets	-30	20
Other non-cash income/expenses	28	-28
Changes in working capital	23	110
Changes in other balance sheet items	-40	269
Cash flow from operation activities - continuing operations	**1,033**	**893**
Cash flow from operating activities - discontinued operations	31	20
Cash flow from operating activities	**1,064**	**913**
Cash outflows for additions to intangible assets, property, plant and equipment and investment property	-948	-829
Cash inflows from disposal of fixed assets	76	15
Cash outflows for acquisitions	-182	-65
Cash inflows from (cash outflows for) divestures	63	-
Cash inflows from (cash outflows for) financial assets	219	-20
Cash flow from investment activities - continuing operations	**-772**	**-899**
Cash flow from investment activities - discontinued operations	-9	-9
Cash flow from investment activities	**-781**	**-908**
Profit transfer to parent company	-130	-9
Repayments of debt to banks	-325	-282
Proceeds from debt to banks	363	304
Cash flow from financing activities - continuing operations	**-92**	**13**
Cash flow from financing activities - discontinued operations	-3	0
Cash flow from financing activities	**-95**	**13**
Net change in cash and cash equivalents	**188**	**18**
Effects of foreign exchange rates changes and other changes in value	1	-3
Cash and cash equivalents at beginning of reporting period	116	101
Cash and cash equivalents at end of reporting period	**305**	**116**
Less: Cash and cash equivalents of discontinued operations at end of reporting period	-	0
Cash and cash equivalents of continuing operations at end of reporting period	**305**	**116**
Supplementary information on cash flows from operating activities - continuing operations		
Income tax paid (less refunds)	8	43
Interest paid	98	90
Interest received	53	3
Dividends received	0	0

1) Due to the reporting of discontinued operations, the comparative prior figures have been adjusted.

DEA Deutsche Erdoel AG - Consolidated Statement of Changes in Equity

€m	Subscribed capital	Capital reserve	Retained earnings	Currency translation adjustments	Fair valuation of financial instruments	Shareholder's equity	Non-controlling interests	Total
As at 01-01-2017	344	980	657	-63	-18	1,900	4	1,904
Fair value of derivative financial instruments with no impact on profit or loss					-9	-9		-9
Currency translation adjustments			1	-27		-26		-26
Remeasurement of defined benefit plans			2			2		2
Other comprehensive income			3	-27	-9	-33		-33
Net result			18			18	3	21
Total comprehensive income			21	-27	-9	-15	3	-12
Profit and loss transfer/ distribution			-72			-72	-2	-74
Other changes								
As at 31-12-2017	344	980	606	-90	-27	1,813	5	1,818
As at 01-01-2018	344	980	606	-90	-27	1,813	5	1,818
Adjustments on adoption of IFRS 9 (net of tax)			-3			-3		-3
As at 01-01-2018 (restated)	344	980	603	-90	-27	1,810	5	1,815
Fair value of derivative financial instruments with no impact on profit or loss					66	66		66
Currency translation adjustments			0	6		6		6
Remeasurement of defined benefit plans			-22			-22		-22
Other comprehensive income			-22	6	66	50		50
Net result			330			330	4	334
Total comprehensive income			308	6	66	380	4	384
Profit and loss transfer/ distribution			-350			-350		-350
Other changes			0	0		0	-9	-9
As at 31-12-2018	344	980	561	-84	39	1,840	-	1,840

About this report

DEA Deutsche Erdoel AG is a German limited company and is headquartered at Überseering 40 in 22297 Hamburg, Germany. It is registered at the Hamburg local court under HRB 6882. The nature of the operations and principal activities of DEA Deutsche Erdoel AG are described in the management report. The presented consolidated financial statements as at 31 December 2018 were approved for publication by the Board of Management of DEA Deutsche Erdoel AG on 8 February 2019. In accordance with the resolution adopted at the annual general meeting, PricewaterhouseCoopers GmbH Wirtschaftsprüfungs-gesellschaft audited the consolidated financial statements and the consolidated management report of DEA Deutsche Erdoel AG and issued its unqualified audit opinion. The consolidated financial statements are available from DEA Deutsche Erdoel AG, Überseering 40, 22297 Hamburg and at www.dea-group.com. The consolidated financial statements are filed electronically with the operator of the German Government Gazette and promulgated therein after their filing.

Basis of preparation

The consolidated financial statements were prepared in accordance with the International Financial Reporting Standards (IFRS) applicable in the EU, as well as in accordance with the supplementary accounting regulations applicable pursuant to Section 315e, Para. 1 of the German Commercial Code (HGB). All figures for the previous year were determined in conformity with the same principles unless new accounting methods have been used prospectively for the reporting period.

The financial statements are prepared in euros (€). The amounts, including figures for previous years , are generally reported in millions of euros (€m). If necessary, amounts are disclosed in thousands of euros (€k). This rounding effect does not produce any loss of information. The income statement is prepared in accordance with the cost-of-sales method. Various items of the Income Statement and the Balance Sheet are combined to improve the transparency of presentation. These items are shown and explained separately in the Notes.

The financial statements have been prepared under the historical cost convention, except for derivative financial instruments and certain other financial assets and financial liabilities, which have been measured at fair value.

Summary of significant accounting policies

Scope of consolidation

The consolidated financial statements include the accounts of DEA Deutsche Erdoel AG and its subsidiaries over which the company has control. DEA AG controls an investee if it has power over the investee. In addition, DEA AG is exposed to, or has rights to, variable returns from its involvement with the investee and DEA AG has the ability to use its power over the investee to affect the amount of DEA AG's return. A subsidiary is de-consolidated from the date that control ceases. There are 16 consolidated companies (previous year: 20), 6 of them abroad (previous year: 4). Participation in 2 foreign subsidiaries (previous year: 3) of minor importance to the DEA AG Group are reported as financial investments measured at fair value in accordance with IFRS 9. In total, these subsidiaries account for less than 1 % of the consolidated revenue and income as well as of consolidated debt. In the reporting period, 4 domestic and one foreign subsidiaries were deconsolidated (see note 1) and 3 foreign subsidiaries, one of them previously reported as financial investment, were consolidated for the first time. Moreover, 2 subsidiaries have been merged on their parent company.

Consolidation principles

The financial statements of the domestic and foreign companies included in the Consolidated Financial Statements of DEA Deutsche Erdoel AG are drawn up in conformity with uniform accounting and valuation methods. Expenses and earnings as well as accounts receivable and payable between the consolidated subsidiaries are eliminated. Intercompany gains or losses are eliminated, unless they are negligible. Capital consolidation is performed by offsetting the carrying amounts of subsidiaries against their underlying equity. Depreciation charged in the companies' individual statements on shares in, and loans to, consolidated subsidiaries is reversed.

Business combinations

Cost of an acquisition is measured at the fair value of the assets given and liabilities incurred or assumed at the date of exchange. Identifiable assets acquired and liabilities assumed in a business combination (including contingent liabilities) are measured initially at their fair values at the acquisition date, irrespective of the extent of any non-controlling interest. Non-controlling interest in a subsidiary represents the portion of the subsidiary not owned by DEA Deutsche Erdoel AG. The results of the subsidiaries acquired or disposed of during the year are included in the consolidated statement of income from the date of acquisition or until their disposal, respectively.

Joint arrangements

Joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor. There are joint arrangements at DEA AG Group in the course of development and production activities. They are classified as joint operations since the arrangements transfer the rights and obligations relating to the assets and liabilities to the investors. The Group's shares in joint operations are accounted for by recognising its respective share in assets and liabilities as well as its income and expenses.

Currency translation

In the companies' individual statements, foreign currencies transactions are translated at exchange rates prevailing at the date of the transaction. Monetary foreign currency items are measured at the current exchange rate at each balance sheet date. Exchange gains or losses incurred by the balance sheet date are recognised in the income statement.

The financial statements of Group companies with functional currencies different from the Group's presentation currency (Euro) are translated using the current rate method. All balance sheet items are translated at the current exchange rates prevailing at the balance sheet date. Differences from previous-year translation are recognised in other comprehensive income without impact on profit or loss. Income statement items are translated generally at annual average rates. The use of average rates for the income statement creates additional differences compared with the application of current exchange rates for balance sheet items which are also recognised in other comprehensive income.

The following exchange rates were applied in translating foreign currencies to euros:

1 € =	Rate on balance sheet date		Average rate	
	31-12-2018	31-12-2017	Jan. - Dec. 2018	Jan. - Dec. 2017
1 Pound sterling	1.12	1.13	1.13	1.14
100 Norwegian kroner	10.05	10.16	10.42	10.72
100 Polish zloty	23.25	23.94	23.48	23.49
1 Mexican peso	0.044	-	0.044	-

Realisation of income

Revenues are recognised when a performance obligation has been satisfied by transferring a promised good or service to a customer. The transfer criteria is fulfilled when the customer obtains control. They are measured at the transaction price that is allocated to the respective performance obligation.

At DEA AG Group revenues primarily consist of oil and gas sales. Oil and gas revenues are recognised at the time of delivery to the contractual delivery point. This is generally the case, if oil passes the vessel's rail or, in case of oil and gas supply via pipeline, when passing agreed delivery points. Revenues derived from services are of minor significance for the DEA AG Group.

Income taxes

Tax positions under respective local tax laws and tax authorities' views can be complex and subject to different interpretations by tax payers and local tax authorities. Different interpretations of tax laws may result in additional tax payments for previous years and are included in management considerations. In the DEA AG Group, despite the existence of a fiscal unit, actual and deferred taxes are recognised on the basis of a tax allocation contract.

Under the liability method, deferred tax assets and liabilities are recognised for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets are recognised if sufficient future taxable profit is available, including knowledge about income from forecast operating earnings, the reversal of existing taxable temporary differences and established tax planning opportunities. As of each period-end, the DEA AG Group evaluates the recoverability of deferred tax assets on the basis of projected future taxable profits. According to the level of historical taxable income and projections for future taxable income over the periods in which the deferred tax assets are deductible, the DEA AG Group believes it is probable the company will realise the benefits of these deductible differences. As future developments are uncertain, assumptions are necessary to estimate future taxable profits as well as the period in which deferred tax assets will recover. Estimates are revised in the period in which there is sufficient evidence to revise the assumption.

Intangible assets

Intangible assets include capitalised exploration expenditure, other intangible assets such as cost recovery rights, licence rights in the production phase, commercial and technical software and goodwills. They are reported at amortised costs.

The exploration phase comprises the period from the receipt of exploration rights until their expiry or until technical feasibility of a field development and economic viability have been demonstrated. The exploration expenditure capitalised during this phase includes, for example, concession acquisition costs, licences and exploration rights and exploration wells. Exploration wells are accounted for at their historic cost of acquisition or production according to the successful efforts method; i.e. expenses incurred on exploration wells are generally capitalised only if they were successful, in the sense that they led in particular to the discovery of oil and gas deposits. Once the reserves are proved and commercial viability is established and the development is highly probable, the exploration wells are reclassified into property, plant and equipment and intangible exploration rights are reclassified into other intangible assets. During the exploration phase, the exploration expenditure capitalised is not subject to scheduled amortisation/depreciation. With the start of production, it is amortised/depreciated according to the unit-of-production method.

Other intangible assets have a finite useful life and are therefore subject to systematic linear or production-related depreciation. The useful life of concessions and other licence rights corresponds to the contractual term or comprises the period until the end of economic production. Software for commercial or technical applications is depreciated under the straight-line method over three years. The useful economic life and amortisation methods are subject to annual review.

Goodwill is not subject to systematic amortisation. It is subject to an impairment test on an annual basis or whenever there are indications of a diminution in value (impairment test). Goodwill is part of cash-generating units. The goodwill impairment test is performed at the level of a cash-generating unit or a group of cash-generating units. This is the lowest level at which goodwill is monitored for internal management purposes.

Property, plant and equipment

Property, plant and equipment comprise land and buildings, oil and gas assets, other plant, machinery and equipment as well as fixtures and fittings and office equipment. They are valued at amortised acquisition or production cost. Borrowing costs that can be directly allocated to the acquisition or production of an asset are capitalised as part of acquisition or production costs if a considerable period is necessary to convert the asset into its intended state for use or sale ("qualified asset"). The cost of property, plant and equipment includes the estimated cost of de-installation or demolition and removal and of the reconditioning of the site under public or private law obligations, to the extent related provisions are set up. Maintenance and repair costs are stated as expenses.

Oil and gas assets are generally depreciated using the unit-of-production method. Basically, in the case of capitalised wells the depreciation is based on the current production of the period in relation to proved developed producing reserves and in the case of acquisition costs and production facilities/support equipment the current production of the period is set in relation to total proved reserves.

Other property, plant and equipment, with the exception of land and similar rights, is depreciated using the straight-line method. The typical useful lives of the DEA AG Group's non-production-related property, plant and equipment are as follows:

	Years
Buildings	24 - 50
Technical plant and machinery	5 - 15
Factory and office equipment	3 - 20

Impairment test

An impairment loss is recognised for intangible assets as well as for property, plant and equipment and investment properties if the recoverable amount of the asset is less than its carrying amount. Exploration assets are required to be tested for impairment as soon as the technical feasibility and profitability of a resource can be proven. The presence of facts and circumstances indicating an impairment also gives rise to an impairment test. If the asset is part of a cash-generating unit (the smallest identifiable group of assets generating cash flows, which are largely independent of the cash inflows of other assets or other groups of assets), then an impairment is derived on the basis of the recoverable amount of the cash-generating unit. In the event that the carrying amount of a cash-generating unit to which a goodwill was allocated exceeds the recoverable amount, a resulting impairment loss is initially applied to the allocated goodwill. Any further impairment loss required will be taken into account through a pro-rata reduction in the remaining carrying amounts of the cash-generating unit. A reversal of an impairment loss up to the value of amortised cost is made if the reasons for an earlier impairment no longer exist. In this case, the increased book value resulting from a reversal must not exceed the amortised cost of acquisition or production. Impairment losses are reported net of reversals of impairment losses. Impairment losses on goodwill are not reversed.

Within the scope of the impairment test, the recoverable amount of the cash-generating unit is determined. The recoverable amount is defined as the higher of fair value less cost of disposal or value in use. The fair value represents the best possible estimate for the amount for which an independent third party would acquire the cash-generating unit on the balance sheet date; the cost of disposal is deducted. Value in use reflects the present value of the future cash flows which are expected to be generated with the cash-generating unit. If either of these amounts exceeds the carrying amount, it is not always necessary to determine both amounts. These values are generally determined on the basis of discounted cash flow calculations which, in turn, are generally based on current corporate planning. The cash flow forecasts pertain to the life-of-field-period for the individual concession/licence or groups of concessions/licences. The calculations are based on historical experience as well as expectations of future market trends. The principal assumptions underlying the determination by management of the recoverable amount are the forecasts for market prices of oil and natural gas, the estimated reserves, the production forecast as well as the discount rates. The discount rates applied are based on weighted average capital costs taking into consideration specific country risks. The calculation was not related to the actual capital structure of the company but was derived by peer group.

Financial assets

From 1 January 2018 onwards, financial assets are classified in the following measurement categories:

- Financial assets to be measured at fair value through profit or loss (FVPL)
- Financial assets to be measured at amortised costs

Financial assets are classified as at amortised costs only if the asset is held within a business model whose objective is to collect the contractual cash flows and if the contractual term give rise to cash flows that are solely payments of principal and interest.

Financial assets are recognised in the balance sheet if a company is a party to a contract for the asset in question. Market-conform purchases or sales of financial assets are recognised or derecognised on the day of trading. Financial assets are derecognised when the contractual rights to cash flows from the asset expire or the entity transfers the financial asset. The latter applies when all the essential risks and rewards of ownership of the asset are transferred, or the entity no longer has control of the asset.

Except for trade accounts receivables from sales revenues, at initial recognition, financial assets are measured at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction cost that are directly attributable to the acquisition of the financial asset. Trade accounts receivable from sales revenues are recognised initially at the amount of consideration that is unconditional unless they contain significant financing components.

After initial recognition, financial assets are measured depending on their classification either at amortised cost using the effective interest method or at fair value through profit or loss.

For financial assets measured at amortised costs expected credit losses are recognised. The assessment of credit losses is carried out on a forward looking basis. Impairment losses are presented in separate line items in the income statement either as impairment losses on operating receivables or as impairment losses on financial receivables. Reversals of impairment losses are credited against the same line item.

Inventories

Inventories are carried at cost of acquisition or production or at the lower net realisable value. Production costs reflect the full costs directly related to production and are determined on the basis of the normal capacity. To the extent that the net realisable value of previously impaired inventories has increased, the resulting reversal is recognised in the same expense item in which the original impairment was recorded.

Provisions

Provisions are set up for all legal or factual obligations to third parties as at the balance sheet date which are based on past events and will probably lead to an outflow of resources in the future and the extent of which can be reliably estimated. Possible obligations to third parties or existing obligations where an outflow of resources is improbable or the extent thereof cannot be reliably determined, are not to be recognised as provisions. They have to be disclosed as contingent liabilities in the notes unless the possibility of an outflow of resources with economic benefits is remote.

Provisions are carried at their foreseeable settlement amount and not netted against any recovery claims. The settlement amount comprises cost increases to be taken into account as of the balance sheet date. In the case of non-current provisions, the amounts are discounted to the present value, applying the country-specific or currency-specific market interest rate applicable as of the respective balance sheet date. Provisions based on a large number of similar events are reported at their expected value. Releases of provisions are written back against the expense item against which the provision was originally set up.

Decommissioning provisions cover the updated commitments for the plugging of wells, the de-installation of onshore and offshore production facilities and the reconditioning of operations and drilling sites. Their extent is based on the anticipated full costs, taking into account the empirical data and the cost benchmarks determined by the Association of German Crude Oil and Natural Gas Producers, with comparable assumptions available for foreign activities. Should any changes in interest rates or estimates in terms of the time or the level of payouts lead to changes in this provision, then the carrying amount of the associated asset will be adjusted accordingly. If the reduction is higher than the book value, the excess amount must be recorded with direct impact on income.

Provisions for pensions are recognised for defined benefit plans. This relates to commitments by the company to cover vested entitlements of employees in active service and current benefits to active and former employees or their dependents. These commitments relate in particular to old-age pension payments. The specific commitments are based on benefits that vary throughout the industry; however, as a rule they are measured according to employees' length of service and remuneration.

The company pension plan consists both of defined-benefit and contribution-based benefit plans. Provisions for defined-benefit plans are based on the actuarial projected benefit obligation, measured using the projected unit credit method. This benefit/years of service method takes into account not only the pension benefits and benefit entitlements known as of the balance sheet date, but also anticipated future increases in salaries and pension benefits. The calculation is based on actuarial reports, taking into account appropriate biometric parameters (for Germany, in particular the “Richttafeln 2018G" [previous year: "Richttafeln 2005G"] by Klaus Heubeck; for Norway, the mortality table “K2013”). The provision is reduced by the fair value of the plan assets set up to cover the pension commitments. The service cost, i.e. the increase in the obligation resulting from the work performed by employees in the period under review, is disclosed in operating result and the interest expenses/income are reported in financial expenses.

Results of the remeasurement of defined-benefit plans are fully recognised in the fiscal year in which they occur. They are reported outside profit or loss in the consolidated statement of comprehensive income and immediately assigned to retained earnings. Therefore, they remain outside profit or loss in subsequent periods as well.

In the case of contribution-based benefit plans, the company does not incur any further obligations beyond making contribution payments to special-purpose funds. The contribution payments are recorded as expenses.

Financial liabilities

From 1 January 2018 onwards, financial liabilities are classified in the following measurement categories:

- Financial liabilities to be measured at fair value through profit or loss (FVPL)
- Financial liabilities to be measured at amortised costs

At initial recognition, financial liabilities are measured at its fair value plus, in the case of a financial liability not at fair value through profit or loss, transaction cost that are directly attributable to the acquisition of the financial liabilities.

After initial recognition, financial liabilities are measured depending on their classification either at amortised cost using the effective interest method or at fair value through profit and loss.

Derivative financial instruments

Derivative financial instruments are reported as other assets or other liabilities. Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently measured to their fair values at the end of each reporting period. The accounting for subsequent changes in fair value depends on whether the derivate is designated as a hedging instrument, and if so, the nature of the item being hedged.

At inception of the hedge relationship, the group documents its risk management objective and strategy for undertaking its hedge transactions as well as the economic relationship between hedging instrument and hedged items including whether changes in the cash flows of the hedging instrument are expected to offset changes in the cash flow of hedged items.

The group has designated derivatives as hedging instruments within the scope of cash flow hedges. Cash flow hedges are used to hedge the risk of variability in cash flows related to highly probable forecast transactions. The effective portion of changes in the fair value of derivates that are designated as cash flow hedges is recognised as other comprehensive income within equity. The gains or losses relating to the ineffective portion are recognised immediately in profit or loss.

Amounts accumulated in equity are reclassified in the periods when the hedged item affects profit or loss. When a hedging instrument expires, or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gains or losses in equity at that time remains in equity until the forecast transaction occurs. When the forecast transaction is no longer expected to occur, the cumulative gains or losses are immediately reclassified to profit or loss.

Changes in the fair values of any derivative instrument that does not qualify for hedge accounting are recognised immediately in profit or loss.

Agreements concluded for the purpose of receiving or supplying non-financial items in accordance with the company's expected buying, selling or utilisation demand and held for this purpose (own-use contracts) are accounted for not as financial derivatives but as pending transactions. If the agreements contain embedded derivatives, then the derivatives will be accounted for separately from the underlying agreement if the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the underlying agreement.

Discontinued operations

Discontinued operations are reported when a component of an entity that either has been disposed of, or is classified as "held for sale" represents a separate major line of business or geographical area of operations. In the consolidated income statement, the result from discontinued operations is reported separately from the result from continuing operations. In the consolidated cash flow statement, the cash flows from discontinued operations are presented separately from cash flows of continuing operations. Previous periods are, in each case, presented on a comparable basis. The disclosures in the notes, except for note (1), that refer to the consolidated income statement and the consolidated cash flow statement relate to continuing operations. In order to present the financial effects of discontinued operations, income and expenses as well as receivables and liabilities arising from intragroup transactions are eliminated. Non-current assets classified as "held for sale" are measured at the lower of their carrying amount and fair value less costs to sell, unless these assets are not part of the measurement scope as defined in IFRS 5. Depreciation and amortisation ceases from the date of classification as "held for sale".

Important estimates and assumptions

Preparation of the consolidated financial statements on the basis of IFRS requires management to make estimates and assumptions that affect the amounts reported for assets, liabilities, income and expenses as well as disclosed contingent liabilities and fair values. The assumptions and estimates mainly concern the following areas:

Oil and gas reserves

Oil and natural gas reserves are applied to determine the recoverable amount in the framework of the impairment test as well as for the production-related depreciation and amortisation using the unit-of-production method. Reserves are estimated by the Group's own qualified engineers and geoscientists applying standardised valuation methods, and are classified in line with international industry standards. This process is subject to defined principles. Furthermore, the estimates are audited by an independent consultant (RPS Group) on an annual basis.

Impairment tests

Key assumptions within impairment tests for intangible assets and property, plant and equipment relate to estimated reserves, forecasts for market prices of crude oil and natural gas, production forecasts and discount rates.

Impairment on financial assets

The loss allowances for financial assets are based on assumptions about probability of default and expected credit losses. The inputs to the impairment calculation are based on the group's past history, existing market conditions as well as forward looking estimates.

Derivative financial instruments

In accounting for derivative financial instruments, assumptions have to be made as to whether the principles of hedge accounting apply. In addition, for certain contracts a decision is required as to whether they are to be recognised as derivatives or treated as pending transactions like what are known as own-use contracts.

Provisions

Decommissioning provisions mainly require estimates and assumptions with regard to terms, exchange rates, costs to be considered and discount rates. Future actual cash outflows can differ, owing to changes in relation to these items.

With regard to pension provisions, the discount rate is one of the very important estimators. The discount factor for pension obligations is determined on the basis of yields on high quality, fixed-rate corporate bonds on the financial markets as of the balance sheet date.

All assumptions and estimates are based on conditions and evaluations made as at the balance sheet date. In addition, with regard to expected future business trends, the future development (considered realistic at the current time) of the economic environment in the industries and the regions in which the DEA AG Group operates is taken into account. If the actual trend deviates from the assumed development of conditions, then the assumptions and, if necessary, the carrying amounts of the assets and liabilities concerned will be adjusted accordingly. As of the date of preparation of the consolidated financial statements, it is not expected that there will be a material change in the assumptions and estimates.

Changes in accounting policies

The International Accounting Standards Board (IASB) and the IFRS IC have adopted new International Financial Reporting Standards (IFRS), an Interpretation and amendments to existing Standards, which became effective for the DEA AG Group as of 1 January 2018.

IFRS 15 (2014) "Revenue from Contracts with Customers" was issued in 2014 and replaces the previous regulations of IAS 11, IAS 18, IFRIC 13, IFRIC 15, IFRIC 18 and SIC 31. In April 2016, some clarifications were published. The new standard introduces uniform criteria for the timing of revenue recognition. According to IFRS 15, sales revenue is recognised when control of the agreed-upon goods or services and the benefits obtainable from them are transferred to the customer. The transfer of the essential risks and rewards of ownership of the goods is no longer the deciding factor. Sales revenue is measured as the amount the entity expects to receive in exchange for goods and services. The new model for the determination of revenue recognition is based on five steps, with the contract with the customer and the individual performance obligations within the contract to be identified first. The transaction price is then determined and allocated to the performance obligations in the contract. Finally, sales are recognised for each performance obligation in the amount of the allocated portion of the transaction price as soon as the agreed-upon good or service has been provided or the customer receives control over it. Principles are set out for determining whether the goods or services have been provided over time or at one point in time.

The application of IFRS 15 had no impact on the DEA consolidated financial statements except for additional disclosure requirements.

IFRS 9 (2014) "Financial Instruments" was issued in 2014 and replaces the previous regulations of IAS 39. IFRS 9 contains new requirements for the classification and measurement of financial instruments, fundamental changes regarding the accounting treatment of financial asset impairments, and a reformed approach to hedge accounting. IFRS 9 retains "amortised cost" and "fair value" as the criteria for measuring financial instruments. Whether financial assets are measured at amortised cost or fair value will depend on two factors: the entity's business model for managing the portfolio to which the financial asset belongs and contractual cash flow characteristics of the financial asset. According to IFRS 9, the recognition of financial asset impairments is based on expected losses. The general approach adopts a three-stage model to assess the provisions for risks. The model requires different degrees of impairment based on the credit default risk of the counterparties. For certain financial instruments, such as trade accounts receivable, operational simplifications for recognising impairment losses apply. IFRS 9 regulations on hedge accounting aim for a closer alignment of hedge accounting with the entity's risk management strategy and additionally include changes in the requirements for measuring effectiveness that will mainly be based on the hedge ratio. The hedge ratio needs to be adjusted (so-called "rebalancing") on a prospective basis if it no longer meets the hedge effectiveness requirements under an unchanged risk management strategy.

Measurement categories

On the date of initial application, 1 January 2018, the financial instruments were as follows, with any reclassification noted:

	Measurement category		Carrying amount	
€m	Original (IAS 39)	New (IFRS 9)	Original (IAS 39)	New (IFRS 9)
Financial investments	available for sale	FVPL [1)]	4	4
Financial receivables	loans and receivables (amortised cost)	amortised cost	2,043	2,043
Trade accounts receivable	loans and receivables (amortised cost)	amortised cost	279	279
Other accounts receivable and other assets				
Derivatives (hedge accounting not applied)	FVPL [1)]	FVPL [1)]	1	1
Other accounts receivable and other assets in the scope of IFRS 9/IFRS 7	loans and receivables (amortised cost)	amortised cost	16	16
Cash and cash equivalents	loans and receivables (amortised cost)	amortised cost	116	116
Debt to banks	amortised cost	amortised cost	1,334	1,334
Financial liabilities	amortised cost	amortised cost	1,129	1,129
Trade accounts payable	amortised cost	amortised cost	304	304
Other liabilities				
Derivatives (hedge accounting applied)	in hedge relationship (measured at FV)	in hedge relationship (measured at FV)	39	39
Other liabilities in the scope of IFRS 9/IFRS7	amortised cost	amortised cost	179	179

1) FVPL = Financial assets measured at fair value through profit or loss

Financial investments were reclassified from available for sale to assets at fair value through profit or loss. They do not meet the criteria to be classified as at amortised cost in accordance with IFRS 9, because their cash flows do not represent solely payments of principal and interest. Following the reclassification with transition to IFRS 9, there are no valuation differences and therefore no changes in the carrying amounts as well as no changes in equity.

Impairment

The application of the new impairment rules for financial assets resulted in an impairment amounting to €8m. After taking account of deferred tax income of €5m the total impact on the opening retained earnings amounts to €3m.

€m	Financial receivables	Trade accounts receivable	Other receivables	Total
Closing impairment losses as of 31 December 2017 (according to IAS 39)	-	31	-	31
Amounts restated through opening retained earnings	17	-9	0	8
Opening impairment losses as of 1 January 2018 (according to IFRS 9)	17	22	0	39

As from the reporting period, impairments and reversals of impairments are stated separately as "net impairment of operating receivables" and "net impairment of financial receivables" in separate line items in the income statement, as applicable. Previous periods have not been restated.

Hedging

Following the initial application of IFRS 9, the hedge documentation and the assessment of effectiveness have been amended. Furthermore, more detailed information on risk management strategies, effectiveness and effects of hedge accounting on balance sheet and income statement are presented in the notes.

Further changes in accounting standards

The following interpretation and amendments to existing standards have no impact on the DEA consolidated financial statements:

- Annual improvements to IFRS Standards 2014 - 2016 (2016)
- Amendments to IFRS 2 (2016) "Classification and Measurement of Shared-based Payment Transactions"
- Amendments to IFRS 4 (2016) "Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts"
- IFRS Interpretation 22 (2016) "Foreign Currency Transactions and Advance Consideration"
- Amendments to IAS 40 (2016) "Transfer of Investment Property"

New accounting policies

The IASB and the IFRS IC have adopted further standards, an interpretation and amendments to standards, which are not yet mandatory in the European Union (EU) for fiscal years which begin on 1 January 2018. EU endorsement is still pending in some cases.

IFRS 16 (2016) "Leases" replaces the previous regulations of IAS 17, IFRIC 4, SIC 15 and SIC 27. The new standard introduces a single lessee accounting model. It requires a lessee to recognise assets and liabilities for all leases with a term of more than twelve months, unless the underlying asset is of low value. As for the lessor, the new standard substantially continues the lessor accounting requirements of IAS 17. IFRS 16 (2016) is applicable for the first time for fiscal years that begin on or after 1 January 2019. The DEA AG Group will apply the modified retrospective transition method and will not restate figures for the previous year. All of the group's lease agreements have been reviewed over the last year in line of the new lease accounting rules in IFRS 16. Judgements primarily made regarding the assessment whether the criteria of a lease agreement are fulfilled and with respect to the assessment of the term of the lease agreement. On the initial adoption of IFRS 16 as of 1 January 2019, approximately €70m will be capitalised as right of use assets from leases and lease liabilities will be recognised in the same amount. In the income statement, the lease expenses, typically on a straight-line basis, are replaced by depreciation of the capitalised assets and interest expenses on the lease liabilities. In the cash flow statement, the reduction of the lease liability will be recognised in the cash flow from financing activities, whereas interest payments will be recorded in the cash flow from operating activities. For short-term leases and leases of low-value assets, the lease instalments will be recognised as lease expenses in the income statement. In the cash flow statement, the lease payments are shown in the cash flow from operating activities.

The following changes in standards and interpretations are not expected to have any material effect on the DEA AG Group's consolidated financial statements:

Standards and Interpretations	IASB Effective Date
IFRS Interpretation 23 (2017) "Uncertainty over Income Tax Treatments"	1 January 2019
Amendments to IFRS 9 (2017) "Prepayments Features with Negative Compensation"	1 January 2019
Amendments to IAS 28 (2017) "Long-term Interests in Associates and Joint Ventures"	1 January 2019
Annual Improvements to IFRS Standards 2015 - 2017 (2017)	1 January 2019
Amendments to IAS 19 (2018) "Plan Amendment, Curtailment or Settlement"	1 January 2019
Amendments to Reference to the Conceptional Framework in IFRS Standards (2018)	1 January 2020
Amendments to IFRS 3 (2018) "Business Combinations"	1 January 2020
Amendments to IAS 1 and IAS 8 (2018) "Definition of Material"	1 January 2020
IFRS 17 (2017) "Insurance Contracts"	1 January 2021

Selected key financial data by region (voluntary disclosure)

The DEA AG Group operates within several geographical areas. The following representation at country level is in accordance with internal management reporting and does not represent segment information as defined by IFRS 8.

	January - December 2018					
€m/kboed	Germany/ Denmark	Norway	North Africa [1]	Mexico	Other [2]	Total
Production (kboed) [3]	32	52	34	3	-	121
Revenues	402	928	220	53	-	1,603
Depletion, depreciation, amortisation	-47	-130	-114	-24	-3	-318
Net impairment of assets	-	-9	-159	-	-	-168
EBITDAX	231	697	157	18	-60	1,043
Exploration cost	-19	-65	-16	-5	-6	-111
Capital expenditure (without acquisitions)	50	533	345	18	2	948

1) Comprising Egypt and Algeria
2) Incl. rest of the world, central functions and investment property
3) On working interest basis

	January - December 2017					
€m/kboed	Germany/ Denmark	Norway	North Africa [1]	Mexico	Other [2]	Total
Production (kboed) [3]	36	54	35	-	-	125
Revenues	420	802	200	-	-	1,422
Depletion, depreciation, amortisation	-48	-134	-104	-	-3	-289
Net impairment of assets	0	-63	-37	-	-	-100
EBITDAX	236	538	187	-	-67	894
Exploration cost	-1	-108	-24	-	11	-122
Capital expenditure (without acquisitions)	48	370	409	-	2	829

1) Comprising Egypt and Algeria
2) Incl. rest of the world, central functions and investment property
3) On working interest basis

(1) Acquisitions, disposals and discontinued operations

Acquisitions

As of 6 March 2018, the DEA AG acquired via its Mexican subsidiary a 50 % share in the Ogarrio field in Mexico and became operator in this licence. As of 4 December 2018, DEA signed a share purchase agreement for the acquisition of Sierra Oil & Gas, a leading Mexican independent oil and gas company. The transaction is still subject to certain conditions precedent and expected to be closed in the first half of 2019.

Disposals and discontinued operations

As of 2 March 2018, DEA AG has signed a contract for the sale of the complete storage business. The sale was completed on 28 December 2018 with effective date 31 December 2018.

The storage business, which represents a separate line of business and comprises 4 subsidiaries, was classified as a discontinued operation as of signature date. With the classification of discontinued operations, a measurement at the agreed purchase price was carried out. It was not necessary to account for an impairment loss. The disposal of the companies led to a gain on deconsolidation in the amount of €58m.

€m	Jan. - Dec. 2018	Jan. - Dec. 2017
Sales and other operating revenues	35	31
Cost of sales	-12	0
Financial result	3	-5
Result before taxes	26	26
Income taxes		
from ordinary activities	-8	-12
on proceeds from disposal	-23	-
Result after taxes [1)]	**-5**	**14**
Gain on deconsolidation (after deduction of disposal costs)	58	-
Total result from discontinued operations	**53**	**14**

1) Thereof attributable to non-controlling interests €4m.

The cumulative other comprehensive income of discontinued operations, which was not to be reclassified, amounts to €0m.

In connection with the disposal of the storage business the following assets and liabilities were derecognised:

€m	
Non-current assets	85
Current assets	50
thereof cash and cash equivalents	42
Non-current liabilities	63
Current liabilities	21

In connection with the sale, a purchase price of €106m was paid to DEA AG. After deduction of disposal costs and disposed cash and cash equivalents the net inflow from divestures amounts to €63m. The net inflow is shown as cash flow from continuing operations.

In addition, the foreign subsidiary DEA UK Upstream was deconsolidated due to liquidation. The cumulative currency exchange losses relating to that foreign operation of €10m were reclassified from equity to profit or loss.

(2) Sales and other operating revenues

€m		Jan. - Dec. 2018	Jan. - Dec. 2017
Oil			
	Germany/Denmark	187	197
	Norway	554	479
	North Africa	78	54
	Mexico	40	-
		859	730
Gas			
	Germany/Denmark	215	222
	Norway	364	313
	North Africa	138	122
	Mexico	12	-
		729	657
Others			
	Germany/Denmark	0	1
	Norway	10	10
	North Africa	4	24
	Mexico	1	-
		15	35
Sales revenues		1,603	1,422
Other operating revenues		289	5
		1,892	1,427

The oil revenues comprise losses from commodity derivatives amounting to €50m (previous year: €5m).

(3) Cost of sales

€m	Jan. - Dec. 2018	Jan. - Dec. 2017
Cost of operations		
Production costs	265	311
Royalties	99	79
Change in over-/underlift position	8	0
Tariffs, transport and lease expenses	97	114
Depletion, depreciation, amortisation	314	284
Other	-38	-74
	745	714
Development costs	14	14
	759	728

Other cost of operations for the reporting period include net gains from the disposal of fixed assets of €38m. In the previous year, other cost of operations comprised net impairment gains on operating receivables of €75m and restructuring costs of €1m. As of this year, net impairments of operating receivables are disclosed as a separate line item in the income statement.

(4) Exploration

Exploration costs in the income statement comprise, among other things, expenses related to seismology, geology, geophysics, unsuccessful exploration wells, additions and reversals of provisions and allocable administrative expenses. Impairment losses and reversals are not included in the exploration costs.

Provisions comprise commitments from exploration (mainly working programmes) amounting to €101m (previous year: €87m).

The cash flow from operating activities attributable to exploration amounts to €16m (previous year: €69m). In addition, the cash flow from investment activities by the exploration division amounts to €-48m (previous year: €-34m).

(5) Staff costs

Total staff costs are included in the following items in the income statement:

€m	Jan. - Dec. 2018	Jan. - Dec. 2017
Cost of sales	83	77
Exploration costs	21	19
General and administration expenses	50	49
	154	145

€m	Jan. - Dec. 2018	Jan. - Dec. 2017
Wages and salaries	124	119
Social security and other benefits	15	15
Expenses relating to post-employment benefits	15	11
	154	1145

In the fiscal year, the average size of the DEA AG Group's workforce (excluding discontinued operations) converted to employee equivalents was 967 (previous year: 1,064), of whom 808 (previous year: 892) were in Germany. Full-time employees are included in the employee equivalents at 100 %. Part-time employees or employees with agreements subject to time limits are recorded only to the extent of their part-time quota or their employment time in relation to the annual time worked. In addition, the number of apprentices employed as at 31 December 2018 (headcount) was 8 (previous year: 12).

(6) Financial income and financial expenses

€m	Jan. - Dec. 2018	Jan. - Dec. 2017
Interest income from third parties	2	4
Interest income from affiliated companies	94	83
Foreign currency exchange gains, net	13	-
Income from investments	0	0
Other financial income	0	0
Financial income	**109**	**87**
Interest expenses to third parties	77	63
Interest expenses to affiliated companies	50	49
Less capitalised borrowing costs	-76	-45
Foreign currency exchange losses, net	-	145
Losses from financial derivatives, net	0	10
Other financial expenses	10	10
	61	232
Interest from additions to		
Provisions for pensions and similar obligations less plan assets (net pension obligations)	3	2
Abandonment provisions	24	26
Other provisions	1	0
	28	28
Financial expenses	**89**	**260**

(7) EBITDAX

EBITDAX is used for the purpose of internal management control and is derived from the result from continuing operations before taxes adjusted by the following items:

a) Interest income and expenses shown as financial income and expenses in the income statement, but adjusted for interest effects regarding pension provisions and pension plan assets which are shown separately in the line "pension items".
b) Income and expenses attributable to exploration, but excluding depletion/depreciation/ amortisation and impairment losses and reversal of impairment losses, interest income and expenses, currency effects and pension items for exploration, since these are adjusted in separate line items.
c) Depletion, depreciation, amortisation and impairment losses less reversal of impairment losses of assets as shown in the income statement.
d) Acquisition, disposal and restructuring costs and further extraordinary items. This represents all fees, costs and expenses, stamp duty, registration and other taxes incurred by the company in connection with an acquisition or a disposal and material items of an unusual or non-recurring nature (e.g. resulting from restructuring activities).
e) Realised and unrealised foreign exchange gains and losses (including hedging results).
f) Gains over book value or losses on book value arising from the disposal of any fixed assets (other than the sale of trading stock).
g) Income from pension plan assets, interest expenses, service costs or other charges attributable to a post-employment benefit scheme.

€m	Jan. - Dec. 2018	Jan. - Dec. 2017
Result from continuing operations before taxes	759	181
a) Interest and other financing costs	-10	16
b) Exploration costs	111	120
c) Depletion, depreciation, amortisation and net impairment losses of assets	486	389
d) Acquisition, disposal and restructuring costs and extraordinary items as well as income from investments	-269	12
e) Realised and unrealised gains/losses from foreign currency valuation and financial derivatives	-12	155
f) (Gain)/loss attributable to the disposal of fixed assets	-39	8
g) Pension items	17	13
EBITDAX	1,043	894

(8) Income taxes

€m	Jan. - Dec. 2018	Jan. - Dec. 2017
Current income taxes		
Germany/Denmark	45	36
Norway	142	11
North Africa	4	24
Mexico	0	-
Other	0	0
	191	71
Deferred taxes		
arising from deductible temporary differences	255	71
resulting from taxable loss carry-forwards	32	32
	287	103
	478	174

Current income taxes relating to expenses from other periods, amount to €2m (previous year: €6m).

The average consolidated income tax rate on earnings generated by companies liable to German taxation generally amounts to 30.56 % (previous year: 30.55 %). It results from the applicable corporation tax rate of 15.0 % and the solidarity surcharge of 5.5 % as well as the average trade income tax rate of the DEA AG Group. By way of derogation from this, for German companies that have activities in countries with which no double taxation agreement exists, a tax rate of 15.83 % (without trade income tax) is applied. Current taxes of foreign subsidiaries are based on local tax laws and applicable tax rates in the individual foreign countries. Deferred tax assets and liabilities in Germany and abroad are measured at the tax rates that are expected to apply in the period when the asset is realised or the liability is settled.

Taxes on income are derived from the expected tax expenses as follows:

€m	Jan. - Dec. 2018	Jan. - Dec. 2017
Result from continuing operations before taxes	759	181
Expected tax expenses 30.56 % (previous year: 30.55 %)	232	55
Changes in expected tax expenses due to:		
Tax rates differences	239	90
Taxes relating to a different accounting period	2	6
Tax effects on		
other tax-free earnings and earnings from foreign operations	-5	8
expenses not deductible for tax purposes	1	1
different trade income tax assessment bases and tax rates	-38	-3
changes in tax loss carry-forwards	8	-1
tax provision	12	12
Other	27	8
Changes in deferred taxes due to tax rate changes	0	-2
Effective tax expenses	478	174
Effective tax rate in %	63	96

Income tax assets and liabilities:

	31-12-2018		31-12-2017	
€m	Assets	Liabilities	Assets	Liabilities
Germany/Denmark	-	23	0	24
Norway	-	120	11	-
North Africa	-	2	-	20
Mexico	0	0	-	-
Other	0	5	-	6
	0	150	11	50
Non-current	-	26	-	26
Current	0	124	11	24

Income tax liabilities consist primarily of income taxes for the respective current year and prior-year periods that have not been definitively audited by the tax authorities.

The deferred tax assets and liabilities (gross) are allocable to the following balance sheet items:

€m	31-12-2018		31-12-2017	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Non-current assets	24	946	85	751
Current assets	1	16	3	16
Tax-related special items	-	7	-	7
Non-current liabilities				
Pension provisions	52	-	49	-
Other non-current provisions/ liabilities	196	18	200	43
Other current provisions/liabilities	15	0	29	1
	288	987	366	818
Loss carry-forwards	11	-	42	-
Gross	299	987	408	818
Netting	-248	-248	-292	-292
Net amount	51	739	116	526

Deferred tax assets and liabilities for each company are netted. Deferred taxes on loss carry-forwards are netted against deferred tax liabilities.

Deferred tax assets as a rule comprise capitalised tax credit claims resulting from the expected utilisation of loss carry-forwards in subsequent years. The realisation of these loss carry-forwards is ensured to an adequate level of certainty. The amount of loss-carry-forwards not covered by deferred tax claims totals €106m (previous year: €51m).

In the year under review, deferred taxes of €-16m (previous year: €5m) were netted against equity with no effect on profit or loss. They result from the valuation of derivative financial instruments with no effect on profit or loss, amounting to €-29m (previous year: €4m), from the remeasurement of defined benefit plans amounting to €8m (previous year: €1m) as well as from IFRS 9 restatement €5m (previous year: €-m).

Effects resulting from currency translation of deferred tax items in foreign financial statements amounting to €14m (previous year: €39m) were recognised with no impact on profit or loss.

Of the total amount of deferred tax assets and deferred tax liabilities, €16m (previous year: €37m) and €16m (previous year: €20m) are expected to be realised within twelve months.

(9) Intangible assets and property, plant and equipment

Intangible assets

€m	Exploration	Other intangible assets	Goodwill	Total
At cost of acquisition and production				
1 January 2018	697	310	113	1,120
Additions	30	300	-	330
Transfers	-74	43	-	-31
Currency translation adjustments	-3	-1	-1	-5
Disposals	-7	-10	-	-17
31 December 2018	643	642	112	1,397
Accumulated amortisation and impairment losses				
1 January 2018	-387	-145	-	-532
Amortisation	-	-27	-	-27
Transfers	4	-	-	4
Currency translation adjustments	2	0	-	2
Disposals	1	10	-	11
Impairment losses	-	-	-	-
Reversal of impairment losses	-	-	-	-
31 December 2018	-380	-162	-	-542
Carrying amount 31 December 2018	263	480	112	855
At cost of acquisition and production				
1 January 2017	862	259	122	1,243
Additions	42	64	-	106
Transfers	-66	47	-	-19
Currency translation adjustments	-38	-7	-9	-54
Disposals	-103	-53	-	-156
31 December 2017	697	310	113	1,120
Accumulated amortisation and impairment losses				
1 January 2017	-485	-191	-	-676
Amortisation	-	-7	-	-7
Transfers	-	-	-	-
Currency translation adjustments	16	1	-	17
Disposals	82	52	-	134
Impairment losses	-1	-	-	-1
Reversal of impairment losses	1	-	-	1
31 December 2017	-387	-145	-	-532
Carrying amount 31 December 2017	310	165	113	588

Property, plant and equipment

€m	Land and buildings	Oil and gas assets	Other plant, machinery and equipment	Fixtures and fittings and office equipment	Total
At cost of acquisition and production					
1 January 2018	102	8,439	93	55	8,689
Changes in scope of consolidation	-13	-4	-100	-1	-118
Additions	0	963	9	3	975
Transfers	1	30	0	0	31
Currency translation adjustments	0	-68	-	0	-68
Disposals	0	-224	-1	-3	-228
31 December 2018	90	9,136	1	54	9,281
Accumulated depreciation and impairment losses					
1 January 2018	-72	-5,542	-80	-43	-5,737
Changes in scope of consolidation	11	3	79	1	94
Depreciation	-3	-284	0	-4	-291
Transfers	0	-4	-	0	-4
Currency translation adjustments	0	43	-	0	43
Disposals	0	99	0	3	102
Impairment losses	-	-178	-	-	-178
Reversal of impairment losses	-	10	-	-	10
31 December 2018	-64	-5,853	-1	-43	-5,961
Carrying amount 31 December 2018	26	3,283	0	11	3,320
At cost of acquisition and production					
1 January 2017	102	7,985	92	57	8,236
Additions	1	914	9	2	926
Transfers	0	20	0	0	20
Currency translation adjustments	0	-418	-	-1	-419
Disposals	-1	-62	-8	-3	-74
31 December 2017	102	8,439	93	55	8,689
Accumulated depreciation and impairment losses					
1 January 2017	-70	-5,517	-79	-43	-5,709
Depreciation	-3	-275	-1	-4	-283
Transfers	0	0	0	0	0
Currency translation adjustments	0	312	-	1	313
Disposals	1	38	0	3	42
Impairment losses	-	-125	-	-	-125
Reversal of impairment losses	-	25	-	-	25
31 December 2017	-72	-5,542	-80	-43	-5,737
Carrying amount 31 December 2017	30	2,897	13	12	2,952

Capitalised borrowing costs

In connection with the acquisition and production of qualified assets, in the year under review borrowing costs amounting to €76m (previous year: €45m) were capitalised as part of acquisition and production costs. In the year under review the financing cost rate applied in this context was between 3.7 % and 4.3 % (previous year: between 3.1 % and 3.5 %) as well as between 6.7 % and 7.3 % (previous year: between 6.4 % and 6.7 %) for qualified assets of DEA Norge AS.

Impairment losses and reversal of impairment losses

For the impairment tests conducted, the recoverable amount was determined on the basis of the fair value less costs of disposal. The assumptions regarding oil and gas prices are based on forward prices for the first 3 years. From the 4th year a transition to a consensus price is applied. The consensus price is inflated by 2 % p. a. for the following years. The interest rates used for discounting future cash flows after tax range between 7.0 % and 9.5 % (previous year: 6.5 - 9.5 %).

The net impairment of assets in the reporting period relates primarily to cash generating units in the following countries:

€m	Impairment	Reversal of impairment	Recoverable amount
Cash generating units in Egypt	141	10	1,219
Cash generating units in Algeria	28	-	251
Cash generating units in Norway	9	-	-1
	178	10	

The impairments had to be carried out because of lower profitability of assets. The reversals of impairment losses mainly arose from higher profitability.

The goodwill is allocated to the producing licences in Norway. For the impairment test an interest rate of 7.0 % (previous year: 7.0 %) was applied. As in the previous year, there was no need for impairment.

(10) Financial receivables

€m	31-12-2018		31-12-2017	
	non-current	current	Non-current	current
Loans to related companies and participations	1,916	29	2,021	22
Other loans	0	-	0	-
	1,916	29	2,021	22

The non-current loans to related companies and participations mainly relate to a loan which was granted in 2015 by DEA Deutsche Erdoel AG to L1E Funding GmbH in return for a debt assumption (see note 16). The loan was originally an USD loan that was converted into Euro in the reporting period. It carries floating interest rates (LIBOR plus margin or EURIBOR plus margin after conversion, respectively).

(11) Trade accounts receivable/other receivables and other assets

€m	31-12-2018		31-12-2017	
	non-current	current	non-current	current
Trade accounts receivable				
Trade accounts receivable from sales revenues	-	218	-	255
Other trade accounts receivable	-	46	-	22
Other receivables and other assets				
Derivatives	46	10	0	1
Receivables from other taxes	-	31	-	3
Prepayments	-	27	-	5
Prepaid expense	2	12	5	11
Receivables from finance lease	-	-	61	6
Receivables from working interest reductions	8	12	15	12
Receivables from production underlift	-	6	-	17
Miscellaneous other assets	-	12	-	14
	56	110	81	69
	56	374	81	348

The carrying amounts of the financial assets largely correspond to their fair values.

(12) Inventories

€m	31-12-2018	31-12-2017
Raw materials, supplies and merchandise	82	82
Finished goods	1	1
	83	83

In the year under review, net impairment losses amounting to €0m (previous year: €1m) had to been taken into account.

(13) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and bank deposits with original maturities of up to three months. Bank deposits in the amount of €40m are restricted in connection with the acquisition of assets in Mexico where completion of the transaction is still pending (previous year: €-m).

(14) Equity

The subscribed capital and capital reserves relate to DEA Deutsche Erdoel AG. The subscribed capital is divided up into 13,440,000 shares with full voting rights. The shares in the company are completely held by L1E Acquisitions GmbH. A domination and profit and loss transfer agreement exists with L1E Acquisitions GmbH as controlling enterprise.

Non-controlling interests in previous years relate to Speicher Breitbrunn/Eggstätt DEA & Storengy GbR.

(15) Provisions

The following discount rates are applied to determine the present value of non-current provisions:

	31-12-2018	31-12-2017
Decommissioning provisions	3.25 - 7.25 %	2.50 - 6.25 %
Provisions for anniversaries	1.39 %	1.25 %
Provisions for early retirement benefits/ severance payments/performance plan	0.22/0.25 and 1.00 %	0.00/0.25 and 0.60 %
Other provisions		
with terms of 5 – 10 years	3.25 %	2.25 %
with terms of 1 – 4 years	2.25 and 3.50 %	1.25 and 2.00 %

€m	Decommissioning provisions	Other provisions	Pension Provisions	Total
As at 01-01-2018	571	208	157	936
Changes in the scope of consolidation	-44	-1	-11	-56
Addition	14	30	15	59
Release	-84	-8	-	-92
Interest component	26	1	3	30
Other changes	-2	0	31	29
Amounts used	-7	-48	-9	-64
As at 31-12-2018	474	182	186	842
Non-current	446	25	186	657
Current	28	157	-	185
	474	182	186	842

€m	Decommissioning provisions	Other provisions	Pension Provisions	Total
As at 01-01-2017	458	212	155	825
Addition	139	66	16	221
Release	-36	-18	-6	-60
Interest component	34	0	3	37
Other changes	-22	-3	-3	-28
Amounts used	-2	-49	-8	-59
As at 31-12-2017	571	208	157	936
Non-current	539	32	157	728
Current	32	176	-	208
	571	208	157	936

Decommissioning provisions

The addition was essentially owing to quantity effects and the acquisition of a new concession. With regard to reversal of provisions, mainly higher discount rates year-on-year and life extensions have taken effect. The change in discount rates had a total impact on the provision amounting to €-53m (previous year: €123m). The expected settlement date of the provision depends on the ratio of produced reserves to expected reserves and varies within a range of less than one year up to approx. 30 years.

Pension provisions

The company pension plan consists of defined-benefit and defined-contribution schemes. Defined-benefit schemes exist in Germany and Norway.

DEA Deutsche Erdoel AG has transferred assets to WillisTowers Watson Treuhand e. V. within the framework of Contractual Trust Arrangements (CTA) and to Willis Towers Watson Pensionsfonds AG for insolvency insurance of parts of the company pension plan. Willis Towers Watson Pensionsfonds AG falls under the scope of the Act on Supervision of Insurance Undertakings and Oversight by the Federal Financial Supervisory Agency (BaFin). Insofar as a regulatory deficit occurs in the pension fund, supplementary payment shall be requested from the employer. Independently of the aforementioned rules, the liability of the employer shall remain in place. The bodies of Willis Towers Watson Treuhand e. V. and Willis Towers Watson Pensionsfonds AG are responsible for ensuring that the funds under management are used in compliance with the contract and thus fulfil the requirements for recognition as plan assets.

Within the scope of the Contractual Trust Arrangement (CTA), €8m (previous year: €8m) were transferred to Willis Towers Watson Treuhand e. V. in the year under review.

The amount of the provision for defined-benefit pension schemes was determined by actuarial methods on the basis of the following underlying assumptions.

	31-12-2018		31-12-2017	
	Germany	Norway	Germany	Norway
Discount rate	1.75 %	2.80 %	1.75 %	2.40 %
Salary growth rate	2.35 %	2.75 %	2.35 %	2.25 %
Pension growth	1.00 and 1.60 %	0 - 2.50 %	1.00 and 1.60 %	0 - 2.25 %

As of 31 December 2018, the mortality tables "Richttafeln 2018G" (previous year: "Richttafeln 2005G") were used for the pension schemes in Germany.

Composition of plan assets (fair value) €m	31-12-2018				31-12-2017			
	Germany	thereof active market	Norway	thereof active market	Germany	thereof active market	Norway	thereof active market
Equity instruments	119	119	-	-	118	118	-	-
Interest-bearing instruments	262	262	-	-	285	285	-	-
Assets held by insurance company	-	-	17	-	-	-	15	-
Alternative investments	-	-	-	-	13	13	-	-
Other	2	2	-	-	3	3	-	-
	383	383	17	-	419	419	15	-

Pension assets are continuously monitored and managed from a risk and return perspective. The allocation of funds to different asset-classes is based on detailed analysis of the plan assets and pension obligations as well as their interactions. In 2018 a comprehensive Asset-Liability-Management-Study (ALM-Study) was conducted. As target values, several key asset indicators are considered relative to the amount of pension obligations in various scenarios. Thereby, particularly sensitivities of the obligation and pension assets to changes in market interest rates are taken into account. By comparing different asset allocations, those portfolios are identified that achieve the best target value within a given risk budget. On the basis of these efficient portfolios, the strategic asset allocation is derived. Based on the results of the ALM-Study, the asset allocation was further refined by the addition of several new asset classes. The new strategic asset allocation was implemented in Q4/2018.

The focus of the strategic investment policy continues to be on European government and corporate bonds with strong creditworthiness (investment grade ratings). The portfolio also includes higher yielding asset classes such as high-yield corporate bonds and emerging-market bonds. Compared to bonds, global equities have a lower portfolio weight. The investment in equities is intended to earn a risk premium in excess of bonds over the long term.

€m	Present value of defined benefit obligations	Fair value of plan assets	Total
As at 01-01-2018	**592**	**-435**	**157**
Current service cost	15	-	15
Interest expense/(income)	10	-7	3
	25	**-7**	**18**
Remeasurements			
Return on plan assets, excluding amounts already recognised in interest income	-	20	20
Gains/losses from changes in financial assumptions	-2	-	-2
Gains/losses from changes in demographical assumptions	6	-	6
Experience gains/losses	7	-	7
	7	**20**	**27**
Effect of exchange rate differences	0	0	0
Contribution to the funded plans:			
Employer	-	-8	-8
Employee	0	0	0
Benefit payments	-30	29	-1
Changes in the scope of consolidation	-12	1	-11
As at 31-12-2018	**586**	**-400**	**186**
As at 01-01-2017	**600**	**-445**	**155**
Current service cost	16	-	16
Past service cost	-6	-	-6
Interest expense/(income)	10	-7	3
	20	**-7**	**13**
Remeasurements			
Return on plan assets, excluding amounts already recognised in interest income	-	-15	-15
Gains/losses from changes in financial assumptions	2	-	2
Experience gains/losses	11	-	11
	13	**-15**	**-2**
Effect of exchange rate differences	-2	1	-1
Contribution to the funded plans:			
Employer	-	-8	-8
Employee	0	0	0
Benefit payments	-39	39	0
As at 31-12-2017	**592**	**-435**	**157**

The present value of the defined benefit obligations less plan assets measured at fair value results in the net defined benefit obligation arising from funded and unfunded plans and is recognised as provisions for pensions and similar obligations in the balance sheet. Of the present value of defined benefit obligations €558m (previous year: €562m) refer to benefit obligations in Germany and €28m (previous year: €30m) to benefit obligations in Norway.

Domestic company pensions are subject to an obligation to review for adjustment every three years pursuant to the Act on the Improvement of Company Pensions (Sec 16 of the German Company Pension Act (BetrAVG)). Additionally, some commitments grant annual adjustments of pensions, which may exceed the legally mandated adjustment obligation.

The weighted average duration of the pension obligations is 16 years in Germany (previous year: 16 years) and 15 or 27 years in Norway (previous year: 15 or 27 years).

An increase or decrease in the discount rate and in salary and pension growth would have the following impact on the defined benefit obligations:

	Change in actuarial assumptions	Impact on defined benefit obligations 31-12-2018		31-12-2017	
€m		in Germany	in Norway	in Germany	in Norway
Discount rate	Increase by 0.5 percentage points	-41	-4	-42	-4
	Reduction by 0.5 percentage points	48	4	48	4
Salary growth	Increase by 0.5 percentage points	5	1	6	1
	Reduction by 0.5 percentage points	-5	-1	-6	-1
Pension growth	Increase by 0.5 percentage points	27	2	28	2
	Reduction by 0.5 percentage points	-25	-2	-26	-2
Life expectancy	Increase by 1 year	28	1	26	1

The sensitivity analyses are based on a change in one assumption, with all other assumptions remaining unchanged. Actual developments will probably be different from this. The methods for calculating the aforementioned sensitivities and for calculating the pension provisions are in agreement.

The dependence of pension provisions on market interest rates is limited by an opposite effect. The background to this is that the commitments stemming from company pension plans are primarily covered by funds, and plan assets mostly exhibit a negative correlation with the market yields of fixed-interest securities. Consequently, declines in market interest rates are typically reflected in an increase in plan assets, and vice-versa.

For defined-contribution plans, expenses of €0m (previous year: €1m) were incurred in the year under review.

In the financial year 2019 contributions into the CTA will be processed in a magnitude that achieve a constant funding level. The amount to be contributed will depend on i.a. plan-asset performance and interest rate developments.

(16) Debt to banks and financial debt

€m	31-12-2018		31-12-2017	
	non-current	current	non-current	current
Debt to banks	1,441	6	1,334	0
Financial debt to related companies	1,041	396	1,013	116
	2,482	402	2,347	116

With effect from 2 April 2015, DEA Deutsche Erdoel AG assumed the rights and obligations of a senior secured reserve-based lending facility (RBL facility), which had been concluded between L1E Funding GmbH and a banking syndicate as of 30 December 2014. The RBL is a revolving USD2,300m credit facility with a term ending in December 2021. The amount available under the facility is recalculated on an annual basis or if certain triggering events occur and is mainly based on the reserves of the underlying licences. The RBL does not require repayment in the initial four years, after which commitments under the RBL will start reducing as scheduled.

In the year under review a net amount of USD200m was drawn by DEA Deutsche Erdoel AG. Meanwhile, DEA Norge AS repaid an amount of USD150m. As of 31 December 2018 a loan amount of USD1,650m or €1,441m (previous year: USD1,600m or €1,334m) is utilised by DEA Deutsche Erdoel AG and DEA Norge AS. The floating interest rate was Libor plus a margin. As in the entire prior-year period, the margin amounted to 2.5 % until 29 December 2018. As from 30 December 2018 the margin has increased to 2.75 % according to contract.

The RBL facility is secured by a pledge over the shares of certain group companies and by a charge over some of the bank accounts of the pledged companies and over all existing hedging transactions within the DEA AG Group. Regarding the unrealised market values of our derivatives we refer to note 18. The pledged amount of the shares is represented by the accounting value of net assets of the respective group companies.

The financial debt to related companies breaks down as follows:

	31-12-2018				31-12-2017			
	Carrying amount [1] €m	Currency	Term	Interest rate	Carrying amount [1] €m	Currency	Term	Interest rate
Shareholder loan from 25 February 2015	472	EUR	2024	LIBOR plus margin	460	EUR	2024	LIBOR plus margin
Revolving shareholder loan [2]	175	USD	2024	LIBOR plus margin	161	USD	2024	LIBOR plus margin
Total shareholder loans	647				621			
Loan from DEA Finance SA [3]	400	EUR	2022	7.55 %	398	EUR	2022	7.55 %
Liability from net profit transfer	390	EUR	-	-	110	EUR	-	-

1) Including accrued interest
2) Credit facility of USD400m, thereof not utilised USD214m
3) The financing fees (€8m) have been capitalised as a reduction of the loan amount and are being amortised over the term of the loan applying the effective interest method.

In October 2016 DEA Finance SA issued Senior unsecured Notes with a principal amount of €400m and a term until 2022. The proceeds of the notes were onlent to DEA Norge AS with the same maturity.

The carrying amounts are close to their fair values.

Liabilities arising from financing activities reconcile to the cash flows in the cash flow statement as follows:

€m	01-01-2018	Cash flows from repayments/ proceeds	Foreign currency valuation	Changes in accrued interest	Other changes	31-12-2018
Debt to banks	1,334	39	68	6	-	1,447
Financial debt	1,129	-130	7	20	411	1,437

€m	01-01-2017	Cash flows from repayments/ proceeds	Foreign currency valuation	Changes in accrued interest	Other changes	31-12-2017
Debt to banks	1,497	22	-182	-3	-	1,334
Financial debt	1,034	-9	-22	18	108	1,129

(17) Trade accounts payable/other liabilities

€m	31-12-2018		31-12-2017	
	non-current	current	non-current	current
Trade accounts payable	-	298	-	304
Other liabilities				
Derivatives	-	-	9	30
Liabilities arising from other taxes	-	7	-	5
Prepayments				
Contract liabilities	4	3	6	-
Other prepayments	-	-	-	8
Liabilities from production overlift	-	2	-	5
Accrued future overlifts oil	-	19	-	21
Liabilities from acquisitions/ divestures	-	195	-	-
Accrued insurance reimbursement	-	-	-	150
Other miscellaneous liabilities	-	11	-	13
	4	237	15	232
	4	535	15	536

Trade accounts payable and financial instruments reported under other liabilities generally have short residual terms of maturity. The carrying amounts accounted for therefore are close to their fair values. The derivatives are recorded at fair value.

(18) Reporting on financial instruments

Financial assets measured at fair value

The following overview represents the financial instruments to be recognised at fair value and the essential parameters on which the measurement is based. The individual levels are defined according to IFRS 13 as follows:

Level 1: Measurement at (unadjusted) prices quoted for identical assets or liabilities on active markets.

Level 2: Measurement based on inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3: Measurement on the basis of unobservable inputs.

Fair value hierarchy	31-12-2018			
€m	Total	Level 1	Level 2	Level 3
Financial investments	3			3
Derivative financial assets	56		56	
Derivative financial liabilities	-		-	

Fair value hierarchy	31-12-2017			
€m	Total	Level 1	Level 2	Level 3
Financial investments	4			4
Derivative financial assets	1		1	
Derivative financial liabilities	39		39	

Fair values of derivative financial assets and liabilities are determined using customary market valuation methods taking into account the market data available on the measurement date as well as the default risk. For financial investments costs are an appropriate estimate of fair value.

No transfers between the levels occurred during the period under review or during the previous year.

The following overview shows the development of level 3 financial instruments to be recognised at fair value:

Development of level 3 financial instruments € m	As of 01-01-2018	Changes recognised in profit or loss	Transfer	Changes with a cash effect	As of 31-12-2018
Financial investments	4		-2	1	3

Development of level 3 financial instruments €m	As of 01-01-2017	Changes recognised in profit or loss	Transfer	Changes with a cash effect	As of 31-12-2017
Financial investments	1			3	4

Netting agreements

In the year under review, trade accounts payable amounting to €23m (previous year: €20m) were netted with trade accounts receivable amounting to €24m (previous year: €22m) on the basis of an unconditional netting agreement.

Valuation categories

As from 1 January 2018, financial assets and liabilities have been assigned to the following valuation categories according to IFRS 9:

	31-12-2018				
€m	Amortised costs	FVPL	FV (in hedge relationship)	Beyond the scope of IFRS 9/IFRS 7	Total
Financial investments	-	3	-	-	3
Financial receivables	1,945	-	-	-	1,945
Trade accounts receivable	264	-	-	-	264
Other accounts receivable and other assets					
Derivatives	-	-	56	-	56
Other	17	-	-	93	110
Cash and cash equivalents	305	-	-	-	305
Debt to banks	1,447	-	-	-	1,447
Financial liabilities	1,437	-	-	-	1,437
Trade accounts payable	298	-	-	-	298
Other liabilities					
Derivatives	-	-	-	-	-
Other	220	-	-	21	241

In the previous year, according to IAS 39, financial assets and liabilities had been classified as follows:

	31-12-2017							
€m	Available for sale	Held for trading	Loans and receivables	Valued at amortised cost	In hedge relationship	Finance lease	Beyond the scope of IFRS 7	Total
Financial investments	4	-	-	-	-	-	-	4
Financial receivables	-	-	2,043	-	-	-	-	2,043
Trade accounts receivable	-	-	279	-	-	-	-	279
Other accounts receivable and other assets	-	1	16	-	-	67	66	150
Cash and cash equivalents	-	-	116	-	-	-	-	116
Debt to banks	-	-	-	1,334	-	-	-	1,334
Financial liabilities	-	-	-	1,129	-	-	-	1,129
Trade accounts payable	-	-	-	304	-	-	-	304
Other liabilities	-	-	-	179	39	-	29	247

Financial risks and sensitivity analysis

As an E&P enterprise operating on an international scale, the DEA AG Group is exposed to credit, liquidity, interest rate and market risks (price and currency risks) within the ordinary course of its business. Our subsidiaries are subject to a strict risk management regime. The scope of action, responsibilities and controls is enshrined in binding, internal corporate instructions. Financial derivatives are used exclusively to hedge the risk related to underlying operations, not for speculative purposes.

Market risks

Market risks result in particular from changes in oil and gas commodity prices, changes in USD/EUR and USD/NOK exchange rates and corresponding unexpected negative changes regarding planned incoming and outgoing payments. In addition, currency risks arising from financial transactions between companies in the DEA AG Group may result if the functional currencies of the two partners do not match.

Risk management strategy for commodity risks

Commodity price risks are mitigated in the DEA AG Group using systematic risk management methods. The principles are defined in DEA's commodity hedge policy.

All hedging transactions serve the exclusive purpose of covering the risk from operational transactions as well as underlying transactions accounted for or expected with a high degree of probability. According to our hedging policy, we intend to continue hedging oil and gas prices in the future in order to stabilise the RBL borrowing base and thus give the management time to adapt the strategy to a low price scenario. The extent of the amounts to be hedged depends on economic exposure and prevailing oil and gas prices. The maximum hedge volume is set to 50 % of the economic exposure after tax.

Physical forward sales are used in the gas sector to stabilise parts of the gas revenues until 2023. In addition, financial derivatives are used to hedge oil price risks arising from payments received for future oil revenues. As of 31 December 2018, parts of our oil sales are hedged until 2022. The German oil production currently serves as a hedge item for achieving the hedging target. The price of the hedged item is defined via a price formula in the sales contract. The instruments used are Brent dated oil swaps for which a liquid market exists. Furthermore, a regression analysis shows a high correlation between Brent dated oil and the price formula. This is also the basis to determine the hedge ratio in order to achieve the highest level of hedge efficiency.

Derivative financial instruments

Derivative financial instruments are measured at fair value. In interpreting positive or negative fair values, it has to be considered that they are offset by underlying transactions with compensating risks. All derivative financial instruments are reported as assets or liabilities. Measurement of the fair values of financial derivatives is performed by using current market price quotations within a trading system developed externally for the commodity markets. On this basis commodity price swaps are valued by means of internal computations of the relevant swap curves and subsequent discounting as at the balance sheet date. Credit Value Adjustments (CVA) and Adjustments for Own Credit Risk (DVA) are applied to all derivatives. The CVA adjustment depends on the expected positive risk exposure and on the creditworthiness of the counterparty. DVA is determined by the expected negative exposure and the credit quality of the DEA AG. The exposure calculation implied all derivatives and is based on a Monte Carlo approach by using market values and market-based default probabilities.

Effects of hedge accounting on financial positions and performance:

Crude oil swaps €m	31-12-2018/ Jan. - Dec. 2018	31-12-2017/ Jan. - Dec. 2017
Carrying amount		
Other assets	56	-
Other liabilities	-	39
Nominal amount	692	347
Maturity date	1/2019 - 12/2022	1/2018 - 12/2019
Amounts recognised in profit or loss or other comprehensive income		
Change in fair value of hedging instrument recognised in OCI	-45	17
Reclassified from OCI to profit or loss (revenues)	-50	-5

In the previous year, non-financial gas forward sales contracts were recognised at fair values in the amount of €1m. They had been classified as "held for trading". The nominal volume amounted to €12m.

Hedge ineffectiveness is determined at inception of the hedge relationship and through periodic prospective effectiveness assessment to ensure that an economic relationship exists between the hedged item and hedging instrument. At DEA AG Group sources of ineffectiveness result from CVA/DVA adjustments and from a change in the correlation of the hedged item and the hedging instrument.

Hedge ineffectiveness as of 31 December 2018 is calculated as follows:

€m	31-12-2018
Change in fair value of the hedging instrument	56
Change in fair value of the hedged item	-57
Hedge ineffectiveness	1

Hedge ineffectiveness to be recognised in profit or loss amounts to €0m.

Sensitivity analysis for financial instruments in the scope of IFRS 7

To quantify the risk relating to market price fluctuations and financial instruments deployed, we use the sensitivity method. In quantifying market prices using the sensitivity method, a statement is made concerning the impact on earnings of a percentage-based change in market prices. The sensitivity figures shown below in accordance with the regulations of IFRS 7 refer only to financial instruments recognised in the balance sheet. Therefore, the reporting of the risk position of the DEA AG Group is incomplete.

The following table presents changes in the market values of concluded commodity hedge instruments that would have resulted from a 10 % increase or decline in the oil price. The underlying transactions are not taken into account. The calculation of oil price sensitivities is based on Brent quotations. Moreover, changes to the market values of loan liabilities in USD (in the previous year: also loan assets) as well as USD receivables arising from Egyptian activities that would have occurred both in the event of an increase and a decline by 10 % in the USD forward curve in relation to the EUR or NOK, respectively, are presented. The presentation of market value changes is in each case shown after taxes. The corporate tax rate of 30.56 % (previous year: 30.55 %) is applied.

	January - December 2018		January - December 2017	
€m	Changes impacting on profit and loss	Impacts on other comprehensive income	Changes impacting on profit and loss	Impacts on other comprehensive income
Increase in USD by 10 %	-86		58	
Decrease in USD by 10 %	107		-69	
Increase in oil price by 10 %		-58		-28
Decrease in oil price by 10 %		52		25

Credit risk

Credit risk is the risk that a counterparty will not meet its obligation under a financial instrument or customer contract, leading to financial loss. DEA AG Group is exposed to credit risk from its operating activities (primarily trade accounts receivable) and from its financing activities, including deposits with banks and financial institutions, favourable derivative financial instruments (positive fair value) and other financial receivables.

Risk management

Credit risk is managed on a group basis. To manage credit risk, the DEA AG Group has group-wide procedures in place covering the application for credit approvals, granting and renewal of counterparty limits, proactive monitoring of exposures against these limits and requirements triggering secured payment terms. As part of these processes, the credit exposures with all counterparties are regularly monitored and assessed on a timely basis. For banks and financial institutions, only independently rated parties with an investment grade rating are accepted.

If customers are independently rated, these ratings are used. Otherwise, if there is no independent rating, risk control assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. Individual risk limits are set based on internal or external ratings in accordance with set limits. There are no significant concentrations of credit risk, whether through exposure to individual customers or regions. Country specific payment risks are within limits stipulated by the management and closely monitored.

A default event occurs if management has one or more reasons to believe that a customer will not repay his liability towards DEA AG Group, mainly due to financial difficulty of the customer. A delay of payments in the cause of regular business practices does not alone indicate a customer default. An assessment of the overall situation is required on a case-by-case basis.

The maximum risk of default corresponds to the carrying amounts (less loss allowance) of the financial assets. For some trade accounts receivable the group obtains security in the form of guarantees, deeds of undertaking or letters of credit which can be called upon if the counterparty is in default under the terms of agreement.

Financial assets are written off when there is no reasonable expectation of recovery of contractual cash flows. The loss from financial assets that are written off is not material for both, the year under review and the previous year.

Impairment of financial assets

In order to determine the impairment losses of financial assets, DEA AG Group is using the general three-stage approach or the simplified approach according to IFRS 9, as applicable. For all financial assets, for which the simplified approach does not apply, it is assessed, at each reporting date, whether the credit risk on a financial instrument has increased significantly since initial recognition.

The following financial assets are subject to the expected credit loss model:

- Trade accounts receivables
- Other receivables
- Financial receivables and deposit with banks

For all trade accounts receivables, DEA AG Group applies the simplified approach. Accordingly, the loss allowance is measured at an amount equal to the lifetime expected credit losses. For trade accounts receivables the contractual payment term is usually 30 days. Deviating from this general rule terms of up to 2 years are considered for the calculation of expected credit losses due to different regional payment practice.

The loss allowance for other receivables, financial receivables and deposits with banks is measured at an amount equal to 12-month expected credit loss.

The loss allowance as of 1 January 2018 (first-time adoption of IFRS 9) and as of 31 December 2018 was determined as follows:

€m	Financial receivables	Trade accounts receivable	Other receivables	Total
As at 31-12-2017 (according to IAS 39)	-	31		31
Amounts restated through opening retained earnings	17	-9	0	8
As at 01-01-2018 (according to IFRS 9)	17	22	0	39
Impairment losses	1	19	1	21
Reversal of impairment losses	-10	-21	0	-31
Currency translation adjustments	-	-	-	-
As at 31-12-2018	8	20	1	29

The identified impairment loss regarding deposits with banks was immaterial and therefore not recognised.

In the prior year, the impairment of trade accounts receivables was assessed based on the incurred loss model according to IAS 39. The impairments were mainly related to overdue receivables and were based on staggered impairment rates.

€m	Trade accounts receivable	Other receivables	Total
As at 01-01-2017	106	-	106
Impairment (+)/reversal of impairment (-) in the year under review	-75	-	-75
Disposals	-	-	-
Currency translation adjustments	-	-	-
As at 31-12-2017	31	-	31

Liquidity risk

Our liquidity risk management ensures that the required liquidity to meet financial obligations is available at all times and that the liquidity position of the DEA AG Group is optimised. Centralised financial planning for the DEA AG Group is the basis of the liquidity risk management. Financial planning for the respective currencies is effected for the following twelve months on a monthly basis and for the following two months on a daily basis.

We monitor our liquidity risk by reviewing our cash flow requirements on a regular basis taking into consideration our funding sources, existing bank facilities and cash flow generation from our producing asset base. Specifically, we ensure that we have sufficient liquidity to meet our operational funding requirements and debt servicing. As part of the liquidity risk management, we also carry out sensitivity analyses and monitor compliance with the financial covenants defined in the RBL facility. In particular, the ratio of net debt to EBITDAX should not exceed a factor of 3 : 1. The calculation is based on definitions determined in the agreement. In the event of non-compliance with the financial covenants - if not cured through additional equity ("equity cure") - the lenders are allowed to declare that the loan is immediately due and payable. The financial covenants were complied with at all times during the reporting period.

Financial liabilities within the scope of application of IFRS 7 in the next several years are expected to result in the following amortisation payments:

€m	Carrying amounts 31-12-2018	Amortisation payments 1st succeeding year	2nd - 5th succeeding year	from 6th succeeding year
Debt to banks	1,447	6	1,441	
Other financial debt	1,437	396	400	647
Miscellaneous financial liabilities	518	518		

€m	Carrying amounts 31-12-2017	Amortisation payments 1st succeeding year	2nd - 5th succeeding year	from 6th succeeding year
Debt to banks	1,334	0	1,334	
Other financial debt	1,129	116	400	621
Commodity derivative financial liabilities	39	30	9	
Miscellaneous financial liabilities	333	333		

Interest rate risk

As of 31 December 2018, the DEA AG Group has financial debt and financial receivables that bear floating interest rates. An increase/decrease in the floating rate element by 50 basis points would result in a change in our interest result (after tax) in 2019 of €+2m or €-4m, respectively.

(19) Capital management

The capital management system of DEA Deutsche Erdoel AG is determined by the DEA AG Group's strategic objectives and focuses on increasing the value of the business over the long term. To achieve this goal, the DEA AG Group endeavours to constantly improve its existing operations, to safeguard its market position and to optimise its portfolio via value-creating acquisitions and divestments.

One of the strategic objectives of the DEA AG Group is the optimisation of the capital structure with a two-tier capital base. The reserves-based lending facility provides immediate drawdown options at lower costs, whereas the unsecured capital from the Bond proceeds provides non-amortising longer-term debt. In addition, the shareholder has provided various subordinated loans to the DEA AG Group (refer to note 16). In this way, DEA increases its financial flexibility and diversifies the investor base.

(20) Contingent and financial liabilities

DEA AG Group is subject to statutory liability with regard to participations in various joint ownerships.

In the course of their regular business activities, DEA AG Group companies are involved in legal disputes. Irrespective of the outcome of such legal disputes, we do not expect any significant negative effects on the economic and financial position of the DEA AG Group.

As of 31 December 2018, commitments based on rental, lease and similar commitments relate to operating leases, primarily for offices and for transport and production vessels. Minimum operating lease payments under non-cancellable operating leases are due as follows:

€m	31-12-2018	31-12-2017
Due within 1 year	22	16
Due within 1 – 5 years	62	65
Due after more than 5 years	13	26
	97	107

The DEA AG Group has commitments from firm contracts for property, plant and equipment and from field development projects amounting to €238m (previous year: €626m) and exploration commitments in the context of concession agreements amounting to €75m (previous year: €106m).

(21) Related party disclosures

The DEA AG Group is controlled by L1E Acquisitions GmbH (incorporated in Germany) which owns 100 % of the shares in DEA Deutsche Erdoel AG. The Group's ultimate parent is LetterOne Holdings S.A. (incorporated in Luxembourg). Related companies are all companies in which LetterOne Holdings S.A. or their controlling shareholders have at least a significant holding.

€m	LetterOne Group affiliated companies	
	31-12-2018/ Jan. - Dec. 2018	31-12-2017/ Jan. - Dec. 2017
Financial receivables	1,944	2,043
Trade accounts receivable	0	3
Financial debt	1,047	1,019
Liabilities from net profit transfer	390	110
Trade accounts payable	5	9
General and administrative expenses	2	9
Interest income	94	83
Interest expenses	50	49
Other financial expenses	4	4

All transactions are subject to market terms and conditions.

Related persons are the members of the Board of Management and Supervisory Board of DEA Deutsche Erdoel AG and of the parent company. No business relations exist with members of the Board of Management and of the Supervisory Board or individuals close to them.

In accordance with the by-laws, the members of the Supervisory Board of DEA Deutsche Erdoel AG received an amount of €250k for 2018 (previous year: €250k). Each Supervisory Board member receives fixed remuneration to an unchanged amount of €20k per calendar year for his or her activities. The Chairman receives twice this amount, and his Deputy one-and-a-half times the annual fixed remuneration. In addition, expenses incurred are refunded. Some employee representatives on the Supervisory Board have labour contracts with individual Group companies. Remuneration occurs in accordance with relevant contractual conditions.

Remuneration paid to members of the Board of Management consists of a fixed and a performance-related variable component as current remuneration components. The remuneration paid to the Board of Management of DEA Deutsche Erdoel AG for the fiscal year amounted to €4m (previous year: €3m), including variable remuneration of €1m (previous year: €1m). In addition, the fixed remuneration component for members of the Board of Management includes non-cash and other perquisites essentially comprising the values to be recognised subject to tax directives for the use of company cars and insurance premiums for accident insurance.

Furthermore, (direct) pension commitments have been granted to the members of the Board of Management, entitling them to life-long pensions and benefits for their surviving dependants. The present value of the overall commitment (defined benefit obligation) amounts to €168k as at 31 December 2018 (previous year: €7m). Pension service costs total €-k (previous year: €368k).

The Members of the Board also receive a remuneration component with a long-term incentive effect in the form of a performance cash plan with an overall 5-year performance period and deferred annual cash payments after performance periods of 3, 4 and 5 years. The key performance indicator is a defined increase in the net asset value of the DEA AG Group (calculated as an annualised "internal rate of return"). The annually-determined net asset value is based primarily on the discounted cash flow method and has to be reviewed by the Personnel Committee and approved by the Supervisory Board. As of 31 December 2018, the fair value of the long-term performance plan amounts to €907k (previous year: €301k). In the reporting period, additions to provisions amounting to €606k (previous year: €199k) were recognised as expenses.

(22) Joint Operations

The following joint operations are structured as separate entities:

Name	Nature of the joint arrangements	Principal place of business	Ownership interest/ voting rights %
SUEZ OIL COMPANY (Suco)	Operating company for the development and production phase	Cairo, Egypt	50.00
DEMINEX EGYPT OIL COMPANY (Deoco)	Operating company for the development and production phase; performed by Suco as a service	Cairo, Egypt	50.00
DISOUQ PETROLEUM COMPANY (DISOUCO)	Operating company for the development and production phase; performed by Suco as a service	Cairo, Egypt	50.00
Groupement Reggane	Operating company for the development and production phase	Algiers, Algeria	19.50

(23) Auditor's fees

DEA AG Group recognised the following fees as expenses for the services rendered by the auditors of the consolidated financial statements, PricewaterhouseCoopers GmbH Wirtschaftsprüfungs-gesellschaft (PwC) and companies belonging to PwC's international network:

€k	Jan. - Dec. 2018	Jan. - Dec. 2017
Audit services	645	664
Tax services	39	139
Other services	697	42

Thereof attributable to PwC Germany:

€k	Jan. - Dec. 2018	Jan. - Dec. 2017
Audit services	266	344
Tax services	34	48
Other services	697	38

The fees for audit services primarily contain the fees for the audit of the consolidated financial statements and for the audits of the financial statements of DEA Deutsche Erdoel AG and its subsidiaries. In particular, the fees for tax services include compensation for consultation in the preparation of tax returns and other national and international tax-related matters. The fees for other services mainly comprise project-specific advisory and assurance services.

(24) Events after the balance sheet date

No events subject to mandatory disclosure occurred after the balance sheet date.

(25) List of holdings of DEA Deutsche Erdoel AG according to Section 313 Para. 2 of the German Commercial Code (HGB)

	Share of capital %
Affiliated companies which are included in the consolidated financial statements	
DEA Cyrenaica GmbH, Hamburg 1)	100.00
DEA E&P GmbH, Hamburg 1)	100.00
DEA Global Limited, London/Great Britain	100.00
DEA International GmbH, Hamburg 1)	100.00
DEA Nederland B.V., Amsterdam/Netherlands	100.00
DEA Nile GmbH, Hamburg 1)	100.00
DEA Norge AS, Stavanger/Norway	100.00
DEA North Africa/Middle East GmbH, Hamburg 1)	100.00
DEA Suez GmbH, Hamburg 1)	100.00
DEA Suriname GmbH, Hamburg 1)	100.00
DEA Trinidad & Tobago GmbH, Hamburg	100.00
DEA Upstream Polska Sp. z o.o., Warsaw/Poland	100.00
DEA WND GmbH, Hamburg 1)	100.00
DEM México-Alemania S. de R.L. de C.V., Mexico-City/Mexico	100.00
Deutsche Erdoel México S. de R.L. de C.V., Mexico-City/Mexico	100.00
Affiliated companies which are not included in the consolidated financial statements	
DEA Petróleo e Gás do Brasil Ltda., Rio de Janeiro/Brazil	100.00
DEA Ukraine LLC, Kiev/Ukraine	100.00

1) Application of Section 264 Para. 3 of the German Commercial Code (HGB)

Supervisory Board, Management Board

Supervisory Board

Lord Edmund John Phillip Browne of Madingley, London (Chairman)
Executive Chairman, L1 Energy (UK) LLP

Günther Prien, Hamburg (Deputy Chairman)
Chairman of the Joint Works Council, DEA Deutsche Erdoel AG

Uwe Balasus-Lange, Hamburg (since 1 January 2019)
General Manager OpCo Germany/Denmark, DEA Deutsche Erdoel AG

Daniela Freise, Hamburg
Manager Risk Controlling & Back Office, Treasury, DEA Deutsche Erdoel AG

Mikhail Fridman, London/Moscow
Chairman, LetterOne Holdings S.A.

Andreas J. Goss, Duisburg
Executive Chairman, ThyssenKrupp Steel Europe AG

Franz-Gerd Hörnschemeyer, Hanover
Political Union Secretary, Union of the Mining, Chemical and Energy Industries

German Khan, London/Moscow
Director, LetterOne Holdings S.A.

Dr Jan Konerding, Hamburg
Auditor, Tax Advisor, Lawyer

René Pawel, Hamburg (until 31 December 2018)
Vice President Reservoir Management, DEA Deutsche Erdoel AG

Rajko Pientka, Hamburg
Political Union Secretary, Union of the Mining, Chemical and Energy Industries

Andreas Schöpf, Lachendorf
Chairman of the Works Council Betriebe Wietze, DEA Deutsche Erdoel AG

Alf Henryk Wulf, Stuttgart
Executive Chairman, BWCon Baden-Württemberg: Connected e.V.

Board of Management

Maria Moræus Hanssen (Chairwoman) (since 4 January 2018)
Responsible for: Chairing the Board

Thomas Rappuhn (Chairman) (until 3 January 2018)
Responsible for: Chairing the Board

Dmitry Avdeev
Responsible for: Finance

Dirk Warzecha
Responsible for: Operations

Hamburg, 8 February 2019

The Board of Management



Moræus Hanssen Avdeev Warzecha

The following auditor's report (Bestätigungsvermerk) has been issued in accordance with Section 322 German Commercial Code (Handelsgesetzbuch) on the consolidated financial statements and group management report (Konzernlagebericht) of DEA Deutsche Erdoel AG, Hamburg as of and for the fiscal year ended December 31, 2018. The group management report is neither included nor incorporated by reference in this Offering Memorandum.

"**INDEPENDENT AUDITOR'S REPORT**

To DEA Deutsche Erdoel AG, Hamburg

Audit Opinions

We have audited the consolidated financial statements of DEA Deutsche Erdoel AG, Hamburg, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at December 31, 2018, and the consolidated statement of comprehensive income, consolidated statement of profit or loss, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from January 1 to December 31, 2018, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In addition, we have audited the group management report of DEA Deutsche Erdoel AG for the financial year from January 1 to December 31, 2018. We have not audited the content of the statement on corporate governance pursuant to § [Article] 289f HGB [Handelsgesetzbuch: German Commercial Code] and § 315d HGB in accordance with the German legal requirements.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to § 315e Abs. [paragraph] 1 HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at December 31, 2018, and of its financial performance for the financial year from January 1 to December 31, 2018, and

- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the content of the above mentioned statement on corporate governance referred to above.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements

of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Other Information

The executive directors are responsible for the other information. The other information comprises the statement on corporate governance pursuant to § 289f HGB and § 315d HGB.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to

be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to

continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.

- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit."

Hamburg, February 13, 2019

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

sgd. Thorsten Dzulko	sgd. ppa. Helge Schäper
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Audited Consolidated Financial Statements of Wintershall (prepared in accordance with IFRS as adopted by the EU) as of and for the short fiscal year ended 30 April, 2019



CONSOLIDATED FINANCIAL STATEMENTS

Wintershall Dea GmbH
(up until May 16, 2019: Wintershall Holding GmbH)

Short fiscal year
1. January 2019 to April 30, 2019

Consolidated statement of financial position
as of April 30, 2019

€ thou.	Note	4/30/2019	12/31/2018
Intangible assets	[13]	1,817,247	2,283,557
Property, plant and equipment	[14]	6,450,795	6,508,012
Investments accounted for using the equity method	[15]	2,190,799	2,566,397
Other financial investments		1,883	1,883
Deferred tax assets		269,660	128,729
Other assets	[17]	954,913	896,174
Non-current assets		**11,685,297**	**12,384,752**
Inventories	[16]	142,967	136,588
Trade receivables	[17]	551,412	669,783
Miscellaneous receivables and other assets	[17]	1,018,619	254,369
Cash and cash equivalents		889,210	218,958
Current assets		**2,602,208**	**1,279,698**
Assets		**14,287,505**	**13,664,450**
Share capital	[18]	105,000	105,000
Capital reserve	[18]	1,172,543	1,265,543
Retained earnings and net retained profit	[18]	2,853,858	3,133,956
Other comprehensive income	[18]	-1,012,571	-1,173,903
Third-party interests	[19]	154,339	136,260
Equity		**3,273,169**	**3,466,856**
Pension provisions	[20]	343,549	307,039
Other provisions	[21]	1,833,418	1,605,018
Deferred tax liabilities		1,202,549	1,320,993
Non-current financial liabilities	[22]	1,251,758	499,417
Miscellaneous non-current liabilities	[22]	293,665	517,880
Non-current liabilities		**4,924,939**	**4,250,347**
Trade payables	[22]	327,508	348,011
Provisions		159,030	77,213
Tax liabilities		245,572	222,433
Current financial liabilities	[22]	1,494,624	10,396
Miscellaneous current liabilities	[22]	3,862,663	5,289,194
Current liabilities		**6,089,397**	**5,947,247**
Equity and liabilities		**14,287,505**	**13,664,450**

Consolidated income statement
for the short fiscal year from January 1, 2019 to April 30, 2019

€ thou.	Note	1/1/2019 - 4/30/2019	1/1/2018 – 12/31/2018
Net revenue	[5]	**1,531,177**	**4,707,203**
Cost of conversion and purchase costs of the services rendered to generate the revenue		-971,556	-2,910,502
Gross earnings from revenue		**559,621**	**1,796,701**
Distribution costs		-59,610	-94,346
General administrative expenses		-36,475	-67,579
Research costs		-7,545	-26,210
Exploration costs		-75,326	-111,522
Other operating income	[6]	48,387	118,437
Other operating expenses	[7]	-1,441,481	-450,356
Equity result	[8]	60,567	128,464
Result from operating activities		**-951,862**	**1,293,589**
Income from other participating interests		-	3,675
Expenses from other participating interests		-	-415
Net investment income		**-**	**3,260**
Interest income		36,474	71,869
Interest expenses		-25,182	-67,744
Net interest income		**11,292**	**4,125**
Miscellaneous financial income		132,356	251,102
Miscellaneous financial expenses		-150,833	-304,677
Miscellaneous financial result		**-18,477**	**-53,575**
Financial result	[9]	**-7,185**	**-46,190**
Earnings before income taxes		**-959,047**	**1,247,399**
Income taxes (income, previous year: expense)	[10]	108,189	-576,580
Net income for the year		**-850,858**	**670,819**
Non-controlling interests	[11]	-18,151	-54,731
Net income after non-controlling interests		**-869,009**	**616,088**

Consolidated statement of comprehensive income
for the short fiscal year from January 1, 2019 to April 30, 2019

	1/1/2019 – 4/30/2019			12/31/2018		
€ thou.	Total	BASF	Non-controlling interests	Total	BASF	Non-controlling interests
Net result for the period	**-850,858**	**-869,009**	**18,151**	**670,819**	**616,088**	**54,731**
Actuarial gains/losses	-33,809	-33,763	46	10,187	10,173	14
Deferred taxes	9,994	9,981	-13	-2,821	-2,817	-4
Income and expenses that will not be reclassified to the statement of income at a later date, recognized directly in equity	**-23,815**	**-23,782**	**33**	**7,366**	**7,356**	**10**
Unrealized gains/losses on currency translation	150,846	150,846	-	-76,998	-76,998	-
Measurement of securities at market value	-	-	-	328	328	-
Gains/losses after taxes from investments accounted for using the equity method that are eligible for reclassification	34,301	34,301	-	-32,808	-32,808	-
Income and expenses that will be reclassified to the statement of income at a later date, recognized directly in equity	**185,147**	**185,147**	**-**	**-109,478**	**-109,478**	**-**
Total comprehensive income	**-689,526**	**-707,644**	**18,184**	**568,707**	**513,966**	**54,741**

Development of income and expenses recognized directly in equity

€ thou.	**Actuarial gains/ losses**	**Asset ceiling for defined benefit pension plans**	**Unrealized gains/ losses from currency translation**	**Measurement of securities at market value**	**Hedging of future cash flows (cash flow hedge)**	**Total of all income and expenses recognized in equity**
As of 1/1/2019	-118,680	15	-1,016,894	-	-38,344	-1,173,903
Changes	-33,809	-	182,914	-	2,233	151,338
Deferred taxes	9,994	-	-	-	-	9,994
As of 4/30/2019	-142,495	15	-833,980	-	-36,111	-1,012,571

€ thou.	**Actuarial gains/ losses**	**Asset ceiling for defined benefit pension plans**	**Unrealized gains/ losses from currency translation**	**Measurement of securities at market value**	**Hedging of future cash flows (cash flow hedge)**	**Total of all income and expenses recognized in equity**
As of 1/1/2018	-126,046	15	-896,498	-328	-48,934	-1,071,791
Changes	10,187	-	-120,396	328	10,590	-99,291
Deferred taxes	-2,821	-	-	-	-	-2,821
As of 12/31/2018	-118,680	15	-1,016,894	-	-38,344	-1,173,903

Consolidated cash flow statement
for the short fiscal year from January 1, 2019 to April 30, 2019

€ thou.	1/1/2019 - 4/30/2019	2018
Net income for the year after non-controlling interests	**-869,009**	**616,088**
Amortization of intangible assets, depreciation of property, plant and equipment and impairment of financial investments	1,532,619	1,080,114
Changes in inventories	-3,513	-52,498
Changes in receivables	-14,567	-161,931
Changes in business-related liabilities and other provisions	-65,967	199,320
Change in provisions for pensions, in assets from overfunded pension plans and other items	5,781	101,881
Gains (-) from the disposal of non-current assets	-22,497	-20,268
Cash flow from operating activities	**562,848**	**1,762,706**
Payments for property, plant and equipment	-168,761	-587,821
Payments for intangible assets	-1,301	-34,336
Payments for financial investments	-82,822	-330,146
Proceeds from the disposal of non-current assets	1,116	56,847
Payments for acquisitions	-	-135,100
Cash flows from investing activities	**-251,768**	**-1,030,556**
Payments to company owners	-323,711	-1,298,892
Proceeds from company owners	-	850,000
Raising of financing-related liabilities BASF Group	4,546,025	2,176,666
Repayment of financing-related liabilities BASF Group	-6,127,602	-2,236,535
Raising of financial liabilities	2,250,589	44,693
Repayment of financial liabilities	-	-137,352
Change in lease liabilities	12,599	-
Cash flows from financing activities	**332,702**	**-601,420**
Changes in cash and cash equivalents affecting liquidity	**643,781**	**130,730**
Change in cash and cash equivalents		
due to currency translation effects	26,471	-22,098
due to changes in the scope of consolidation	-	-
Cash and cash equivalents at the beginning of the period	**218,958**	**110,326**
Cash and cash equivalents at the end of the period	**889,210**	**218,958**
Composition of cash and cash equivalents		
Cash and cash equivalents	**889,210**	**218,958**

Consolidated statement of changes in equity
as of April 30, 2019

€ thou.	Subscribed capital	Capital reserves	Retained earnings and net retained profit	Other comprehensive income	Non-controlling interests	Total
1/1/2019	**105,000**	**1,265,543**	**3,133,956**	**-1,173,903**	**136,260**	**3,466,856**
Taking from capital reserve	-	-93,000	-	-	-	**-93,000**
Result for the year before profit transfer	-	-	-869,009	-	18,151	**-850,858**
Result of natural gas transport companies accounted for using the equity method	-	-	-	-	-	**-**
Profit transferred under profit and loss transfer agreement	-	-	588,845	-	-	**588,845**
Actuarial gains/losses	-	-	33	-23,815	-33	**-23,815**
Market valuation of cash flow	-	-	-	2,233	-	**2,233**
Translation adjustment	-	-	-	182,914	-	**182,914**
Miscellaneous	-	-	33	-	-39	**-6**
4/30/2019	**105.000**	**1,172,543**	**2,853,858**	**-1,012,571**	**154,339**	**3,273,169**
12/31/2017	**105,000**	**415,543**	**3,693,020**	**-1,071,791**	**71,678**	**3,213,450**
IFRS 9 adjustment	-	-	-810	-	-	**-810**
1/1/2018	**105,000**	**415,543**	**3,692,210**	**-1,071,791**	**71,678**	**3,212,640**
Changes in the scope of consolidation (Gullfaks)	-	-	-595	-	-	**-595**
Capital increase by means of the "pay out and claw back" procedure	-	850,000	-	-	-	**850,000**
Result for the year before profit transfer	-	-	616,088	-	54,731	**670,819**
Result of natural gas transport companies accounted for using the equity method	-	-	-	-	57,187	**57,187**
Profit transferred under profit and loss transfer agreement	-	-	-323,711	-	-	**-323,711**
Dividend distribution	-	-	-	-	-47,346	**-47,346**
Withdrawal	-	-	-850,000	-	-	**-850,000**
Actuarial gains/losses	-	-	-10	7,366	10	**7,366**
Market valuation of cash flow	-	-	-	10,918	-	**10,918**
Translation adjustment	-	-	-	-120,396	-	**-120,396**
Miscellaneous	-	-	-26	-	-	**-26**
12/31/2018	**105,000**	**1,265,543**	**3,133,956**	**-1,173,903**	**136,260**	**3,466,856**

Group notes for the short fiscal year from January 1, 2019 to April 30, 2019

Principles and scope of consolidation

1. Summary of accounting policies

1.1 General information

Wintershall Dea GmbH (until May 16, 2019: Wintershall Holding GmbH, registration court: Local Court (*Amtsgericht*) of Lüneburg; registration number: HRB 200519) has its registered office in Celle, Lower Saxony, Germany. The address is Friedrich-Ebert-Strasse 160, 34119 Kassel, Germany. The consolidated financial statements are submitted electronically to the operator of the Federal Gazette and are published in the electronic Federal Gazette after submission.

The consolidated financial statements of Wintershall Dea GmbH for the short fiscal year ending on April 30, 2019 were prepared in accordance with the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB) as they applied on the balance sheet date, and in accordance with the supplementary provisions to be applied pursuant to section 315e (1) of the German Commercial Code (HGB). As a matter of principle, IFRSs are only applied after they have been adopted by the European Union. All IFRSs and pronouncements of the International Financial Reporting Interpretations Committee (IFRIC) that are binding for the 2019 short fiscal year have been applied. Comparability with the previous year's figures is limited as the latter relate to the full 2018 financial year.

The consolidated financial statements have been prepared in euros. As a general rule, all amounts, including the previous year's figures, are stated in thousands of euros (€ thou.). Exceptions to this rule are specially marked in the text (individual figures are shown in millions of euros - € million).

The annual financial statements of the consolidated companies were prepared as of the balance sheet date of the consolidated financial statements. The accounting policies applied essentially correspond to those applied in 2018. This does not apply to changes resulting from the application of new or revised accounting standards.

1.2 Basic group accounting principles

Scope of consolidation: The scope of consolidation is based on the application of IFRS 10 and 11.

According to IFRS 10, a group consists of a parent company and its subsidiaries, which are controlled by the parent company. "Control" over an investee requires all of the three criteria set out below to be fulfilled at the same time:

- Decision-making power of the parent company over the relevant activities of the investee,
- Variable returns from the investee flow to the parent company, and
- The ability of the parent company to use its decision-making power to influence the variable returns.

On the basis of corporate governance and any existing supplementary agreements, the relevant activities of

companies, variable returns and the relationship between the ability to influence the relevant activities and the variable returns are analyzed.

Pursuant to IFRS 11, which governs the accounting of joint arrangements, a distinction is made between joint ventures and joint operations. In the case of joint ventures, the partners participate in the net assets of a jointly controlled, legally independent company on the basis of their shareholder status. In joint operations, the parties that have joint control of the arrangement have direct rights to the assets, and obligations for the liabilities, relating to the arrangement. This requirement is met, in particular, if the production of the joint arrangement is almost completely sold to the partners and the partners thereby secure the ongoing financing of the joint arrangement.

Companies whose corporate governance structures classify them as joint arrangements are analyzed to determine whether they meet the criteria for joint ventures or joint operations in accordance with IFRS 11. Should the arrangement be structured through a separate vehicle, its legal form, contractual arrangements and all other facts and circumstances are reviewed.

In addition to Wintershall Dea GmbH, the consolidated financial statements include all material subsidiaries in full, and one joint operation on a pro rata basis. Companies whose business is dormant or of low volume, and are of minor importance for the presentation of a true and fair view of the net assets, financial position and results of operations, are not consolidated, but rather are reported under "Other financial assets". These companies are carried at amortized cost and are written down in the event of an impairment. The aggregated assets as well as equity of these companies amount to less than 2.5% of both corresponding values at Group level.

Joint ventures and associated companies are accounted for using the **equity method** in the consolidated financial statements. Associates are defined as companies over which significant influence can be exerted over operating and financial policy and which are not subsidiaries, joint ventures or joint operations. In general, this applies to companies in which the Wintershall Group has an investment of between 20% and 50%. Equity-accounted income is reported as part of the result from operating activities (EBIT).

Methods of consolidation: The assets and liabilities of the companies included in the consolidated financial statements are recognized and measured uniformly in accordance with the principles described herein. In the case of companies accounted for using the equity method, material valuation differences resulting from the application of different accounting principles than those that apply to Wintershall are adjusted.

Transactions between consolidated companies, as well as intercompany profits resulting from trade between consolidated companies, are eliminated in full; elimination is performed on a pro rata basis for joint operations. With regard to revenue, these are eliminated in full. Material intercompany profits are eliminated in the case of companies accounted for using the equity method.

Capital consolidation is conducted at the acquisition date according to the purchase method. Initially, all assets, liabilities and additional intangible assets that are to be capitalized are measured at fair value. The acquisition cost of the participating interests is then offset against the proportionate share of the newly measured equity. The resulting positive differences are capitalized as goodwill. Negative differences are reviewed once more before being recognized directly in the income statement.

The incidental acquisition costs associated with a business combination are recognized in "Other operating expenses".

If the consolidated subsidiaries have a balance sheet date that differs from that of the parent company, they

are included on the basis of interim financial statements as of April 30, 2019.

Profit and loss transfer agreement: Up until April 30, 2019, Wintershall Dea GmbH is a direct (10.29%) and also an indirect (89.71% as a subsidiary of BASF Handels- und Exportgesellschaft mbH) subsidiary of BASF SE, Ludwigshafen am Rhein. The profit and loss transfer agreement concluded with BASF Handels- und Exportgesellschaft mbH in 2006 was terminated by way of an agreement dated April 30, 2019 effective at 24hrs on April 30, 2019.

With regard to the third-party shares of WIGA Transport Beteiligungs-GmbH & Co. KG, these are transferred to the shareholders via distribution.

Translation of foreign currency items: The acquisition costs of assets acquired in foreign currencies and the proceeds from sales in foreign currencies are calculated using the exchange rates prevailing at the time the transactions are posted. Receivables and liabilities in foreign currencies are valued at the exchange rates that apply on the balance sheet date. The translation-related changes in assets and liabilities are recognized in profit or loss and are generally reported under other operating expenses or income. The "Miscellaneous financial result" shows, among others, the effects of microhedges on earnings.

Translation of annual financial statements in foreign currencies: Currency translation is based on the functional currency of the consolidated companies. For those companies whose functional currency is not the euro, amounts are translated into the reporting currency using the closing rate method: balance sheet items are translated into euros at the closing rates that apply on the balance sheet date, while expenses and income are translated at the average monthly rates and accumulated over the course of the year. The difference between the companies' equity converted at historical rates on the date of contribution or retention and their equity converted at closing rates on the balance sheet date is shown separately under "Other comprehensive income" (translation adjustment) in equity and is not recognized in profit or loss until the company is derecognized.

For some companies outside of the euro or US dollar area, the euro or US dollar is the functional currency. In these cases, the financial statements prepared in local currency terms are translated into the functional currency using the temporal method: all non-monetary assets, as well as the depreciation/amortization and equity attributable to them, are translated at the applicable transaction rate. All other balance sheet items are translated using the closing rates that apply on the balance sheet date, and all other income and expenses are translated at average monthly rates. The resulting translation differences are recognized in "Other operating income" or "Other operating expenses". If necessary, financial statements denominated in the functional currency are subsequently translated into the reporting currency using the closing rate method.

Selected exchange rates

€1 =	Closing rates		Average rates	
	4/30/2019	12/31/2018	1/1/2019 - 4/30/2019	2018
Argentina (ARS)	49.15	43.07	45.32	32.97
UK (GBP)	0.86	0.89	0.87	0.88
Norway (NOK)	9.67	9.95	9.71	9.60
Russia (RUB)	72.21	79.72	74.33	74.04
USA (USD)	1.12	1.15	1.13	1.18

1.3 Accounting changes

➔ **Accounting standards applied for the first time in the short fiscal year 2019**

IFRS 16 "Leases"

IFRS 16 "Leases" replaces the previous rules and definitions of IAS 17, IFRIC 4, SIC15 and SIC27 and provides a comprehensive model for the identification and treatment of leases in financial statements for both lessors and lessees. The standard provides for an accounting model for the lessee in which all rights to use assets (Right-of-Use (RoU) assets) and liabilities under leases are to be recognized in the balance sheet unless the lease term is twelve months or less or the asset is of low value. For lessors, the accounting model does not differ significantly from that provided for in IAS 17 "Leases", i.e. lessors continue to classify leases as finance or operating leases. The new standard was adopted by the European Union on October 31, 2017. IFRS 16 is mandatory for fiscal years beginning on or after January 1, 2019. The date of first-time application of IFRS 16 for the Wintershall Dea Group is January 1, 2019.

The Group has opted for the modified retrospective application of IFRS 16 in accordance with IFRS 16.C5(b). The previous year's figures have not been adjusted. As part of the transition process, right-of-use assets from leases were capitalized as of January 1, 2019 and corresponding lease liabilities were recognized. The relief provisions for short-term leases with a term of less than twelve months and leases in which the asset underlying the lease agreement is of a low value have been applied. The Wintershall Dea Group applies a value limit of €5,000 for the purposes of identifying low-value assets.

In contrast to accounting at the level of the lessee, accounting at the level of the lessor does not change as a result of the introduction of IFRS 16.

When IFRS 16 was first applied, the Wintershall Dea Group made use of the option not to perform an assessment to determine whether an agreement constitutes a lease as defined by IFRS 16 or not. Accordingly, the definition of a lease set out in IAS 17 and IFRIC 4 continues to apply to leases entered into or modified prior to January 1, 2019.

The change in the definition of a lease mainly relates to the concept of control. IFRS 16 makes a distinction between lease agreements and service agreements depending on whether the lessee has the right to control the use of the identified asset. The lessee is assumed to have control over the leased asset if the lessee

- has the right to control the use of the asset and
- the entire economic benefit flows to the lessee during the term of the lease agreement.

The Wintershall Dea Group will apply the leases and related IFRS 16 guidance to all lease agreements entered into or modified on or after January 1, 2019.

When applying IFRS 16 for the first time, the Wintershall Dea Group proceeds as follows for all leases:

- Recognition of RoU assets and lease liabilities in the consolidated statement of financial position, which are initially measured at the present value of future lease payments;
- Recognition of depreciation on RoU assets and interest expenses on lease liabilities in the income statement of the Wintershall Dea Group;
- Separation of the total amount of repayments made (reported in cash flow from financing activities) and the interest portion (reported in cash flow from operating activities) in the cash flow statement.

Incentive payments (e.g. rent-free periods) are recognized in the measurement of RoU assets and lease liabilities, whereas in accordance with IAS 17 they led to the recognition of a lease liability incentive payment,

which reduced rental expenses by reversing them on a straight-line basis.

In accordance with IFRS 16, RoU assets are tested for impairment based on IAS 36 Impairment of Assets. This replaces the previous obligation to set up a provision for onerous leases.

As permitted by IFRS 16, the Wintershall Dea Group will recognize leasing expenses on a straight-line basis for short-term leases (up to 12 months and with no purchase option) and leases involving low-value assets (e.g. PCs and office furniture).

Reconciliation as of the date of application: January 1, 2019

€ thou. **Reconciliation of lease liabilities**	
Future minimum lease payments under operating leases as of 12/31/2018 (IAS 17 disclosure of undiscounted amounts)	**144,786**
- Low-value leases	-874
- Leases with remaining terms of less than 12 months	-22,905
+ Other adjustments	-2,918
= Gross lease liability	**118,089**
- Discounting	-4,568
= Net lease liability	**113,521**
+ Lease liability from finance leases as of 12/31/2018	-
= Lease liability as of January 1, 2019	**113,521**

As of January 1, 2019, the Wintershall Dea Group had non-cancellable operating lease obligations of €144,786 thousand. The weighted incremental borrowing rate for the lease liabilities recognized for the first time as of January 1, 2019 was 2.47%.

An evaluation shows that €114,702 thousand of these agreements relate to lease agreements other than short-term lease agreements and lease agreements for low-value assets, meaning that the Wintershall Dea Group recognized a RoU asset and a corresponding lease liability of €113,521 thousand as of January 1, 2019 for all of these lease agreements. Ultimately, this leads to a reduction in other expenses with a simultaneous increase in amortization/depreciation and interest expenses.

As of January 1, 2019, €23,779 thousand of these agreements relate to short-term leases and agreements on low-value assets. In accordance with IAS 17, all lease payments under operating leases are presented as part of the operating cash flow.

The main difference between IFRS 16 and IAS 17 with respect to assets previously held under finance leases relates to the measurement of the residual value guarantees provided by the lessee vis-à-vis the lessor. IFRS 16 requires the Group to recognize, as part of its lease liability, only the amount expected to fall due under a residual value guarantee and not the maximum amount guaranteed under IAS 17. At the time of the first-time application of IFRS 16, the Wintershall Dea Group did not have any finance leases.

Amendments to IFRS 9 "Prepayment Features with Negative Compensation" (IFRS 9)

The adjustments relate to the assessment criteria relevant to the classification of financial assets. Financial assets with a negative prepayment penalty can be recognized, subject to certain requirements, at amortized cost or at fair value through other comprehensive income, instead of at fair value through profit or loss. The amendments are to be applied for the first time as of January 1, 2019. The changes have no effect on the Wintershall Dea Group.

IFRIC 23 “Uncertainty over Income Tax Treatments”

IFRIC 23 supplements the provisions set out in IAS 12 regarding how to deal with uncertainty surrounding

the income tax treatment of scenarios and transactions with regard to both current and deferred taxes. IFRIC 23 is effective for the first time for fiscal years beginning on or after January 1, 2019. The supplementary provisions have no material impact on the Wintershall Dea Group.

Amendments to IAS 28 "Investments in Associates and Joint Ventures"

On October 12, 2017, the IASB published amendments to the accounting treatment of investments in associates and joint ventures. The amendments to IAS 28 clarify that IFRS 9 is to be applied to investments in associates or joint ventures that are not accounted for using the equity method. The amendment was adopted in EU law in the first quarter of 2019 and its application is mandatory as of January 1, 2019. The effects are described under –"Financial Instruments" in this note.

Amendments to various further IFRS standards adopted in EU law

On March 14, 2019, the European Union adopted the amendments to various standards in EU law as part of the annual improvements to the IFRS standards 2015-2017 cycle.

The European Union published Regulation (EU) No 2019/412 of 14 March 2019 on amending Regulation (EC) No 1126/2008 adopting certain international accounting standards in accordance with Regulation (EC) No 1606/2002 of the European Parliament and of the Council on March 15, 2019.

The amendments are set out in detail below:

– **IFRS 3 "Business Combinations":** When an entity obtains control over a business operation in which it previously held an interest as part of a joint operation, the principles governing successive business combinations are to be applied. This means that the interest previously held by the acquirer is to be remeasured (IFRS 3.42A).

– **IFRS 11 "Joint Arrangements":** If a party obtains joint control of an operation in which it previously participated as part of a joint operation, the previously held interest is not remeasured (IFRS 11.B33CA). The amendment does not have significant effects on Wintershall Dea Group.

– **IAS 12 "Income Taxes":** A company is to account for all income tax consequences of dividend payments in the same way as the income on which the dividends are based. This means that they are to be recognized in profit or loss, unless the dividend is based on income recognized directly in other comprehensive income or equity (IAS 12.57A).

– **IAS 23 "Borrowing costs":** In connection with the calculation of the capitalization rate, if a company has generally borrowed funds to purchase qualifying assets, the costs associated with debt taken out specifically in connection with the qualifying assets are not to be included until the asset is completed (IAS 23.14

The amendment is effective for reporting periods beginning on or after January 1, 2019. The EU Regulation is available on the website of the Official Journal of the European Union.). The amendment does not have significant effects on Wintershall Dea Group.

Improvements to IAS 19 "Plan Amendment, Curtailment or Settlement"

On March 13, 2019, the European Union published Regulation (EU) No 2019/402 of 13 March 2019 amending Regulation (EC) No 1126/2008 adopting certain international accounting standards in accordance with Regulation (EC) No 1606/2002 of the European Parliament and of the Council. The amendments to IAS 19 clarify that current service cost and net interest after plan amendment, curtailment or settlement must be recognized for the remainder of the period on the basis of updated assumptions.

The amendment is effective for reporting periods beginning on or after January 1, 2019. The amendment does not have a significant effects on Wintershall Dea Group.

Amendments to IAS 28 "Investments in Associates and Joint Ventures"

On February 11, 2019, the European Union published Regulation (EU) No 2019/237 of 8 February 2019 amending Regulation (EC) No 1126/2008 adopting certain international accounting standards in accordance with Regulation (EC) No 1606/2002 of the European Parliament and of the Council.

In particular, the amendments to IAS 28 address the question as to how the requirements of IAS 28 and IFRS 9 "Financial Instruments" interact with each other. It sets out provisions governing the extent to which "long-term interests" that form part of the entity's net investment in an associate or joint venture and to which the equity method does not apply fall within the scope of the two standards. Essentially, the standard clarifies that IFRS 9 is initially to be applied to such long-term investments.

The amendments are effective for reporting periods beginning on or after January 1, 2019. The amendments do not have significant effects on Wintershall Dea Group.

➔ IFRSs and IFRICs not yet to be taken into account – subject to endorsement in EU law

The IASB has issued further amendments to standards and interpretations whose application is not yet mandatory and which have not yet been endorsed by the EU. These changes are not expected to have any material impact on the Wintershall Dea Group's reporting. The Wintershall Dea Group does not plan to apply the changes early.

Amendments to IFRS 10 and IAS 28 - "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"

The IASB published amendments to IFRS 10 and IAS 28 on September 11, 2014. The amendments address a known inconsistency between the provisions in IFRS 10 and those in IAS 28 (2011) in the event of the sale of assets to an associate or joint venture and/or the contribution of assets to an associate or joint venture.

Initial application of the amendments has been postponed for an indefinite period of time by the IASB.

Conceptual Framework

The Conceptual Framework published on March 29, 2018 replaces the previous Conceptual Framework from 2010. Key changes relate, in particular, to the definition, recognition and measurement of assets and liabilities, as well as the distinction between the profit/loss for the period and other total comprehensive income. The amendments are to be applied as of January 1, 2020, subject to their endorsement in EU law.

Amendments to References to the IASB Conceptual Framework

The amendments relate to updated references to quotations from the Conceptual Framework. Subject to adoption into EU law, the amendments need to be applied for the first time in the first reporting period in a fiscal year starting on or after January 1, 2020.

1.4 Accounting policies

➔ Oil and gas exploration

Exploration and production costs are accounted for using the successful efforts method. This method means that expenses for successful exploratory drilling, as well as successful and dry development wells, are capitalized.

An exploration well is a well located outside of an area with proven oil and gas deposits. A development well is a well which is sunk to the depth of a deposit of oil or gas within an area with proved reserves.

Exploratory drilling is generally reported under construction in progress until its success can be determined. When the presence of hydrocarbons is proved such that the economic development of the field is probable, the costs remain capitalized as suspended well costs. At least once a year, all suspended wells are assessed from an economic, technical and strategic viewpoint to see if development is still intended. If this is not the case, the capitalized expenses for the well concerned are written off. When economically viable reserves are proven, the exploration wells are reclassified as technical equipment and machinery when production starts.

Production costs include all costs incurred to operate, repair and maintain the well and the associated plant and ancillary equipment, as well as any associated depreciation.

The unit of production method is used to depreciate assets from oil and gas exploration at the field or deposit level. As a matter of principle, depreciation is calculated on the basis of production during the period in relation to the proven, developed reserves. Depreciation on producing fields is reflected in production costs, while depreciation on exploration potential is reflected in exploration costs. Impairment losses/reversals of impairment losses on other non-current assets are included in other operating income/expenses.

Exploration expenses include all costs connected with non-proven oil and gas deposits. They include costs for the exploration of areas with possible oil or gas reserves. Costs for geological and geophysical investigations are, as a matter of principle, reported under exploration expenses. In addition, this item includes impairment losses on capitalized expenses for exploration wells for which no reserves could be proven. Scheduled depreciation on successful exploration wells is part of the cost of conversion.

The intangible asset from the marketing agreement for natural gas from the Yuzhno Russkoye natural gas field is amortized in accordance with Wintershall Dea's share of the volume produced and marketed.

Intangible assets mainly comprise exploration and production rights. During the exploration phase, these are not subject to scheduled depreciation, but rather are tested annually for impairment. In the event of an economically successful strike, the rights are amortized using the unit-of-production method.

➔ Revenue recognition

Expenses and income from the exploration, development and production phases of oil and gas concessions are often allocated based on defined formulae via exploration and production sharing agreements between the state and one or more development and production companies. The proceeds due under these contracts are reported as revenue.

Revenue from contracts with customers is recognized when control of the goods or services is transferred to the customer in the amount of the consideration expected to be received by the Wintershall Dea Group in exchange for the goods or services.

Services rendered to customers are invoiced on an ongoing basis and recognized as revenue accordingly.

If the consideration in a contract contains variable components, the Wintershall Dea Group estimates the amount of consideration to which it is entitled in return for delivery of the goods to the customer. The variable consideration is estimated and is only recognized when it is highly probable that a significant reversal of the revenue will not occur when the related uncertainty regarding the variable consideration has been resolved. Expected rebates and other discounts are accrued based on the principles of item-by-item measurement to cover probable risks and other claims.

As it applies the simplification rule set out in IFRS 15, the Wintershall Dea Group does not adjust the amount of the agreed consideration to reflect the effects of a material financing component if, on the contract start date, it is expected that the period between the transfer of the goods or services to the customer and the date on which the customer is expected to pay for those goods or services will be one year or less.

➔ Assets

Acquired intangible assets (excluding goodwill) with determinable useful lives are generally measured at cost less straight-line amortization. The useful life is measured based on the term of the underlying contract or the expected utilization of the intangible asset's economic benefits.

Impairment losses are recognized if the recoverable amount is less than the carrying amount. The recoverable amount is the higher of the fair value less costs to sell and value in use. The value in use is calculated on the basis of future cash inflows and outflows and the weighted average cost of capital after taxes, depending on tax rates and country risks. If the reasons for impairment no longer apply, the impairment loss is reversed up to the amount that would have arisen if no impairment loss had been recognized. Depending on the type of intangible asset, amortization is included in the cost of conversion, distribution costs, research and development expenses or other operating expenses.

Internally generated intangible assets are measured at their cost of conversion less scheduled amortization over the average useful life of the asset. Impairment losses are recognized if the net carrying amount of the asset exceeds its recoverable amount. In addition to directly attributable costs, the cost of conversion of internally generated intangible assets also includes an appropriate share of overheads.

Intangible assets of the Wintershall Dea Group mainly comprise exploration and production rights. During the exploration phase, these are not subject to scheduled depreciation, but rather are tested annually for impairment. In the event of an economically successful strike, the rights are amortized using the unit-of-production method.

The intangible asset from the marketing agreement for natural gas from the Yuzhno Russkoye natural gas field is amortized in accordance with Wintershall Dea's share of the volume produced and marketed.

Emission rights: Certificates issued free of charge by the German Emissions Trading Authority (DEHSt) or a comparable authority in other countries are carried at zero in the balance sheet. Emission rights purchased on the market are capitalized at cost as intangible assets. The emissions caused give rise to the obligation to surrender emission rights. Purchased intangible assets are subsequently measured at market prices up to a maximum of the acquisition cost. In the event of a lower fair value on the balance sheet date, the asset is written down to this value.

Goodwill is only written down in the event of impairment. Goodwill is tested for impairment once a year and also if there is any indication of impairment. Impairment losses on goodwill are not reversed.

Property, plant and equipment is measured at cost, less depreciation over the average useful life and

impairment losses. The revaluation method is not applied. Low-value assets are expensed in the year of acquisition.

In addition to directly attributable costs, the cost of conversion of internally generated assets includes an appropriate share of material and production overheads, as well as general administrative expenses for the areas involved in constructing the assets.

The costs of maintenance and repair in the ordinary course of business are recognized as an expense.

Movable and immovable fixed assets are largely depreciated using the straight-line method, with the exception of production licenses and plants, which are primarily depreciated based on use in accordance with the unit of production method. The estimated useful lives and depreciation methods of property, plant and equipment are based on historical values, plans and estimates. The depreciation methods, useful lives and residual values are reviewed at each balance sheet date. The weighted average depreciation periods were as follows:

Weighted average depreciation in years	1/1/2019 - 4/30/2019	2018
Buildings and structural installations	29	29
Technical equipment and machinery	13	13
Operating equipment and other fixtures	7	7

Impairment losses are recognized if the recoverable amount is less than the carrying amount. Measurement is based on the fair value less costs to sell or the value in use. The value in use is calculated on the basis of future cash inflows and outflows and the weighted average cost of capital after taxes, depending on tax rates and country risks. The impairment is recognized in the amount of the difference between the previous carrying amount and the recoverable amount. If the reasons for impairment no longer apply, the impairment loss is reversed up to the amount that would have arisen if no impairment loss had been recognized.

Leases: A lease is established by a contract that grants the right to control the use of an identified asset for an agreed period in return for consideration.

Since January 1, 2019, the present value of future lease payments has generally been recognized as a financial liability for those leases in which the Wintershall Dea Group is the lessee. The lease payments are divided into principal and interest portions in accordance with the effective interest method. Correspondingly, at the inception of the lease, the right to use the leased asset is capitalized as a fixed asset which generally corresponds to the present value of the liability plus directly attributable costs. Payments made prior to the commencement of the lease and rental incentives granted by the lessor are also included in the carrying amount of the right-of-use asset.

The right-of-use asset is generally subject to amortization over the term of the lease. Right-of-use assets allocated to production licenses and facilities are essentially amortized over the term of the lease based on the unit-of-production method. The provisions set out in IAS 36 governing the determination and recognition of asset impairments also apply to capitalized right-of-use assets.

If the expected lease payments change, e.g. due to new estimates regarding contractual options or in cases involving index-linked payments, the liability is remeasured. The adjustment to reflect the new carrying amount is generally made without affecting income by way of a corresponding adjustment to the capitalized right-of-use asset.

The options for simplified application are applied to low-value leased assets and short-term leases with a

term of less than 12 months. The lease payments under these agreements are recognized as an expense in the income statement on a straight-line basis.

Borrowing costs: Borrowing costs directly incurred as part of the acquisition, construction or production of a qualifying asset are capitalized as part of the acquisition cost or cost of conversion of that asset. A qualifying asset is an asset for which the time period necessary to make it ready for its intended use or sale is longer than one year. Borrowing costs are capitalized up to the date the asset is ready for its intended use. The borrowing costs were calculated based on a rate of 1.5% (previous year: 1.5%) and adjusted on a country-specific basis, if necessary. All other borrowing costs are recognized as an expense in the period in which they are incurred.

Investments accounted for using the equity method: The carrying amounts of these companies are increased/reduced annually based on the pro rata share of net income, dividends and other changes in equity. These effects are recognized within the equity result. Should there be indications of a reduction in the value of an investment that is not only temporary, an impairment is recognized in other operating expenses.

Inventories are measured at acquisition cost or cost of conversion based on the average-value method. If the stock market/market price or the fair value of the sales products, which are based on the net realizable values, is lower, then the sales products are written down to this lower value. The net realizable value is the price that can be achieved in the ordinary course of business less the estimated costs of completion and distribution that will be incurred up until the time of sale.

In addition to direct costs, cost of conversion includes an appropriate allocation of production overhead costs based on normal utilization rates of the production plants concerned, provided that they are related to the production process. Company retirement provision, social facilities within the company and voluntary social benefits provided by the company are also included, as are allocations for general administrative costs, provided they relate to production. Borrowing costs are not included in cost of conversion.

Inventories can be written down if the prices for the sales products decline, or in cases of a high rate of days of sales in inventories (DSI). Write-downs on inventories are reversed if the reasons for them no longer apply.

➔ Taxes

In the Wintershall Dea Group, taxes incurred are reported from an economic perspective and are shown as liabilities to the parent company, BASF SE, whose taxable entity includes the German group companies up until 24hrs on April 30, 2019, on the basis of the allocation agreements.

Deferred taxes: Deferred taxes are recognized for temporary differences between the IFRS and tax balance sheets, as well as for tax loss carryforwards and unused tax credits. This also comprises temporary differences arising from business combinations, with the exception of goodwill. Deferred tax assets and liabilities are calculated using the country-specific tax rates applicable for the period in which the asset is realized or the liability settled. Tax rate changes enacted or substantively enacted on or before the balance sheet date are taken into consideration.

Deferred tax assets are offset against deferred tax liabilities provided they are related to the same tax authority and have the same maturities. Surpluses of deferred tax assets are only recognized provided that the tax benefits are likely to be realized. The valuation of deferred tax assets is based on the probability of a reversal of the valuation differences and the assessment of the ability to utilize tax loss carryforwards and unused tax credits. This depends on whether future taxable profits will arise during the period in which temporary differences are reversed and in which tax loss carryforwards and unused tax credits can be claimed. The valuation

of deferred tax assets is based on internal projections of the future earnings of the group company concerned.

Changes in deferred taxes in the balance sheet are recognized as deferred tax expense/income if the underlying transaction is not to be recognized directly in equity or in income and expenses recognized in equity. For those effects which have been recognized in equity, changes to deferred tax assets and tax liabilities are also recognized directly in equity.

➔ Financial instruments

Financial assets and financial liabilities are recognized in the consolidated balance sheet when Wintershall Dea becomes a party to a financial instrument. Financial assets are derecognized when Wintershall Dea no longer has a contractual right to the cash flows from the financial asset or when the financial asset is transferred together with all material risks and rewards of ownership. Financial liabilities are derecognized when the contractual obligations expire, are discharged or canceled. Regular-way purchases and sales of financial instruments are accounted for using the settlement date as a general rule.

The fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. If pricing on an active market is available, for example in the form of share prices, these are used as the basis for the measurement. Otherwise, the measurement is based on internal measurement models using current market parameters or external measurements, for example, from banks. These internal measurements predominantly use the net present value method and option pricing models.

The Wintershall Dea Group has been applying IFRS 9 since January 1, 2018. Except for financial assets measured at fair value through profit or loss, this requires the recognition of impairments for expected credit losses, independent of whether there any actual default events and specific valuation allowances if there is evidence of a permanent need for impairment. If this evidence no longer exists, the impairment is reversed in the statement of income up to the carrying amount of the asset had the default event not occurred. Valuation allowances are generally recognized in separate accounts.

The classification and measurement of financial assets are based, on the one hand, on what is known as the cash flow condition (exclusively cash flows from interest and principal repayments), i.e. the specific structure of the contractually agreed cash flows from an individual financial asset. On the other hand, they also depend on the business model based on which portfolios of financial assets are managed. Based on these two criteria, the Wintershall Dea Group uses the following measurement categories for financial assets:

– **Financial assets recognized at fair value through profit or loss** include all financial assets whose cash flows are not solely payments of principal and interest in accordance with the cash flow condition established in IFRS 9. Within the Wintershall Dea Group, derivatives are allocated to this measurement category, for example. The Wintershall Dea Group does not generally exercise the fair value option in IFRS 9, which permits the allocation of financial instruments not to be measured at fair value through profit or loss on the basis of the cash flow condition or the business model criterion to the above category under certain circumstances.

– **Financial assets measured at amortized cost** include all assets with contractual terms that give rise to cash flows on specific dates, provided that these cash flows are solely payments of principal and interest on the principal amount outstanding in accordance with the cash flow condition in IFRS 9, to the extent that the asset is held with the intention of collecting the expected contractual cash flows over its term. Within the Wintershall Dea Group, this measurement category includes trade receivables, for example, as well as receivables reported under "Miscellaneous receivables and other assets".

Initial measurement of these assets is generally at fair value, which usually corresponds to the transaction price at the time of acquisition. Subsequent measurement effects are recognized in income using the effective interest method.

Impairments are recognized for expected credit losses in both initial and subsequent measurement, even before the occurrence of any default event. If the counterparty is considered as having defaulted, a specific valuation allowance is generally recognized for the financial assets measured at amortized cost. In addition, a valuation allowance must be recognized when the contractual conditions that form the basis for the receivable are changed through renegotiation in such a way that the present value of the future cash flows decreases. Their extent of expected credit losses is determined, on the one hand, by the credit risk associated with a financial asset, but also by the change in its credit risk: if the credit risk of the financial asset has increased significantly since its initial recognition in the balance sheet, expected credit losses are generally recognized over the entire term of the asset. If, however, the credit risk has not increased significantly in the period mentioned, only the credit losses expected within the next twelve months are recognized as an impairment. By contrast, under the simplified approach for determining expected credit losses permitted by IFRS 9, impairments for receivables such as lease receivables and trade receivables always cover the lifetime expected credit losses of the receivable concerned.

Within the Wintershall Dea Group, the credit risk associated with a financial asset is assessed both on the basis of internal information and on the basis of external rating information relating to the counterparty concerned. The counterparty's credit risk is assumed to have increased significantly when its rating has been downgraded by a defined number of notches. The significance of the increase in the credit risk is not reviewed for trade receivables or lease receivables. Furthermore, it is generally assumed that the credit risk for a counterparty with a high credit rating will not have increased significantly.

Regional and, in certain circumstances, industry-specific factors and expectations are taken into account when assessing the need for a valuation allowance as part of the calculation of expected credit losses and specific valuation allowances. In addition, Wintershall uses internal and external ratings and the assessments of debt collection agencies and credit insurers, when available. Specific valuation allowances are also based on experience relating to customer solvency and customer-specific risks. Factors such as credit insurance, which covers a portion of receivables measured at amortized cost, are likewise considered when calculating valuation allowances. Bank guarantees and letters of credit are used to an immaterial extent. Expected credit losses and specific valuation allowances are only calculated for those receivables that are not covered by insurance or other collateral. The valuation allowances for receivables whose insurance includes a deductible are not recognized in excess of the amount of the deductible.

A decrease in valuation allowances due, for example, to a reduction in the credit risk of a counterparty or an objective event occurring after the valuation allowance is recorded in profit or loss. Reversals of valuation allowances may not exceed amortized cost, less any expected future credit losses.

- **Financial liabilities that are measured at amortized cost** generally include all financial liabilities, provided these do not represent derivatives. They are generally measured at fair value at the time of initial recognition, which usually corresponds to the value of the consideration received. Subsequent measurement is recognized in profit or loss at amortized cost using the effective interest method. Within the Wintershall Dea Group, liabilities to banks reported under financial liabilities, for example, are measured at amortized cost.
- **Financial liabilities recognized at fair value through profit or loss** contain derivative financial liabilities. These are likewise measured at the value of the consideration received as the fair value of the liability on the

date of initial recognition. The latter also represents the measurement basis for these liabilities in subsequent measurement. The option to subsequently measure financial liabilities at fair value is not exercised.

Derivative financial instruments can be embedded within other contracts, creating a hybrid financial instrument. If IFRS requires separation, the embedded derivative is accounted for separately from its host contract and measured at fair value. If IFRS 9 does not provide for separation, the hybrid instrument is accounted for at fair value in its entirety.

Financial guarantees of the Wintershall Dea Group are contracts that require compensation payments to be made to the guarantee holder if a debtor fails to make payment when due under the terms of a transaction entered into with the holder of the guarantee. Financial guarantees issued by the Wintershall Dea Group are measured at fair value upon initial recognition. In subsequent periods, these financial guarantees are carried at the higher of amortized cost or the best estimate of the present obligation as of the reporting date.

➔ Other comprehensive income

The expenses and income shown in other comprehensive income are divided into two categories: Items that will be recognized in the income statement in the future (known as "recycling") and items that will not be reclassified to the income statement in the future. The first category includes translation adjustments and changes in the fair value of derivatives held to hedge future cash flows and of net investments in foreign operations. Items in other comprehensive income that will not be reclassified to the income statement at a future date include effects from the remeasurement of defined benefit plans.

➔ Liabilities

Provisions for pensions and similar obligations: Provisions for pensions are calculated on an actuarial basis in accordance with the projected unit credit method using assumptions relating to the following valuation parameters, among others: future developments in salaries, pensions and inflation, staff turnover and the life expectancy of beneficiaries. Obligations are discounted based on the market yields on high-quality corporate fixed-rate bonds rated between "AA" to "AA+".

Actuarial expert opinions are used to calculate the amount of pension provisions.

Actuarial gains and losses from changes in estimates relating to the actuarial assumptions used to calculate defined benefit obligations, the difference between standardized and actual returns on plan assets, as well as the effects of the asset ceiling are recognized directly in equity as other comprehensive income.

Other provisions: Other provisions are set up when there is a present obligation as a result of a past event and when there is a probable outflow of resources whose amount can be reliably estimated. Provisions are recognized at the probable settlement value.

Provisions for German trade income tax, German corporate income tax and similar income taxes are calculated and recognized based on the expected taxable income of the consolidated companies less any prepayments that have been made. Other taxes to be assessed are considered accordingly.

Provisions are set up for certain environmental protection measures and risks if there is a present legal or constructive obligation arising from a past event, and the expected cash outflow can be estimated with sufficient reliability.

Provisions for the filling of wells and the removal of production facilities upon the termination of production (restoration obligations) are set up for the first time when the facility is commissioned at the present value of the future restoration costs. Discounting to the present value is based on the country-specific/currency-specific

market interest rate that applies on the balance sheet date in question. An asset of the same value is capitalized as part of the carrying amount of the plant concerned and together they are depreciated. Interest on the provision is accrued annually until the time of the planned restoration. The financing costs resulting from the accrued interest in subsequent periods are recognized under "Miscellaneous financial result".

Provisions are recognized for expected severance payments or similar personnel expenses, as well as for demolition or closure expenses related to restructuring measures that have been planned and publicly announced by management.

Provisions for long-service and anniversary bonuses are predominantly calculated based on actuarial principles. For contracts signed under phased-in early retirement programs, approved supplemental payments are accrued in installments until the end of the period in which the employee is released from his/her duties at the latest. Accounting and measurement follow the German Accounting Standards Committee's Implementation Guidance 1 (IFRS) dated December 2012.

Other provisions also cover risks resulting from legal disputes and proceedings, provided the criteria for recognizing a provision are fulfilled. In order to determine the amount of the provisions, the company takes into consideration the facts related to each case, the size of the claim, claims awarded in similar cases and independent expert advice, as well as assumptions regarding the probability of a successful claim and the range of possible claims. Actual costs can deviate from these estimates

➔ Other accounting policies

Business combinations: In business combinations, the acquired assets and liabilities are recognized at fair value on the date the acquirer effectively obtains control for the first time. The fair value of acquired assets and assumed liabilities at the date of acquisition, as well as the useful lives of the acquired assets, are determined on the basis of assumptions. Measurement is largely based on projected cash flows. Actual cash flows can deviate significantly from those. Valuations in the course of business combinations are based on existing information as of the acquisition date.

➔ Use of estimates and assumptions in preparing the consolidated financial statements

The carrying amount of assets, liabilities and provisions, contingent liabilities and other financial obligations reported in the consolidated financial statements depends on the use of estimates, assumptions and use of discretionary scope. Specific estimates or assumptions used in individual accounting policies are disclosed in the respective sections. They are based on the circumstances and estimates on the balance sheet date and thus affect the amounts of income and expenses shown for the fiscal years presented. These assumptions primarily relate to the determination of discounted cash flows in the context of impairment tests and purchase price allocations, the useful lives of property, plant and equipment and intangible assets, the carrying amount of shareholdings and the measurement of provisions for items such as pension benefits, warranties, price discounts, environmental protection or taxes. The calculation of provisions for restoration obligations (under mining law) essentially requires assumptions and estimates regarding maturities, exchange rates, costs to be taken into account and discount rates. The assumptions are reviewed on a regular basis. Although uncertainty is given appropriate consideration when calculating values, actual results can differ from these estimates.

The assumptions regarding the long-term development of oil and gas prices are significant for the impairment tests. This is particularly relevant for plant (oil and gas fields) and goodwill. The company's in-house forecasts are based on empirically sound analyses of global oil and gas supply and global oil and gas demand. Short-term estimates for periods of up to three years also take current price quotations or forward transactions into

account. Long-term estimates also include assumptions on inflation, production volumes and costs, as well as energy efficiency and substitution of energy sources. Oil and gas price estimates are regularly checked for plausibility on the basis of external sources and studies.

As far as 2019 is concerned, Wintershall Dea projects an average oil price of US$ 70/bbl (Brent) and a gas price of around US$ 6.0/MMBtu.

In line with global economic growth, demand for oil and gas will continue to rise. Growth in the future will, however, be less energy-intensive than in the past. Consequently, although we expect oil prices to continue to rise, we predict that they will develop more conservatively than in the previous year. The gas price scenario of the Wintershall Dea Group assumes that there will be excess capacities in gas liquefaction (LNG) over the next few years, meaning that European gas prices will be lower than in 2018 for several years to come. A significant increase is expected thereafter due to the further increase in demand for natural gas and the considerable need for investment. For the respective effects please refer to Notes 7, 10 and 13 to 15.

Impairment tests on assets are carried out whenever certain triggering events indicate potential impairment. External triggering events include, for example, changes in oil and gas prices and in the estimated reserves. Changes in production processes or physical damage to assets constitute internal indicators of impairment.

Impairment tests are based on a comparison of the amortized carrying amount and the recoverable amount of the assets. The recoverable amount is the higher of fair value less costs to sell and the value in use. As a rule, value in use is determined using the discounted cash flow method. The estimation of cash flows and the assumptions used consider all information available on the balance sheet date on the future development of the operating business. Actual future developments may vary from these estimates. Impairment testing relies upon the cash-generating unit's long-term earnings forecasts, which are based on macroeconomic trends. The forecasts for the market prices of oil and gas, as well as the weighted average cost of capital (WACC) based on the capital asset pricing model play an important role in impairment testing. Its components comprise a risk-free rate, the market risk premium and the spread for the credit risk.

Impairment losses are recognized if the recoverable amount is less than the carrying amount. The impairment relating to the asset (excl. goodwill) is recognized in the amount of the difference between the previous carrying amount and the recoverable amount.

The goodwill impairment test is based on cash-generating units. At Wintershall Dea, these correspond to the operating segments. If there is a need for a valuation allowance, the existing goodwill is, if necessary, completely written off as a first step. If there is further need for a valuation allowance, this would be in general allocated to the remaining assets of the cash-generating unit. Goodwill impairments are reported under "Other operating expenses".

2. Scope of consolidation

2.1 Changes in the scope of consolidation

In the short fiscal year 2019, a total of 18 companies (18 companies in 2018) were included in the consolidated financial statements. In the same period of 2018, two companies were included in the scope of consolidation for the first time.

Although Wintershall Dea does not hold the majority of the shares in ZAO Gazprom YRGM Trading, it is entitled to the company's results on the basis of the profit distribution agreements, meaning that the company is fully consolidated in the consolidated financial statements.

The list of companies included in the consolidated financial statements and the total shareholdings in accordance with section 313 (2) HGB is shown in the list of shareholdings.

Scope of consolidation	Europe	of which: Germany	Russia	South America
As of 1/1/2019	**14**	**8**	**2**	**2**
of which proportionately consolidated	-	-	1	-
First-time consolidations	-	-	-	-
of which proportionately consolidated	-	-	-	-
Deconsolidation	-	-	-	-
of which proportionately consolidated	-	-	-	-
As of 4/30/2019	**14**	**8**	**2**	**2**
of which proportionately consolidated	-	-	1	-

Overview of impact of changes to the scope of consolidation (excluding acquisitions and divestitures)

	1/1/2019 – 4/30/2019		2018	
	€ thou.	%	€ thou.	%
Revenue	**-**	**-**	**945**	**0.0**
Non-current assets	-	-	99,215	0.8
of which property, plant and equipment	-	-	64,990	1.0
Current assets	-	-	14,562	1.1
of which cash and cash equivalents	-	-	6,185	2.8
Assets	**-**	**-**	**113,777**	**0.8**
Equity	-	-	-13,457	0.4
Non-current liabilities	-	-	8,885	0.2
Current liabilities	-	-	6,125	0.1
Capital	**-**	**-**	**1,553**	**0.0**

2.2 Joint operations

A large part of the activities in the Exploration & Production business area are carried out in the context of joint operations which are not managed in separate companies. These are mainly activities in Germany, Norway and Argentina. These are generally accounted for as joint operations in accordance with IFRS 11.

The proportionately consolidated joint operation relates to AO Achimgaz, Novy Urengoy/Russia, which is operated jointly with Gazprom for the production of natural gas and condensate. Wintershall Dea holds a 50% interest in the company and controls the company jointly with Gazprom. The company sells its products exclusively to Gazprom, which ensures the company's ongoing financing. As a result, the company was classified as a joint operation within the meaning of IFRS 11.

2.3 Joint ventures and associated companies

➔ **Significant joint ventures accounted for using the equity method**

The main joint ventures accounted for using the equity method are W & G Infrastruktur Finanzierungs-GmbH, Kassel (50% interest) and Wintershall Noordzee B.V., Rijswijk/Netherlands (50% interest), both of which are operated with the partner Gazprom.

Financial information of W & G Infrastruktur Finanzierungs- GmbH, Kassel (Group)		
€ m	**4/30/2019**	**12/31/2018**
Balance sheet		

Non-current assets	1,703	1,553
Current assets	447	458
Assets	**2,150**	**2,011**
Equity	494	445
Non-current liabilities	1,400	1,393
thereof financial indebtedness	924	924
Current liabilities	256	173
thereof financial indebtedness	4	1
Capital	**2,150**	**2,011**
Statement of income		
Revenue	332	841
Depreciation and amortization	-30	-121
Interest expenses	-3	-10
Income taxes	-7	-14
Net income for the year	53	99
Carrying amount according to the equity method as of the beginning of the year	**630**	**657**
Proportional net income for the year	26	49
Total comprehensive income	**26**	**49**
Capital measures/withdrawals/changes in the scope of consolidation/other adjustments	-	-57
of which withdrawals (includes profit transfer)	-	-57
Other adjustments recognized in profit or loss	-10	-19
Carrying amount according to the equity method as of the end of the year	**647**	**630**

The figures also include the effects of the transfer of GASCADE Gastransport GmbH and NEL Gastransport GmbH to W & G Infrastruktur Finanzierungs-GmbH

Financial information of Wintershall Noordzee B.V. Rijswijk/Netherlands		
€ m	**4/30/2019**	**12/31/2018**
Balance sheet		
Non-current assets	591	1,082
Current assets	82	96
of which marketable securities, cash and cash equivalents	37	45
Assets	**673**	**1,178**
Equity	123	593
Non-current liabilities	470	528
thereof financial indebtedness	45	49
Current liabilities	80	57
Capital	**673**	**1,178**
Statement of income		
Revenue	49	197
Depreciation and amortization	-508	-154
Interest expenses	-	-1
Income taxes	-6	30
Net loss (income) for the year	-471	-14
Carrying amount according to the equity method as of the beginning of the year	**297**	**307**
Proportional net loss (income) for the year	-236	-7
Total comprehensive income	**-236**	**-7**
Capital measures/dividends/changes in the scope of consolidation/other adjustments	-	-3
of which dividends (includes profit transfer)	-	-3
Carrying amount according to the equity method as of the end of the year	**61**	**297**

➔ **Material associated companies accounted for using the equity method**

- OAO Severneftegazprom, Krasnoselkup/Russia (Wintershall Dea's share 25%, economic participation 35%)

Financial information of OAO Severneftegazprom, Krasnoselkup/Russia		
€ m	**4/30/2019**	**12/31/2018**
Balance sheet		
Non-current assets	857	743
Current assets	228	204
of which marketable securities, cash and cash equivalents	94	75
Assets	**1,085**	**947**
Equity	790	696
Non-current liabilities	178	170
Current liabilities	118	81
Capital	**1,085**	**947**
Statement of income		
Revenue	242	645
Depreciation and amortization	-25	-70
Interest income	2	6
Interest expenses	-2	-7
Income taxes	-10	-11
Net income for the year	31	45
Carrying amount according to the equity method as of the beginning of the year	**271**	**309**
Proportional net income for the year	10	13
Proportional change in other comprehensive income	29	-37
Total comprehensive income	**39**	**-24**
Capital measures/dividends/changes in the scope of consolidation/other adjustments	-	-14
of which dividends (includes profit transfer)	-	-14
Carrying amount according to the equity method as of the end of the year	**310**	**271**

- Nord Stream AG, Zug/Switzerland (Wintershall Dea's share 15.5%)

Financial information of Nord Stream AG, Zug/Switzerland (100%)		
€ m	**4/30/2019**	**12/31/2018**
Balance sheet		
Non-current assets	5,264	5,362
Current assets	1,128	801
of which marketable securities, cash and cash equivalents	544	226
Assets	**6,392**	**6,163**
Equity	2,658	2,471
Non-current liabilities	3,300	3,300
thereof financial indebtedness	3,272	2,979
Current liabilities	434	392
thereof financial indebtedness	379	379
Capital	**6,392**	**6,163**
Statement of income		
Revenue	359	1,074
Depreciation and amortization	-114	-295
Interest income	-	-
Interest expenses	-52	-170
Income taxes	-5	-12
Net income for the year	170	466
Carrying amount according to the equity method as of the beginning of the year	**398**	**366**
Proportional net income for the year	27	73
Proportional change in other comprehensive income	2	11
Total comprehensive income	**29**	**84**
Capital measures/dividends/changes in the scope of consolidation/ other adjustments	-	-52
of which dividends (includes profit transfer)	-	-52
Carrying amount according to the equity method as of the end of the year	**427**	**398**

- Wintershall AG, Kassel, in which Libyan exploration and production activities are carried out jointly with Gazprom Libyen Verwaltungs GmbH (Wintershall Dea's share 51%)

Financial information of Wintershall AG, Kassel (100%)		
€ m	**4/30/2019**	**12/31/2018**
Balance sheet		
Non-current assets	641	632
Current assets	220	231
of which marketable securities, cash and cash equivalents	9	1
Assets	**861**	**863**
Equity	190	190
Non-current liabilities	517	528
thereof financial indebtedness	4	-
Current liabilities	154	145
thereof financial indebtedness	13	-
Capital	**861**	**863**
Statement of income		
Revenue	54	154
Depreciation and amortization	-18	-44
Income taxes	2	45
Net income for the year	-	-
Carrying amount according to the equity method as of the beginning of the year	**97**	**97**
Proportional net income for the year	-	-
Total comprehensive income	**-**	**-**
Carrying amount according to the equity method as of the end of the year	**97**	**97**

- Wintershall Wolga Petroleum GmbH, Kassel (Wintershall Dea's share 100%)

Financial information of Wintershall Wolga Petroleum GmbH, Kassel (50% shareholder of Wolgodeminoil LLC)		
€ m	**4/30/2019**	**12/31/2018**
Balance sheet		
Non-current assets	13	13
Current assets	50	43
of which marketable securities, cash and cash equivalents	31	25
Assets	**64**	**56**
Equity	32	23
Non-current liabilities	3	3
Current liabilities	28	29
thereof financial indebtedness	15	15
Capital	**64**	**56**
Statement of income		
Revenue	27	76
General administrative expenses	-2	-7
Other interest and similar income	-	1
Income taxes	-2	-5
Net income for the year	6	16
Carrying amount according to the equity method as of the beginning of the year	**27**	**30**
Proportional net income for the year	6	18
Proportional change in other comprehensive income	3	-6
Total comprehensive income	**9**	**12**
Capital measures/dividends/changes in the scope of consolidation/other adjustments	-	-15
of which dividends (includes profit transfer)	-	-15
Carrying amount according to the equity method as of the end of the year	**36**	**27**

The joint stock company Achim Trading, Moscow/Russia (Wintershall Dea's share 18.01%, economic participation 25.01%, partner Gazprom), is used to market the production of blocks IV/V of the Achimov Formation. In the previous year, an investment carrying amount of €768 million was reported. It resulted from the fair value measurement following the exchange of assets with Gazprom as of September 30, 2015. An impairment loss of €234,266 thousand was recognized in the short fiscal year. The carrying amount of the investment as of April 30, 2019 was €534 million. Economic activity will not commence until the start of production of blocks IV/V, which is scheduled for 2020. As a result, no relevant financial information has to be presented for the short fiscal year 2019 in accordance with IFRS 12.

2.4 Acquisitions and divestitures

➔ Acquisitions

Ghasha Concessions United Arab Emirates

On November 25, 2018, Wintershall Dea United Arab Emirates GmbH (formerly: Wintershall Middle East GmbH) signed an accession agreement to the concession agreement with the Abu Dhabi National Oil Company (ADNOC) and the Supreme Petroleum Council of the United Arab Emirates to acquire a 10% stake in the Ghasha concession in the United Arab Emirates. This acquisition will allow the Wintershall Dea Group to further expand its activities in Abu Dhabi. The acquisition was classified as a joint arrangement accounted for by analogy to IFRS 11 joint operation . The purchase price paid in November 2018 of $151.2 million had not been allocated to the acquired assets and liabilities by the time the consolidated financial statements were prepared due to outstanding information regarding the composition of the acquired assets. At the time, there are no significant effects on the company's financial position and cash flows.

Wintershall DEA merger

BASF and Letterone completed the merger of their respective oil and gas businesses with effect from April 30/May 1, 2019. Following approval by the merger control and foreign investment authorities, as well as the mining authorities and the German Federal Network Agency, Letterone transferred all of its shares in DEA Deutsche Erdoel AG to Wintershall Holding GmbH and received new shares from the latter. The company was subsequently renamed and has been operating under the name Wintershall Dea GmbH ("Wintershall Dea"), with headquarters in Kassel and Hamburg, since May 16, 2019. In the medium term, BASF and Letterone are aiming for an initial public offering of Wintershall Dea.

BASF's share in Wintershall Dea's ordinary shares is 67% to begin with, with Letterone holding a stake of 33%. These shares reflect the value of the respective exploration and production activities of Wintershall and DEA. In order to reflect the value of Wintershall's gas transport business, BASF will receive additional preferential shares. These preference shares are to be converted into ordinary shares in Wintershall Dea no later than 36 months after the merger and in any event before the IPO. This will increase BASF's stake in Wintershall Dea to 72.7%.[1]

➔ Divestitures

In the short fiscal year 2019 Wintershall Dea sold its share in the Shuwaihat field to ADNOC owing to the termination of the Technical Evaluation Agreement (TEA).

[1] The purchase price allocation will be finalized in the second half of 2019.

3. List of shareholdings of the Wintershall Dea Group pursuant to section 313 (2) HGB

The list of companies included in the consolidated financial statements and the total shareholdings in accordance with section 313 (2) HGB is shown in the list of shareholdings below.

I. Companies fully and proportionately consolidated in the consolidated financial statements and included using the equity method

1. Fully consolidated subsidiaries

Company	Registered office	Share of capital (%)
Europe		
Wintershall Dea GmbH (formerly: Wintershall Holding GmbH)	Kassel	100.00
E & A Internationale Explorations- und Produktions-GmbH	Kassel	100.00
WIGA Transport Beteiligungs-GmbH & Co. KG	Kassel	50.02
W & G Transport Holding GmbH	Kassel	49.97
Untertage-Speicher-Gesellschaft mbH	Kassel	100.00
Wintershall Vermögensverwaltungsgesellschaft mbH	Kassel	100.00
Wintershall Dea United Arab Emitrates GmbH (formerly: Wintershall Middle East GmbH)	Kassel	100.00
OPAL Gastransport GmbH & Co. KG	Kassel	49.97
Wintershall Nederland Transport & Trading B.V.	Rijswijk, Netherlands	100.00
Wintershall Dea Schweiz AG (formerly: Wintershall Oil AG)	Zug, Switzerland	100.00
Wintershall Nederland B.V.	Rijswijk, Netherlands	100.00
Wintershall Petroleum (E&P) B.V.	Rijswijk, Netherlands	100.00
Wintershall Norge AS	Stavanger, Norway	100.00
Gullfaks AS	Stavanger, Norway	100.00
Russia		
ZAO Gazprom YRGM Trading	Krasnoselkup, Russian Federation	25.00 [1)]
South America		
Wintershall Energía S.A.	Buenos Aires, Argentina	100.00
Wintershall DEA do Brasil Exploração e Produção Ltda	Rio de Janeiro, Brazil	100.00

1) Fully consolidated in accordance with IFRS 10

2. Proportionately consolidated joint operations

Company	Registered office	Share of capital (%)
Russia		
AO Achimgaz	Novy Urengoy, Russian Federation	50.00

3. Joint ventures accounted for using the equity method

Company	Registered office	Share of capital (%)
Europe		
Wintershall Noordzee B.V.	Rijswijk, Netherlands	50.00
W & G Infrastruktur Finanzierungs-GmbH	Kassel	49.97

4. Associated companies accounted for using the equity method

Company	Registered office	Share of capital (%)
Europe		
Wintershall Wolga Petroleum GmbH (50% shareholder of Wolgodemi-noil LLC)	Kassel	100.00
NEL Gastransport GmbH	Kassel	49.97

Wintershall AG	Kassel	51.00
GASCADE Gastransport GmbH	Kassel	49.97
Nord Stream AG	Zug, Switzerland	15.50 [2]
Russia		
Limited Liability Company Achim Development	Novy Urengoy, Russian Federation	25.01
OAO Severneftegazprom	Krasnoselkup, Russian Federation	25.00 [3]
Joint Stock Company Achim Trading	Moscow, Russian Federation	18.01 [2]

2) Wintershall Dea exerts a significant influence over financial and corporate policy
3) Share of results totals 35% via an additional preference share

II. Investees not included due to minor significance

1. Subsidiaries not consolidated due to minor significance

Company	Registered office	Share of capital (%)
Europe		
Wintershall Libyen Oil & Gas GmbH	Kassel	100.00
Wintershall Exploration and Production International C.V.	Rijswijk, Netherlands	100.00
Wintershall Global Support B.V.	Rijswijk, Netherlands	100.00
Wintershall Russland GmbH	Kassel	100.00
Nordkaspische Explorations- und Produktions GmbH	Kassel	100.00
WIGA Verwaltungs-GmbH	Kassel	50.02
Wintershall Ventures GmbH	Kassel	100.00
OPAL Verwaltungs-GmbH	Kassel	49.97
AWIAG Limited	Birkirkara, Malta	100.00
South America		
Wintershall Dea do Brasil Serviços Ltda. (formerly: Wintershall do Brasil Servicos Ltda.)	Rio de Janeiro, Brazil	100.00
Wintershall BM-C-19 Ltda.	Rio de Janeiro, Brazil	100.00
Wintershall BM-ES-1 Ltda.	Rio de Janeiro, Brazil	100.00
Wintershall Chile Ltda.	Santiago de Chile, Chile	100.00

2. Joint venture not accounted for using the equity method due to minor significance

Company	Registered office	Share of capital (%)
Europe		
Erdgas Münster GmbH	Münster	28.76
Russia		
Limited Liability Company Joint Venture "Wolgodeminoil"	Volgograd, Russian Federation	50.00

Notes to the statement of income

4. Functional costs

Functional costs incurred by the operating functions are determined, based on the cost of sales method, on the basis of cost center accounting. In particular, functional costs include the personnel costs incurred by the final cost centers allocated, depreciation and amortization and the cost categories derived from cost and service allocations. Operating expenses that cannot be allocated to the functional costs are reported as other operating expenses

Cost of conversion

The cost of conversion includes all production and purchase costs of the company's own products, as well as merchandise, that has been sold in the period, particularly plant, energy and personnel costs.

Distribution costs

Distribution costs primarily include marketing and advertising costs, freight costs, packaging costs, distribution management costs as well as commission costs.

General administrative expenses

General administrative expenses primarily include the costs of the central units, the costs of managing business units and costs of general management and the Board of Directors.

Research and development costs

Research and development expenses include the costs resulting from research projects, as well as the necessary license fees for research activities.

5. Revenue

€ thou.	1/1/2019 - 4/30/2019	2018
Own products	763,953	2,435,868
Merchandise	426,684	1,440,713
Commission	86,878	243,538
Miscellaneous	253,662	587,084
Revenue	**1,531,177**	**4,707,203**

Other mainly includes services rendered.

6. Other operating income

€ thou.	1/1/2019 - 4/30/2019	2018
Gains from the disposal of non-current assets	21,617	30,486
Income from refunds, compensation and settlement payments	6,139	44,209
Income from the translation of transactions denominated in foreign currencies	4,298	5,710
Gains from commodity derivatives	3,988	-
Reversals of impairment losses on business-related receivables	3,077	-
Income from other non-typical transactions	2,614	11,835
Income from the adjustment and reversal of provisions recognized under other operating expenses.	1,680	7,398
Other income	4,974	18,799
Other operating income	**48,387**	**118,437**

Gains from the disposal of non-current assets (€21,617 thousand) resulted from the divestment of the Shuwaihat field and the compensation payment received in return.

Income from refunds, compensation and settlement payments were due mainly to compensation payments in Argentina (€6,104 thousand).

Income from the translation of transactions denominated in foreign currencies included income from the translation of companies for which the local currency differs from the functional currency.

Income from other non-typical transactions in the amount of €2,614 thousand (2018: €11,835 thousand) arose from the charging of internal services, from rental and lease agreements, as well as proceeds from the canteen area.

In the 2019 short fiscal year, in contrast to 2018, there were **reversals of impairment losses on non-current assets**. These amounted to €3,077 thousand (2018: €0 thou.).

Income from the reversal of provisions mainly related to provisions for tax audits and other tax provisions for previous years. Provisions are reversed or adjusted if circumstances on the balance sheet date indicate that they will no longer be used or will only be used in a reduced amount. In the previous year, the figure mainly included income from the reversal of provisions for the BOP program in the amount of €5,076 thousand.

Miscellaneous income includes, among other things, income from gains on the disposal of other assets – excluding financial investments – and other income.

7. Other operating expenses

€ thou.	1/1/2019 – 4/30/2019	2018
Amortization, depreciation and impairments of non-current assets	1,208,679	191,219
Expenses for allocations to provisions	180,309	-
Expenses for fees, charges, expenses and other services	20,147	18,693
Expenses from the addition of valuation allowances from business-related receivables	9,207	9,296
Expenses from foreign currency and hedging transactions	5,119	121,262
Cost of production for other non-typical transactions	2,483	10,395
Expenses for project costs not requiring capitalization	2,941	18,292
Losses from commodity derivatives	-	26,909
Other expenses	12,683	54,290
Other operating expenses	**1,441,481**	**450,356**

Amortization, depreciation and impairments of non-current assets mainly resulted from impairment losses in Germany and Norway relating to goodwill and property, plant and equipment, as well as on investments in the Netherlands and Russia.

The **expenses for allocations to provisions** relate exclusively to provisions for restructuring due to the planned reduction in personnel.

Expenses for fees, charges, expenses and other services arose primarily in Germany and amounted to €20,147 thousand.

As of April 30, 2019, **expenses from the addition of valuation allowances from business-related receivables** amounted to €9,207 thousand (€0 thousand) and mainly related to Argentina and Russia.

Expenses from foreign currency and hedging transactions are mainly attributable to losses from unrealized derivative transactions.

The cost of production for other non-typical transactions amounted to €2,483 thousand as of April 30, 2019.

Losses from commodity derivatives in 2018 resulted from pending gas purchase and supply agreements that were recognized 2018 for the first time in this reporting period. Income was recognized in the 2019 fiscal year.

Miscellaneous expenses included losses from other asset disposals (excluding financial investments) (€614 thousand; previous year: €1,983thousand), additions to/the reversal of write-downs on inventories (€986 thousand; previous year:): €9,048 thousand), the derecognition of inventories (€249 thousand; previous year: €370 thousand), structural measures, reorganization, closure costs (€43 thousand; previous year: €7,284 thousand), additions to BOP provisions (€1,359 thousand; previous year: €2 thousand), other tax expenses (€154 thousand; previous year: €255 thousand), integration costs as part of the business combination (€6,241 thousand, previous year): €14,940 thousand) and other expenses (€2,949 thousand; previous year: €20,408 thousand).

Expenses for leases are recognized in the income statement as follows:

€ thou.	1/1/2019 – 4/30/2019
Scheduled amortization on right-of-use assets (recognized in result from operating activities)	14,079
Interest expenses for lease liabilities (recognized in financial result)	1,098
Expenses for short-term leases (recognized in result from operating activities)	613
Expenses for leases relating to low-value assets (excluding short-term leases) (recognized in result from operating activities)	3
Total	**15,793**

8. Income from companies accounted for using the equity method

€ thou.	1/1/2019 - 4/30/2019	2018
Proportional net income for the year	70,200	147,264
of which joint ventures	27,371	42,270
of which associated companies	42,829	104,994
Other adjustments recognized in profit or loss	-9,633	-18,800
of which joint ventures	-9,633	-18,800
Income from companies accounted for using the equity method	**60,567**	**128,464**

Due to the short 2019 fiscal year, the **income from companies** accounted for using the equity method can only be compared with the previous year to a limited extent.

9. Financial result

€ thou.	1/1/2019 - 4/30/2019	2018
Income from participating interests	-	3,195
Income from profit transfer	-	480
Income from other participating interests	-	3,675
Cost of loss absorption	-	-415
Write-downs/losses on participating interests	-	-
Expenses from other participating interests	-	-415
Net investment income	**-**	**3,260**
Interest income from cash and cash equivalents	7,046	14,285
Interest income from loans	26,982	53,036
Interest income from securities	-	58
Miscellaneous interest income	2,446	4,491
Interest and dividend income	36,474	71,869
Interest expenses from financial liabilities	-5,328	-19,877
Miscellaneous interest expenses	-19,854	-47,867
Interest expenses	-25,182	-67,744
Net interest income	**11,292**	**4,125**
Gains from the disposal of/write-up of securities/loans	-	1,003
Capitalization of interest costs during construction	309	13,474
Net interest income from overfunded pension plans and similar obligations	230	628
Accrued interest on receivables	1,306	-
Other financial income	130,511	235,997
Miscellaneous financial income	132,356	251,102
Write-downs/losses from securities and loans	-30	-2,202
Accrued interest on other non-current provisions	-9,702	-25,317
Miscellaneous interest expenses from discounting	-506	-3,748
Net interest expenses from overfunded pension plans and similar obligations	-2,068	-6,285
Other financial expenses	-138,527	-267,125
Miscellaneous financial expenses	-150,833	-304,677
Miscellaneous financial result	**-18,477**	**-53,575**
Financial result	**-7,185**	**-46,190**

Interest income resulted primarily from loans in connection with the financing of the Nord Stream 2 project. Interest expenses are mainly attributable to the interest on liabilities from cash pooling.

The **other financial income** and other **financial expenses** mainly resulted from hedging transactions for loans executed in the fiscal year under review and dismantling obligations in Norwegian krone.

10. Income taxes

In Germany, a uniform corporate income tax rate of 15.0%, as well as a solidarity surcharge of 5.5% thereon, are levied on all distributed and retained earnings. In addition to corporate income tax, income generated in Germany is subject to a trade tax that varies depending on the municipality in which the company is represented. The weighted average trade tax rate in 2019 was 15.0 % (2018: 15.4 %). The 30% rate used to calculate deferred taxes for German group companies remained unchanged in 2019. The income of foreign Group companies are assessed using the tax rates applicable in their respective countries. These are also generally used to calculate deferred taxes to the extent that tax rate adjustments for the future have not yet been enacted.

➔ Tax expense

€ thou.	1/1/2019 - 4/30/2019	2018
Corporate income tax, solidarity surcharge and trade taxes (Germany)	228,425	507,692
Foreign income tax	412	65,878
Taxes for previous years	-49,643	3,175
Current income tax expense	179,194	576,745
from changes in temporary differences	-287,692	-39,615
from changes in tax loss carryforwards/unused tax credits	310	39,484
from changes in the tax rate	-	-34
Income taxes	-108,189	576,580
Other taxes, as well as sales and consumption taxes	5,500	21,527
Tax income (-) / tax expense	**-102,689**	**598,107**

The current tax expense for corporate income tax, solidarity surcharge and trade taxes (Germany) is lower due to the short fiscal year compared with the previous year.

The changes in **temporary differences** mainly result from deviations with regard to the tax carrying amounts of fixed assets and other provisions in Norway and Argentina.

Other taxes, as well as sales and consumption taxes included land tax and other comparable taxes.

Reconciliation to the effective tax expense and the tax rate

	1/1/2019 - 4/30/2019		2018	
	€ thou.	%	€ thou.	%
Earnings before taxes	**-959,047**		**1,247,399**	**-**
Expected corporate income tax based on German corporate income tax rate (15%)	-143,857	15.00	187,110	15.00
Solidarity surcharge	84	-0.01	999	0.08
Trade income tax	8,572	-0.89	17,392	1.39
Effect of different tax rates on income of foreign group companies	-336,502	35.09	280,113	22.46
Income tax subsidies on investments	-16,082	1.68	-71,897	-5.76
Tax-neutral translation effects	14,721	-1.53	-25,404	-2.04
Effects from hedging transactions	-5,153	0.54	149,436	11.98
Balance of tax-exempt income and non-tax-deductible expenses	419	-0.04	1,846	0.15
Net income from participating interests accounted for under the equity method	61,485	-6.41	-19,270	-1.54
Taxes for previous years	-49,643	5.18	3,175	0.25
Taxes abroad	78	-0.01	14,085	1.13
Tax rate changes	-	0.00	-34	0.00
Miscellaneous	357,690	-37.30	39,029	3.13
Effective income taxes/tax rate	**-108,189**	**11.28**	**576,580**	**46.22**

The Wintershall Dea Group's tax rate in 2019 was 11.28% (2018: 46.2%).

The impact of different tax rates increased due to improved earnings in countries with high tax rates, particularly Norway.

The income tax subsidies on investments result from additional depreciation on oil and gas production facilities in Norway and led to tax income.

Losses from hedging transactions result from the hedging of loan liabilities and provisions for restoration in Norwegian krone, which are subject to a reduced tax rate.

Miscellaneous include permanent differences resulting from impairments of fixed assets (€609,904

thousand) and contrary tax neutral translation effects (€306,372 thousand).

➔ Deferred taxes

Development 1/1 – 4/30/2019

€ thou.	As of Jan. 1, 2019 (net)	Effects recognized in income	Effects recognized in equity (OCI)	Recognized directly in equity	Miscellaneous	As of Apr. 30, 2019 (net)
Intangible assets	-131,439	2,073	-9,390	-	-1,633	-140,389
Property, plant and equipment	-1,859,808	176,009	-4,539	-	-32,580	-1,720,917
Financial investments	0	-	-	-	-	0
Inventories and receivables	55,377	9,612	-	473	-2	65,461
Pension provisions	49,350	1,324	7	10,210	-19	60,872
Miscellaneous provisions and liabilities	692,727	98,060	1,249	-487	8,691	800,237
Miscellaneous	765	605	-4	-	16	1,382
Tax losses carried forward	764	-298	0	-	-	466
Total	**-1,192,264**	**287,383**	**-12,677**	**10,196**	**-25,527**	**-932,889**

Development in 2018

€ thou.	As of Jan. 1, 2018 (net)	Effects recognized in income	Effects recognized in equity (OCI)	Recognized directly in equity	Miscellaneous	As of Dec. 31, 2018 (net)
Intangible assets	-168,286	15,634	21,227	-	-14	-131,439
Property, plant and equipment	-1,637,618	-128,386	-93,406	-	-398	-1,859,808
Inventories and receivables	69,868	-13,255	-1,522	-	286	55,377
Pension provisions	50,660	961	553	-2,821	-3	49,350
Miscellaneous provisions and liabilities	498,165	164,419	30,204	-	-61	692,727
Miscellaneous	434	242	32	-	57	765
Tax losses carried forward	44,606	-39,450	-4,392	-	-	764
Total	**-1,142,171**	**165**	**-47,304**	**-2,821**	**-133**	**-1,192,264**

Deferred taxes result from temporary differences between the values recognized in the tax balance sheets and the assets and liabilities accounted for in accordance with IFRS, as well as from tax loss carryforwards and unused tax credits.

Deferred tax income in the amount of €287,383 thousand was recognized in the income statement in 2019 (previous year: €165 thousand).

No deferred tax liabilities were recognized for temporary differences from retained profits of subsidiaries in the amount of €666,152 thousand for the short fiscal year 2019, as these profits are not subject to corresponding taxation when distributed, or are to be reinvested for an indefinite period.

➔ Tax loss carryforwards

The deferred tax assets result from domestic activities. In the fiscal year under review, there were tax loss carryforwards of €1,506 thousand (previous year: €2,543 thousand) in Germany, on which deferred taxes (€466 thousand; previous year €764 thousand) were recognized.

➔ Tax liabilities

Tax liabilities mainly comprise assessed income taxes and other taxes, as well as unassessed income taxes for the current short fiscal year. In short fiscal year 2019, tax liabilities amounted to €245,572 thousand (2018: €222,433 thousand).

11. Minority interests

Profit attributable to other shareholders

€ thou.	1/1/2019 – 4/30/2019	2018
Profit shares	**18,151**	**54,731**

The €36,580 thousand drop in profit shares is attributable to the short financial year, but, as in the previous year, they originate from revenues in the gas transportation business.

The following table shows information on each subsidiary of the Group with significant non-controlling interests after intercompany eliminations:

	1/1/2019 - 4/30/2019			2018		
€ thou.	**WIGA Transport Beteiligungs-GmbH**	**W&G Transp. Holding GmbH**	**OPAL Gastransport GmbH & Co. KG**	**WIGA Transport Beteiligungs-GmbH**	**W&G Transp. Holding GmbH**	**OPAL Gastransport GmbH & Co. KG**
Percentage of non-controlling interests	49.98%	49.98%	49.98%	49.98%	49.98%	49.98%
Non-current assets	53	1,566,416	110	55	1,544,570	127
Current assets	7,707	26,144	16,219	3,453	29,602	33,255
Non-current liabilities	-699,631	-102,368	-2,343	-699,463	-82,167	-2,285
Current liabilities	-344,529	-16,190	-13,036	-375,466	-6,664	-9,350
Net assets/liabilities	**-1,036,400**	**1,474,002**	**950**	**-1,071,421**	**1,485,341**	**21,747**
Net assets of the non controlling interests	-517,993	736,706	475	-535,496	742,373	10,869
Revenue	125	6,723	66,379	348	20,172	216,090
Profit	4,120	26,136	6,061	15,362	78,516	15,631
Miscellaneous income	-19	0	-47	4	-	16
Total comprehensive income	**4,101**	**26,136**	**6,014**	**15,366**	**78,516**	**15,647**
Profit attributable to non-controlling Profit	2,059	13,063	3,029	7,676	39,242	7,812
Other comprehensive income attributable to non-controlling interests	-9	0	-23	2	-	8

12. Personnel expenses and employees

➔ Personnel expenses

In the short fiscal year, the Wintershall Dea Group spent a total of €83,185 thousand on wages and salaries, social security contributions and expenses for retirement provision and other benefits (2018: €218,802 thousand).

Personnel expenses

€ thou.	1/1/2019 - 4/30/2019	2018
Wages and salaries	68,346	187,096
Social security contributions and expenses for retirement provision and other benefits	11,041	31,706
of which for retirement provision	6,541	23,579
of which for other social security contributions	4,501	8,127
Total	**79,387**	**218,802**

➔ Number of employees

As of April 30, 2019, the Group had 2,004 employees (December 31, 2018: 2,018 employees). The employees of joint operations are included in the number of employees in accordance with the corresponding share of the investment.

Total employment contracts headcount

	4/30/2019	12/31/2018
Headcount	**2,004**	**2,018**
of which trainees	52	57
of which employees on fixed-term contracts	160.8	167.5

Notes on statement of financial position

13. Intangible assets

Wintershall Dea's goodwill is allocated to seven globally managed operating segments.

Due to the short fiscal year, the annual impairment tests were performed in March and April 2019 on the basis of the operating segments. The recoverable amount was determined using the value in use. The plans approved by the company management and the corresponding cash flows were used for this purpose. The plans are based on experience gleaned in the past, current business results and the best possible management estimate of the future development of individual influencing factors. Oil and gas prices and the WACCs are the key input parameters for forecasting cash flows in the current financial plans. Market assumptions, such as economic trends and market growth, are included, taking into account external macroeconomic and industry-specific sources.

Further information on the oil and gas price scenario can be found in Note 1.4 Accounting policies.

The discounting of cash flows required for impairment testing is performed using the weighted cost of capital, which is determined using the capital asset pricing model. Its components are a risk-free interest rate, the market risk premium and an adjustment for credit risk (spread) determined on the basis of the relevant sector-specific peer group. The calculation takes into account both the capital structure and the beta factor for the peer group concerned. The valuation model uses a field-based approach. The observation period spans the planned license terms or production series of the oil and gas fields included. In addition, the weighted average cost of capital takes into account the relevant country risk; this results in a more precise calculation of the recoverable amount. Taking these parameters into account, the cost of capital varied in the 2019 short fiscal year in a range from 8.63% to 15.29% (2018: from 9.62% to 30.37%).

After determining the recoverable amount, it was found that deviations from the material assumptions that were deemed possible would not result in the carrying amounts of 4 business units exceeding their recoverable amounts. This does not apply to the goodwill of the Wintershall Norge business unit. The recoverable amount of this business unit is based on its value in use, which was calculated by discounting the future cash flows planned from the continued use of the business unit. The carrying amount of the business unit was higher than its estimated recoverable amount of €2,193 million, resulting in an impairment loss of €527 million being recognized in 2019 (2018: €0 thousand). The impairment loss was allocated in full to goodwill and was recognized under other expenses. A weighted cost of capital before taxes of 15.29% (2018: 27.51%) was used for the impairment test.

This does not apply to the goodwill of the Wintershall Holding as well as Wintershall Middle East business unit with regard to a possible change in the forecast oil and gas prices that was applied as a material assumption. The recoverable amount of Wintershall Holding exceeded the carrying amount by €248 million in the short fiscal year 2019. The recoverable amount would correspond to the carrying amount of the business unit if the oil and gas price forecast were approximately 14% lower. The recoverable amount of Wintershall Middle East exceeded the carrying amount by €56 million in the current year. The recoverable amount would correspond to the carrying amount of the business unit if the oil price forecast were approximately 5% lower. For the purposes of the impairment test, the current oil and gas price scenario was used, which forecasts an oil price of US$70/bbl (Brent) and a gas price of around US$6/mmBtu for 2019.

Due to the impairment loss recognized for the Wintershall Norge business unit, the recoverable amount was equal to the carrying amount. As a result, any unfavorable development in material assumptions would result

in further impairment.

Goodwill of the operating segments

€ thou.	4/30/2019	12/31/2018
Wintershall Holding	55,323	54,202
Wintershall Energia	120,473	118,032
Wintershall Middle East	5,544	10,198
Wintershall Petroleum (E&P)	10,289	10,080
Wintershall Norge	459,085	966,852
Achimgaz	237,063	232,260
Gazprom YRGM Trading	183,715	179,993
Total	**1,071,493**	**1,571,617**

Cost of capital

	4/30/2019	12/31/2018
Wintershall Holding	8.63%	9.62%
Wintershall Energia	13.96%	16.07%
Wintershall Middle East	13.50%	15.77%
Wintershall Petroleum (E&P)	11.19%	30.37%
Wintershall Norge	15.29%	27.51%
Achimgaz	13.50%	11.20%
Gazprom YRGM Trading	13.50%	11.20%

Development in intangible assets in the 2019 short fiscal year

€ thou.	Distribution and similar rights	Goodwill	Product rights, licenses and trademarks	Other rights and assets	Total
Cost					
Balance as of 1/1/2019	773,265	1,701,508	394,839	35,613	**2,905,225**
Additions	-	-	653	648	**1,301**
Disposals	-	-531,667	-	-	**-531,667**
Translation-related changes in value	80,373	34,229	2,649	23	**117,274**
Balance as of 4/30/2019	853,638	1,204,070	398,141	36,284	**2,492,133**
Amortization					
Balance as of 1/1/2019	-318,279	-129,891	-146,988	-26,510	**-621,668**
Additions	-11,573	-526,803	-3,576	-850	**-542,802**
Disposals	-	526,803	-	-	**526,803**
Translation-related changes in value	-33,425	-2,686	-1,097	-11	**-37,219**
Balance as of 4/30/2019	-363,277	-132,577	-151,661	-27,371	**-674,886**
Net carrying amount on Apr. 30, 2019	**490,361**	**1,071,493**	**246,480**	**8,913**	**1,817,247**

In addition to goodwill, **intangible assets** include acquired and internally generated intangible assets. They also include rights that are amortized using the unit-of-production method. As of April 30, 2019, their cumulative cost amounted to € 938,320 thousand, and cumulative amortization to €390,539 thousand; amortization in the short fiscal year 2019 amounted to €14,724 thousand.

The concessions for oil and gas production included in the **product rights, licenses and trademarks** category,

with a net carrying amount of €246,480 thousand in 2019, entitle the holder to carry out oil and gas exploration and production in certain areas. The rights are returned at the end of the term of a concession.

Additions to intangible assets amounted to €1,301 thousand as of April 30, 2019 (€653 thousand in product rights, licenses and trademarks, as well as €648 thousand in other rights and assets).

Translation-related changes in the value of the Russian rouble and the US dollar and the associated contrary effects increased intangible assets by €80,055 thousand. These resulted, in particular, from the appreciation of the Russian rouble and the US dollar against the euro

Development in intangible assets in 2018

€ thou.	Distribution and similar rights	Goodwill	Product rights, licenses and trademarks	Other rights and assets	**Total**
Cost					
Balance as of 1/1/2018	888,302	1,628,305	369,382	35,216	**2,921,205**
Additions	-	-	32,644	1,692	**34,336**
Disposals	-	-3,771	-3,195	-1,359	**-8,325**
Reclassifications	-	-	-12,298	9	**-12,289**
Translation-related changes in value	-115,037	76,974	8,306	55	**-29,702**
Balance as of 12/31/2018	773,265	1,701,508	394,839	35,613	**2,905,225**
Amortization					
Balance as of 1/1/2018	-329,322	-124,010	-135,849	-24,237	**-613,418**
Additions	-34,111	-	-8,738	-3,593	**-46,442**
Disposals	-	-	-	1,359	**1,359**
Translation-related changes in value	45,154	-5,881	-2,401	-39	**36,833**
Balance as of 12/31/2018	-318,279	-129,891	-146,988	-26,510	**-621,668**
Net carrying amount on Dec. 31, 2018	**454,986**	**1,571,617**	**247,851**	**9,103**	**2,283,557**

In addition to goodwill, **intangible assets** include acquired and internally generated intangible assets. They also include rights that are amortized using the unit-of-production method. As of December 31, 2018, their cumulative cost amounted to €857,295 thousand and cumulative amortization to €342,390 thousand; amortization in 2018 amounted to €41,421 thousand.

The concessions for oil and gas production included in the **product rights, licenses and trademarks** category, with a net carrying amount of €247,851 thousand in 2018, entitle the holder to carry out oil and gas exploration and production in certain areas. The rights are returned at the end of the term of a concession.

Additions to intangible assets in the amount of €34,336 thousand are mainly attributable to the acquisition of seven exploration licenses in Brazil, which are reported under product rights, licenses and trademarks.

Translation-related changes in the value of the Russian rouble and the US dollar and the associated contrary effects increased intangible assets by €7,131 thousand. These resulted, in particular, from the appreciation of the Russian rouble against the euro and the depreciation of the US dollar against the euro.

14. Property, plant and equipment

Development in property, plant and equipment in the 2019 short fiscal year

€ thou.	Right-of-use assets	Land and buildings	Technical equipment and machinery	Other equipment, operating and office equipment	Assets under construction	Total
Cost						
Balance as of 12/31/2018	0	148,543	12,080,718	84,806	954,306	**13,268,373**
IFRS 16 adjustments	113,521	-	-	-	-	**113,521**
Balance as of 1/1/2019	113,521	148,543	12,080,718	84,806	954,306	**13,381,894**
Additions	-	-4	147,417	835	133,566	**281,814**
Disposals	-	-8	-284	-282	-58,739	**-59,313**
Reclassifications	-	12	84,589	43	-84,646	**-2**
Translation-related changes in value	1,625	2,050	194,053	503	8,498	**206,729**
Balance as of 4/30/2019	115,146	150,593	12,506,493	85,905	952,985	**13,811,122**
Depreciation						
Balance as of 1/1/2019	-	-53,295	-6,547,368	-67,592	-92,106	**-6,760,361**
Additions	-14,079	-1,580	-501,961	-1,781	-	**-519,401**
Disposals	-	-	176	211	-	**387**
Reversal of impairment losses	-	2	48	-	-	**50**
Reclassifications	-	-	-	-	-	**0**
Translation-related changes in value	-90	-169	-79,343	252	-1,652	**-81,002**
Balance as of 4/30/2019	-14,169	-55,042	-7,128,448	-68,910	-93,758	**-7,360,327**
Net carrying amount on Apr. 30, 2019	**100,977**	**95,551**	**5,378,045**	**16,995**	**859,227**	**6,450,795**

Property, plant and equipment fell by €57,217 thousand year-on-year to €6,450,795 thousand as of April 30, 2019.

As of January 1, 2019, IFRS 16 "Leases" was applied for the first time, resulting in the recognition of **right-of-use assets** in the amount of €113,171 thousand.

Additions to property, plant and equipment from investment projects amounted to €281,814 thousand. Major investments related to the construction of oil and gas production facilities and wells in Europe, South America and the Middle East.

Technical equipment and machinery includes oil and gas deposits including associated wells, production facilities and other infrastructure, which are depreciated using the unit-of-production method.

Depreciation included impairment losses of €209,177 thousand. These relate to technical equipment and machinery and result, in particular, from updated operating assumptions for Germany and the Maria and Aasta Hansten fields in Norway. The recoverable amount corresponded to the value in use, and the weighted cost of capital before taxes was 8.63% for Germany and 15.29% for Norway.

Reclassifications mainly related to the assumption of exploration expenses and expansion projects relating to existing facilities in Norway, Argentina and Russia, with reclassification from assets under construction to technical equipment and machinery.

Development in property, plant and equipment in 2018

€ thou.	Land and buildings	Technical equipment and machinery	Other equipment, operating and office equipment	Assets under construction	Total
Cost					
Balance as of 1/1/2018	79,537	10,258,717	84,395	1,567,203	**11,989,852**
Additions	584	625,499	4,137	397,174	**1,027,394**
Changes in the scope of consolidation	71,982	-	-	-	**71,982**
Disposals	-3,500	-51,554	-3,956	-126	**-59,136**
Reclassifications	728	1,082,749	366	-1,071,554	**12,289**
Translation-related changes in value	-788	165,307	-136	61,609	**225,992**
Balance as of 12/31/2018	148,543	12,080,718	84,806	954,306	**13,268,373**
Depreciation					
Balance as of 1/1/2018	-47,132	-5,322,355	-65,542	-193,991	**-5,629,020**
Additions	-4,753	-1,022,300	-5,136	-1,483	**-1,033,672**
Changes in the scope of consolidation	-3,214	-	-	-	**-3,214**
Disposals	1,678	28,353	3,513	-	**33,544**
Reclassifications	-	-106,968	-	106,968	**0**
Translation-related changes in value	126	-124,098	-427	-3,600	**-127,999**
Balance as of 12/31/2018	-53,295	-6,547,368	-67,592	-92,106	**-6,760,361**
Net carrying amount on Dec. 31, 2018	**95,248**	**5,533,350**	**17,214**	**862,200**	**6,508,012**

Property, plant and equipment increased by €147,180 thousand to €6,508,012 thousand in 2018 compared to the previous year.

Additions to property, plant and equipment from investment projects amounted to €1,027,394 thousand in 2018. Major investments related to the construction of oil and gas production facilities and wells in Europe and South America. The **changes in the scope of consolidation** amounting to €71,982 thousand result from land and buildings of Gullfaks AS, which was consolidated for the first time in the 2018 fiscal year. Overall, these additions (€1,099,376 thousand) and currency effects (€97,993 thousand) were largely offset by scheduled depreciation and write-downs (€1,033,672 thousand).

Technical equipment and machinery includes oil and gas deposits including associated wells, production facilities and other infrastructure, which are depreciated using the unit-of-production method.

Depreciation in 2018 included impairment losses of €185,159 thousand. These relate to technical equipment and machinery and result, in particular, from updated operating assumptions for the Maria field in Norway. The recoverable amount corresponded to the value in use, and the weighted average cost of capital before taxes was 7.5%.

Reclassifications mainly related to the assumption of exploration expenses in Norway for Aasta Hansten, with reclassification from assets under construction to technical equipment and machinery.

15. Investments accounted for using the equity method and other financial investments

Investments accounted for using the equity method

€ thou.	1/1/2019 – 4/30/2019	2018
As of Jan. 1	2,566,397	2,556,542
Additions	-	55,408
Reclassifications	94,868	-2,155
Impairment losses	-470,466	-
Translation-related changes in value	-	-43,398
Net carrying amount as of Dec. 31	**2,190,799**	**2,566,397**

Investments accounted for using the equity method declined by €375,598 thousand as against December 31, 2018 (€2,556,397 thousand) to €2,190,799 thousand, mainly due to impairment losses on investments in Russia and the Netherlands.

Other financial investments

€ thou.	4/30/2019	12/31/2018
Other financial investments	1,883	1,883
Net carrying amount	**1,883**	**1,883**

There was no change in other financial investments as of April 30, 2019.

16. Inventories

Inventories

€ thou.	4/30/2019	12/31/2018
Raw materials, consumables and supplies	126,138	115,527
Work in process and finished goods, merchandise	16,829	21,061
Inventories	**142,967**	**136,588**

As against December 31, 2018, inventories increased by €6,379 thousand to a total of €142,967 thousand (previous year: €136,558 thousand). The increase is mainly attributable to material not yet installed as part of the development of new fields in Russia.

17. Receivables and other assets

Miscellaneous receivables and other assets

€ thou.	4/30/2019		12/31/2018	
	Non-current	Current	Non-current	Current
Loan and interest receivables	884,765	58,124	819,535	481
Dividends/profit transfer/entitlement to assumption of losses	-	628,787	-	41,243
Derivatives with a positive fair value	-	16.684	-	11,250
Consortium settlements	18,860	18,319	14,632	27,741
Operating receivables	49,799	218,363	60,530	104,135
Entitlements to tax rebates	-	25,272	-	15,976
Receivables from employees	-	1,109	-	1,135
Deferred income	1,489	47,077	1,477	47,251
Other financial receivables	-	4,884	-	5,157
Total	954,913	1,018,619	896,174	254,369
Miscellaneous receivables and other assets	**1,973,532**		**1,150,543**	

The increase in miscellaneous receivables and other assets is mainly due to receivables resulting from the assumption of losses vis-à-vis BASF SE and an increase in the loan granted by Wintershall Nederland Transport and Trading B.V., Rijswijk, Netherlands, to Nordstream 2 AG.

Valuation allowances for receivables in 2019

€ thou.	Balance as of 1/1/2019	IFRS 9 Restate-ment	Addition	Reclassifica-tion between stages	Reversal	Translation adjustment	As of 4/30/2019
Trade receiv-ables third party	**13,788**	**--**	**13,903**	**--**	**-8,096**	**-235**	**19,360**
of which							
Level 2	**3,751**	--	3,243	--	-3,889	-154	**2,951**
Level 3	**10,037**	-	10,660	--	-4,207	-81	**16,409**
Other receivables	**62,612**	**-**	**195**	**-**	**-**	**-**	**62,807**
of which							
Level 1	**1,835**	-	195	-	-	-	**2,030**
Level 2	**22**	-	-	-	-	-	**22**
Level 3	**60,755**	-	-	-	-	-	**60,755**
Total	**76,400**	**--**	**14,098**	**--**	**-8,096**	**-235**	**82,167**

Valuation allowances for receivables in 2018

€ thou.	Balance as of 1/1/2018	IFRS 9 Restatement	Addition	Reclassifica-tion between stages	Reversal	Translation adjustment	Balance as of 12/31/2018
Trade receiva-bles third par-ties	**15,789**	**1,108**	**6,911**	**-**	**-7,044**	**-3,663**	**13,101**
of which							
Level 2	1,207	676	6,439	4,594	-6,846	-3,006	**3,064**
Level 3	14,582	432	472	-4,594	-198	-657	**10,037**
Other receivables	**59,552**	**1,272**	**3,250**	**-**	**-1,462**	**-**	**62,612**
of which							
Level 1	-	1,126	720	**-**	-11	-	**1,835**
Level 2	138	8	1,327	**-**	-1,451	-	**22**
Level 3	59,414	138	1,203	**-**	-	-	**60,755**
Total	**75,341**	**2,380**	**10,161**	**--**	**-8,506**	**-3,663**	**75,713**

Changes recognized in income include specific valuation allowances. Changes not affecting income result from changes in the scope of consolidation, translation-related changes in value and the derecognition of impaired receivables.

In the current economic environment, there are no signs of any significant changes in the credit quality of receivables. In short fiscal year 2019, valuation allowances of €13,903 thousand were recognized on **trade receivables** and valuation allowances of €8,096 thousand were reversed. In the previous year, specific valuation allowances of €6,911 thousand were recognized on **trade receivables** and specific valuation allowances of €7,044 thousand were reversed.

Maturity analysis of loan and interest receivables

€ thou.	4/30/2019		12/31/2018	
	Gross value	Valuation allowance	Gross value	Valuation allowance
Not yet due	1,783,307	43,850	1,135,946	44,148
Past due less than 30 days	822	-	3,762	-
Past due between 30 and 89 days	-	-	-	-
Past due for more than 90 days	**-**	**-**	**18,262**	**18,262**
Total:	**1,784,129**	**43,850**	**1,157,970**	**62,410**

Maturity analysis of trade receivables

€ thou.	4/30/2019		12/31/2018	
	Gross value	Valuation allowance	Gross value	Valuation allowance
Not yet due	500,199	1,810	534,434	2,612
Past due less than 30 days	105,876	367	35,651	620
Past due between 30 and 89 days	20,721	175	11,284	218
Past due for more than 90 days	39,682	23,925	34,921	9,849
Total:	**666,478**	**26,277**	**616,290**	**13,299**

There were no material overdue and unimpaired miscellaneous receivables that were financial instruments as of April 30, 2019.

18. Capital, reserves and net retained profit

➔ Share capital

€ thou.	4/30/2019	12/31/2018
Share capital	105,000	105,000

The share capital of Wintershall Dea GmbH as of April 30, 2019 amounts to €105,000 thousand and is divided into 105,000,000 shares with a nominal value of €1.00 each.

➔ Capital reserve

€ thou.	4/30/2019	12/31/2018
Capital reserve	1,172,543	1,265,543

In the short fiscal year ending April 30, 2019, a resolution was passed on the taking of €93,000 thousand from free capital reserves. This was shown as liability towards BASF SE, Ludwigshafen am Rhein, and BASF Handels- und Exportgesellschaft mbH in accordance with the shares held.

➔ Retained earnings and net retained profit

€ thou.	4/30/2019	12/31/2018
Retained earnings and net retained profit	2,853,858	3,133,956

The IFRS net loss for the year amounts to €869,009 thousand (previous year - net income for the year: €616,088 thousand) and was carried forward to net retained profit. The HGB loss of Wintershall Dea GmbH for 2019 is offset by BASF Handels- und Exportgesellschaft mbH in the amount of €588,785 thousand.

➔ Other comprehensive income

€ thou.	4/30/2019	12/31/2018

Other comprehensive income	-1,012,571	-1,173,903

The increase in other comprehensive income of €161,332 thousand is mainly due to translation adjustments.

19. Non-controlling interests

		4/30/2019		12/31/2018	
		Capital share		Capital share	
Group company	**Co-shareholder**	%	€ thou.	%	€ thou.
WIGA Transport Beteiligungs-GmbH & Co. KG, W & G Transport Holding GmbH, OPAL Gastransport GmbH & Co. KG	Gazprom Germania GmbH, Berlin	49.97	154,339	49.97	136,260
Capital share in both W & G Transport Holding GmbH and OPAL Gastransport GmbH & Co. KG: 49.97%; share of voting rights and earnings: 50.02%					

20. Provisions for pensions and similar obligations

In addition to entitlements to benefits from the statutory pension scheme, most employees are entitled to benefits from defined contribution or defined benefit plans. Benefits generally depend on the length of service, remuneration or contributions of the eligible employees, and take into consideration the overall labor, tax and social security legislation in the individual countries. To limit the risks of changes in financial market conditions as well as demographic developments, employees have, for a number of years now, been almost exclusively offered defined contribution plans for future years of service.

The Group Pension Committee of BASF SE monitors the risks associated with all of the Group's pension plans, including those associated with the Wintershall Dea Group. In this context, it issues guidelines regarding the governance and risk management of pension plans, particularly with regard to the financing of pension commitments and the portfolio structure of existing plan assets. The organization, responsibilities, strategy, implementation and reporting requirements are documented for the units involved.

➔ Economic and legal environment of the plans

Particularly in Germany, there are pension obligations that are subject to state supervision or similar legal restrictions. By way of example, there are minimum funding requirements to cover pension obligations, which are based on actuarial assumptions that may differ from those pursuant to IAS 19. Furthermore, qualitative and quantitative restrictions apply to parts of the pension assets regarding investments in individual asset categories. This could result in annual fluctuations in employer contributions, financing requirements and the assumption of obligations in favor of the pension funds to comply with regulatory requirements.

The obligations and any pension assets in the existing pension plans are exposed to demographic, legal and economic risks. Economic risks arise primarily due to unforeseen developments on commodity and capital markets. They affect, for example, pension adjustments based on the level of inflation in Germany, as well as the impact of discount rates on the amount of the pension obligations. In previous years, measures taken to close plans with defined benefits for future service, especially benefits based on final pay promises, led to a reduction in risk with regard to future benefit levels.

The strategy pursued by the Wintershall Dea Group with regard to financing pension commitments is consistent with the country-specific supervisory and tax regulations.

Particularly in Germany, pension benefits have been granted for which the employer has a subsidiary liability.

Pension benefits in Germany also include minimum interest guarantees to a limited extent. If the pension fund cannot generate the income needed to provide the minimum guarantee, this has to be provided by the employer under the subsidiary liability. To the extent that recourse to the employer is unlikely based on the structure and execution of the pension benefits, as well as the financial position of the pension fund, these plans have been treated as defined contribution plans.

➔ Description of the defined benefit plans

The typical plan structure in the individual countries is described in the following. Different arrangements may exist, in particular due to the assumption of plans as part of acquisitions; these do not, however, have any material impact on the description of plans in the individual countries.

Germany

For Wintershall Dea GmbH and German group companies, a basic level of benefits is provided by BASF Pensionskasse VVaG, a legally independent plan which is financed by employer and employee contributions, as well as the return on plan assets. Some of the benefits financed via BASF Pensionskasse VVaG are subject to adjustments that must be borne by its member companies to the extent that these cannot be borne by BASF Pensionskasse VVaG due to the regulations imposed by the German supervisory authority. In 2004, the basic benefit plan was closed for newly hired employees at German Wintershall Dea companies and replaced by a defined contribution plan.

Occupational pension commitments that exceed the basic level of benefits are financed via pension provisions at the German group companies. The benefits are largely based on modular plans. Furthermore, employees are given the option of participating in various deferred compensation schemes.

Norway

In Norway, there is a statutory obligation to provide occupational pension benefits. For employees whose remaining length of service until retirement on January 1, 2016 was 15 years or less, a final salary commitment continues to apply after the closure of the plan. Employees whose remaining length of service as of this date was more than 15 years and employees who joined the company after this date are entitled to benefits under a defined contribution pension plan. Both pension plans are funded via Nordea Liv AS.

➔ Actuarial assumptions

The valuation of the pension obligations is based on the following key assumptions:

Assumptions used to determine the present value of the entitlements as of December 31, 2018/April 30, 2019

	Germany		Norway		Switzerland	
	4/30/2019	12/31/2018	4/30/2019	12/31/2018	4/30/2019	12/31/2018
Discount rate	1.40	2.00	2.60	2.60	0.90	0.9
Pension trend	1.50	1.50	0.80	0.80	-	-

Assumptions used to determine pension expenses in the fiscal year in question

	Germany		Norway		Switzerland	
	4/30/2019	12/31/2018	4/30/2019	12/31/2018	4/30/2019	12/31/2018
Discount rate	1.70	1.90	2.60	2.30	0.60	0.50
Pension trend	1.50	1.50	0.80	0.40	-	-

The assumptions used to determine the present value of the entitlements as of December 31, 2018/April 30, 2019 are used in the following fiscal year to determine the expenses for pension plans.

When it comes to the valuation of the material pension obligations of the Wintershall Dea Group, the discount rates are derived from the yields on corporate bonds in the relevant currency areas with an issue volume of more than 100 million units of the relevant currency with a minimum rating of "AA–" to "AA+" from at least one of the following three rating agencies: Fitch, Moody's, or Standard & Poor's.

The valuation of the defined benefit obligation is generally performed using the most recent actuarial mortality tables as of December 31 of the fiscal year in question/April 30, 2019 of the short fiscal year, which are derived from the BASF Group population in Germany and were last updated in 2015.

Actuarial mortality tables as of April 30, 2019

Germany	Heubeck Richttafeln 2005G (modified)
Norway	K2013
Switzerland	BVG 2015 generational

➔ Sensitivity analyses

A change in the material actuarial assumptions would have the following effects on the amount of the pension obligations:

Sensitivity of pension obligations as of December 31, 2018/April 30, 2019 (€ million)

	Increase by 0.5 percentage points		Decrease by 0.5 percentage points	
	4/30/2019	12/31/2018	4/30/2019	12/31/2018
Discount rate	-40	-36	44	40
Pension trend	28	25	-26	-23

An alternative valuation of the pension obligations was performed to determine how changes in the underlying assumptions influence the amount of the pension obligations. A linear extrapolation of these amounts based on alternative changes in the assumptions, as well as an addition of combined changes in the individual assumptions, is not possible.

➔ **Explanation of the amounts in the statement of income and the statement of financial position**

Composition of expenses for pension benefits (€ m)	**Jan. - Apr. 2019**	**2018**
Expenses for defined benefit plans	5	15
Expenses for defined contribution plans	1	7
Expenses for pension benefits (recognized in income from operating activities)	**6**	**22**
Net interest cost	2	6
Expenses for pension benefits (recognized in the financial result)	**2**	**6**

The interest for the net balance sheet amount at the beginning of the year is offset within the financial result. This corresponds to the difference between the interest cost on the present value of the entitlements and the standardized return on the pension assets. The expected contribution payments and benefits paid over the course of the fiscal year are taken into account when determining the interest. The net interest expense for the fiscal year in question is based on the actuarial interest rate and the present value of the entitlements at the beginning of the year.

Development of the present value of the pension obligations (€ million)	**Jan. - Apr. 2019**	**2018**
Present value of the entitlements as of January 1	481	489
Current service cost	5	15
Interest cost on present value of the entitlements	3	9
Pension payments	-7	-16
Employee contributions	1	1
Actuarial gains/losses		
for adjustments relating to financial assumptions	39	-14
for experience adjustments	-1	-2
Other changes	1	-
Currency effects	1	-1
Defined benefit obligation as of Dec. 31/Apr. 30	**523**	**481**

As of April 30, 2019, the weighted average duration of the obligations amounted to 16.1 years (December 31, 2018: 15.8 years).

Development of pension assets (€ million)	**Jan. - Apr. 2019**	**2018**
Pension assets as of January 1	174	176
Standardized return on pension assets	6	3
Deviation between actual and standardized return on assets	-1	-6
Employer contributions	1	5
Employee contributions	1	1
Pension payments	-2	-5
Other changes	-	-
Currency effects	1	-
Pension assets as of Dec. 31/Apr. 30	**180**	174

The standardized return on pension assets is calculated by multiplying the pension assets at the beginning of the year by the actuarial interest rate used to discount the existing obligations at the beginning of the year, taking into account pension and contribution payments to be made during the year.

The contribution payments expected for 2019 amount to around €2.7 million. A special allocation was made in 2017 to improve the funding level at BASF Pensionskasse VVaG. An amount of €6 million was attributable to the Wintershall Dea Group.

Development in net balance sheet amount (€ million)	Jan. - Apr. 2019	2018
Net balance sheet amount as of January 1	-307	-313
Current service cost	-5	-15
Interest cost on present value of the entitlements	-3	-9
Standardized return on pension assets	6	3
Deviation between actual and standardized return on assets	-1	-6
Actuarial gains/losses on the present value of the entitlements	-37	16
Benefits paid without using pension assets	5	11
Employer contributions	-	5
Other changes	-1	-
Currency effects	1	1
Net carrying amount as of Dec. 31/Apr. 1	**-343**	**-307**
thereof pension provisions	343	307

Regional allocation of defined benefit plans as of Dec. 31/Apr. 30 (€ million)	Pension obligations		Plan assets		Net balance sheet amount	
	4/30/2019	2018	4/30/2019	2018	4/30/2019	2018
Germany	479	440	151	147	-328	-293
Norway	42	39	27	25	-15	-14
Switzerland	2	2	2	2	-	-
Total	**523**	**481**	**180**	**174**	**-343**	**-307**

➔ **Explanations regarding plan assets**

The target portfolio structure of the pension plans is defined by using asset liability studies and is reviewed on a regular basis. The investments are aligned with the long-term development of the obligations, taking into consideration the risks associated with the specific asset classes and the regulatory provisions relating to the investment of pension assets. The existing portfolio structure is generally based on the target allocation. In addition, current market assessments are taken into consideration. In order to mitigate investment risks and maximize returns, a widely spread global portfolio of individual assets is held. Hedging measures are used for the existing currency risks depending on the return profile of the individual asset classes.

Structure of plan assets (%)	**4/30/2019**	**2018**
Equities	**25%** (100)	**20%** (100)
Debt instruments	**50%** (85)	**56%** (85)
thereof vis-à-vis sovereign debtors	**11%** (91)	**9%** (91)
thereof vis-à-vis other debtors	**39%** (84)	**47%** (84)
Real estate	**6%** (2)	**8%** (2)
Alternative investments	**15%** (-)	**14%** (-)
Cash and money market-related investments	**4%** (100)	**2%** (100)
Total	**100%** (70)	**100%** (70)

The amounts shown in brackets denote the part of the asset class for which there is an active market.

The debt instruments asset class comprises promissory notes and covered bonds (*Pfandbriefe*), as well as corporate and government bonds. Government bonds primarily relate to bonds from countries with the highest credit ratings, such as the United States, the United Kingdom, Germany and Switzerland. Corporate bonds mainly comprise bonds from creditworthy debtors, although a conscious decision has been made to also hold high-yield bonds to a limited extent. In connection with the ongoing monitoring of default risk based on a defined risk budget and on the continuous observation of the development of issuer creditworthiness, the pension asset allocation may be adjusted in the event of changes in the market assessment. Alternative investments largely comprise investments in private equity, absolute return funds and secured corporate loans.

A special allocation was made in 2017 to improve the funding level at BASF Pensionskasse VVaG. Beyond this, there were no material transactions between the legally independent pension funds and the companies in the Wintershall Dea Group in 2019 or 2018.

The funding of the plans was as follows:

Pension plan asset coverage as of Dec. 31, 2018/Apr. 30, 2019 (€ m)	4/30/2019		12/31/2018	
	Present value of entitlements	Pension assets	Present value of entitlements	Pension assets
Unfunded pension plans	**248**	-	**233**	-
Funded pension plans	**275**	180	**248**	174
Total	**523**	180	**481**	174

➔ **Defined contribution plans and government pensions**

The contributions to defined contribution plans recognized in income from operations amounted to €1 million in the 2019 short fiscal year and €7 million in 2018.

Contributions to government pension plans were made in the amount of €4 million in 2019 (January to April) and €24 million in 2018.

21. Other provisions

€ thou.	**4/30/2019**		**12/31/2018**	
Provisions for		**thereof current**		**thereof current**
Contaminated sites/risks affecting landfill sites	1	-	1	-
Emission rights	1,381	1,381	5,197	5,197
Employee obligations	221,067	71,097	34,935	23,824
Litigation risks, damage claims	1,052	852	1,172	972
Restoration obligations under mining law	1,658,114	24,795	1,510,877	23,603
Other restoration obligations	2,449	2,449	3,430	3,430
Other	108,384	58,456	126,619	20,187
Total	**1,992,448**	**159,030**	**1,682,231**	**77,213**

Restoration obligations pertain mainly to anticipated costs for filling wells and removing production equipment after production activities have come to an end. The utilization of the **restoration obligations under mining law** is based on the commercial exploitation of the field, which can amount to between one and thirty years. The increase in provisions is mainly due to the changes in discount rates as against the previous year. In order to determine the present value, discount rates of between 0.4% and 8.6% were applied in the short fiscal year (previous year: 1.6% to 8.6%).

The provisions for **contaminated sites/risks affecting landfill sites** cover expected charges associated with the removal of environmental impairments at existing production or storage facilities and similar measures.

Provisions for **employee obligations** include, in particular, obligations to pay long-service bonuses and anniversary bonuses, variable remuneration including the associated social security contributions and provisions due to restructuring measures/for early retirement and phased-in early retirement models.

The provisions for **litigation, damages, warranty and similar obligations** include expected costs from lawsuits in which Wintershall Dea is the defendant and obligations to pay damages from lawsuits against Wintershall Dea, as well as administrative fines.

The underlying cases are set out in Note 24

The **miscellaneous** category mainly includes overlift provisions.

The following table shows the development of other provisions by category. Other changes mainly include

changes in value due to translation and changes in the scope of consolidation.

Development of other provisions in short fiscal year 2019

€ thou.	Balance as of 1/1/2019	Addition	Utilization	Reversal	Compounding	Reclassification	Other changes	**Balance as of 4/30/2019**
Cost								
Contaminated sites/risks affecting landfill sites	**1**	0	0	0	0	0	0	**1**
Emission rights	**5,197**	237	2	4,051	0	0	0	**1,381**
Employee obligations	**34,935**	192,916	7,745	80	49	914	-78	**221,067**
Litigation risks, damage claims	**1,172**	0	0	0	0	0	-120	**1,052**
Restoration obligations under mining law	**1,510,877**	113,051	1,125	0	9,568	10	-25,733	**1,658,114**
Other restoration obligations	**3,430**	0	981	0	0	0	0	**2,449**
Other	**126,619**	33,331	2,612	50,376	88	11	-1,323	**108,384**
Total	**1,682,231**	**339,535**	**12,465**	**54,507**	**9,705**	**935**	**-27,014**	**1,992,448**

Development of other provisions in 2018

€ thou.	Balance as of 1/1/2018	Addition	Utilization	Reversal	Compounding	Reclassification	Other changes	**Balance as of 12/31/2018**
Cost								
Contaminated sites/risks affecting landfill sites	5	-	-4	-	-	-	-	**1**
Emission rights	1,041	5197	-738	-303	-	-	-	**5,197**
Employee obligations	31,510	24,508	-18,346	-9,534	131	7,167	-516	**34,935**
Litigation risks, damage claims	1,259	406	-	-	-	-	-493	**1,172**
Procurement risks and other pending losses	3,187	-	-2,387	-800	-	-	-	**0**
Restoration obligations under mining law	1,217,385	306,103	-19,835	-27,455	25,182	33	9,464	**1,510,877**
Other restoration obligations	6,121	-	-2,586	-105	-	-	-	**3,430**
Other	160,698	58,501	-85,559	-1,270	-	-6,426	675	**126,619**
Total	**1,421,206**	**394,715**	**-129,455**	**-39,467**	**25,313**	**774**	**9,145**	**1,682,231**

22. Liabilities

➔ Trade payables

Trade payables fell by €20,503 thousand to €327,508 thousand. The change is mainly due to a decrease of €68,663 thousand at Wintershall Dea and the compensating effect from the increase at Wintershall Energía S.A. (€22,701 thousand) and Wintershall Norge AS (€16.568 thousand).

➔ Liabilities to banks

In the run-up to the planned merger with DEA, the previous financing (BASF group financing) was replaced by external financing arrangement via a consortium of banks. Until the time of the financial reorganization, the Wintershall Dea Group was financed via the BASF group financing system, which led to an interest rate of 0.0% as a result of the negative key interest rates. The variable interest rates agreed with the banks are between 3.0% and 3.5% for USD loans, between 0.3% and 0.9% for EUR loans and 68.9% for ARS loans as of the balance sheet date of April 30, 2019.

Maturities of liabilities to banks

€ thou.	4/30/2019	2018
Following year 1	1,510,282	10,396
Following year 2	499,555	499,417
Following year 3	376,102	-
Following year 4	-	-
Following year 5	376,101	-
Total	**2,762,040**	**509,813**

Of the loan liabilities totaling €2,762,040 thousand (total nominal amount) existing as of the balance sheet date, the commission payments of €15,658 thousand paid when the loans were taken out has to be deducted; these will be reversed over the term of the loans with a corresponding impact on expenses.

Composition of liabilities to banks

€ thou.	4/30/2019	2018
USD	1,605,455	-
EUR	1,116,797	499,817
ARS	24,130	9,996
Total	**2,746,382**	**509,813**

As part of the refinancing of the Wintershall Dea Group, the following credit lines vis-à-vis the bank consortium were in place as of April 30, 2019.

Composition of unutilized credit lines

€ thou.	4/30/2019
USD	511,678
EUR	2,822,075
EUR	900,000
Total	**4,233,753**

On May 2, 2019, the firm credit lines totaling €3,333,753 thousand were drawn down. A credit facility of €900,000 thousand was agreed with the bank consortium which can utilized if necessary.

➔ **Miscellaneous liabilities**

Miscellaneous liabilities decreased during the reporting period, mainly as a result of the refinancing of the Wintershall Dea Group. The drop related primarily to overnight borrowings from BASF group companies and was offset by the new borrowings from banks referred to above.

€ thou.	4/30/2019		2018	
	Non-current	Current	Non-current	Current
Loan and interest liabilities	200,129	3,000,860	501,686	1,599,577
Derivatives with a negative fair value	-	34,717	-	86,715
Consortium settlements	10,629	142,993	7,389	160,807
Lease liabilities	73,519	29,316	-	-
Liabilities to BASF group companies	-	444,194	-	3,341,700
Employee liabilities	-	12,079	-	9,197
Deferred income	1,315	5,836	1,346	295
Miscellaneous	8,073	192,668	7,459	90,903
Total	293,665	3,862,663	517,880	5,289,194
Miscellaneous liabilities	**4,156,328**		**5,807,074**	

Lease liabilities are presented under other financial liabilities on the balance sheet. Some contracts contain

price adjustment clauses, as well as renewal, purchase and termination options. For the purpose of determining the lease term, such options are only included if an extension/non-termination can be assumed with reasonable assurance.

23. Other financial obligations

The following items are carried at nominal value:

€ thou.	4/30/2019	12/31/2018
Surety bonds	-	-
Other contingent liabilities	533	392
Total	**533**	**392**

Wintershall Dea GmbH provides unlimited guarantees as a prerequisite for the exploration and production of hydrocarbons in the Danish concession area by the joint venture Wintershall Noordzee B.V., Rijswijk/Netherlands, mainly in favor of the Danish government and the state-owned company Nordsøfonden. The possible 100 percent liability of Wintershall Dea GmbH under these guarantees is partly offset by 50 percent guarantees of the joint venture partner in favor of Wintershall Dea GmbH. The guarantees were not expected to be utilized as of April 30, 2019.

If the amount of the obligation is unlimited, the amount of the principal liability as of the balance sheet date is decisive. In cases involving joint and several liability, the full amount must be stated; in the case of pro rata liability, the corresponding share is to be stated. Other contingent liabilities relate to legal disputes.

➔ Obligations from purchase agreements

The obligations from purchase agreements resulted primarily from long-term purchase commitments for natural gas. The following firm purchase commitments existed as of April 30, 2019:

€ thou.	4/30/2019
2019	660,569
2020	1,122,050
2021	1,096,529
2022	1,049,133
2023	829,771
2024 and residual maturities extending beyond this	4,809
Total	**4,762,861**

Additional disclosures

24. Risks from legal disputes and proceedings

W & G Transport Holding GmbH, as the beneficiary of a planning permission decision, is a party to proceedings before the Higher Administrative Court (*Oberverwaltungsgericht*) of Bautzen concerning pending lawsuits in connection with an intersection between the OPAL route and a wind farm for electricity generation in southern Saxony. In the "worst case" scenario, if the action is upheld, a route would have to be built outside the wind farm, which would result in new planning and construction costs of around €10-15 million; this is not expected to interrupt operations. The proceedings are currently suspended because the parties are involved in a mediation process. Bilateral negotiations are currently underway between the operator of the pipeline, OPAL Gastransport GmbH & Co. KG, for the co-ownership association comprising W & G Transport Holding GmbH (80%) and Lubmin-Brandov Gastransport GmbH (20%) and the plaintiffs.

OPAL Gastransport GmbH & Co. KG ("OGT"), Gazprom Export, Gazprom and the German Federal Network Agency concluded a settlement agreement ("OPAL Settlement Agreement") in November 2016 with the approval of the European Commission ("Commission"), which amended the ancillary provisions of the exemption from regulation granted in 2009 for the OPAL pipeline. The main content of the change is the replacement of the restriction currently imposed on Gazprom, which caps the latter's access to the OPAL pipeline's release capacities at 50%, with auxiliary provisions which essentially provide for the allocation of 50% of release capacities in the context of the general capacity auctions.

Several legal remedies are being pursued against this agreement: PGNiG SA ("PGNiG") and PGNIG Supply & Trading GmbH ("PGNiG S&T") have filed an appeal against the OPAL Settlement Agreement with the Düsseldorf Higher Regional Court (OLG), as well as applications for interim relief. At the same time, PGNIG, PGNIG S&T, the Republic of Poland and Naftogaz of Ukraine have brought actions for annulment before the European Union's General Court (EGC) against the Commission's approval of the OPAL Settlement Agreement. PGNIG, PGNIG S&T and the Republic of Poland have also applied to the EGC for interim relief. In July 2017, the President of the EGC rejected the applications for interim relief submitted by PGNIG, PGNIG S&T and the Republic of Poland. In December 2017 and March 2018, respectively, the EGC also dismissed the actions for annulment brought by PGNIG S&T, Naftogaz of Ukraine and PGNIG against the Commission's approval of the OPAL Settlement Agreement as inadmissible. PGNIG S&T has lodged an appeal with the European Court of Justice against the EGC's decision on inadmissibility. On October 23, 2018, the EGC held oral proceedings in the action for annulment brought by the Republic of Poland against the European Commission's decision approving the settlement agreement, which is still pending. The decision on this action is still pending. A decision is expected in the course of 2019. OGT is currently unable to make a statement regarding the chances of success of the action for annulment brought by the Republic of Poland, as OGT is not involved in the proceedings. In October 2017, the Düsseldorf Higher Regional Court dismissed the applications filed by PGNIG and PGNIG S&T for interim relief as unfounded. At the same time, the Düsseldorf Higher Regional Court made it clear that, in its opinion, the effectiveness of the OPAL settlement agreement requires effective approval by the Commission, and said that, as a result, it would not make any decision on the complaints lodged by PGNiG and PGNiG S&T in the main case until the EGC had made a decision on the actions for annulment, ruling against the approval granted by the European Commission. If the action brought by the Republic of Poland is dismissed, the prospects of success of the appeals pending before the Düsseldorf Higher Regional Court are considered to be highly improbable.

In addition, Wintershall Dea GmbH and its participating interests are regularly involved as defendants or other

parties in judicial and arbitration proceedings, as well as official proceedings. On the basis of the knowledge available at present, these proceedings have no significant impact on Wintershall Dea's economic situation.

The amount of provisions for litigation, damages, warranty and similar obligations is explained in Note 21.

25. Additional disclosures on financial instruments

Detailed information on Wintershall Dea's financial risks and risk management can be found in the "Opportunity and Risk Report".

25.1 Financial risks

➔ **Currency risks**

Changes in exchange rates could lead to losses in the value of financial instruments and adverse changes in future cash flows. Foreign currency risks from financial instruments result from the translation at the closing rate of financial receivables, loans, cash and financial liabilities into the functional currency of the group company in question. Foreign exchange contracts are used to hedge foreign exchange risks from nonderivative financial instruments and planned transactions.

The foreign currency exposure corresponds to the net amount of the nominal volume of the nonderivative and the derivative financial instruments that are exposed to currency risks. In addition, planned purchase and sales transactions for the subsequent year were included in the reporting period if they fell under the currency risk management system. Long and short positions in the same currency are offset against each other.

The sensitivity analysis is conducted by simulating a 10% appreciation of the functional currency against the other currencies. The effect on the Wintershall Dea Group's earnings before income taxes would have been €-118,045 thousand as of April 30, 2019, as against €-85,033 thousand as of December 31, 2018. The currency exposure as of April 30, 2019 came to €1,298,790 thousand as against €934,258 thousand as of December 31, 2018. Compared with the previous period, both the currency exposure and the earnings sensitivity were higher due to the full hedging of our NOK loan and restoration obligations using foreign currency forward contracts with matching maturities.

Exposure and sensitivity by currency

€ thou.	April 30, 2019 Exposure	April 30, 2019 Sensitivity	12/31/2018 Exposure	12/31/2018 Sensitivity
RUB	485,280	-44,116	200,924	-18,266
ARS	-22,583	2,258	-86,636	7,876
USD	459,578	-41,781	488,328	-44,528
EUR	1,561,395	-141,924	848,231	-77,091
GBP	-84,071	7,446	349,368	-31,741
NOK	-1,100,809	100,072	-865,957	78,717
Total	**1,298,790**	**-118,045**	**934,258**	**-85,033**

In order to hedge against currency risks, linear products with symmetrical sensitivity were used in particular. The options used involve a unilateral risk, as only put options are used.

➔ Interest rate risks

Interest rate risks arise due to potential changes in prevailing market interest rates, which can lead to changes in the fair value of fixed-rate instruments and in interest payment fluctuations for variable-rate instruments. These risks are relevant to Wintershall's financing activities but are not of material significance for Wintershall's operating activities.

The variable interest rate risk position amounted to €-2,820,506 thousand as of April 30, 2019. An increase in all relevant interest rates by one percentage point would result in a €5,353 thousand drop in earnings before income taxes.

Loan exposure and interest rate sensitivity

€ thou.	April 30, 2019 Exposure	April 30, 2019 Sensitivity	12/31/2018 Exposure	12/31/2018 Sensitivity
Loans	-2,820,506	-5,353	-4,857,793	-36,213
Total	**-2,820,506**	**-5,353**	**-4,857,793**	**-36,213**

➔ Commodity price risks

Commodity price risks arise in the ordinary course of business for contracted gas purchase and supply agreements. Wintershall Dea counters the specific price risks associated with these trading transactions, which result from the valuation of the gas agreements concluded in the event of an adverse change in market prices, by imposing and constantly monitoring limits on the type and scope of the transactions concluded. Any resulting adverse changes in market prices could have a negative impact on Wintershall Dea's earnings and equity.

Wintershall Dea carries out value-at-risk analyses for the existing commodity derivatives. Using the value-at-risk analysis, we continually quantify market risk and forecast the maximum possible loss within a given confidence interval over a defined period. The value-at-risk calculation is based on a confidence interval of 95% and a holding period of one day. Wintershall Dea uses the exponentially weighted variance-covariance approach. Wintershall Dea uses value at risk in conjunction with other risk management tools. Besides value at risk, BASF sets volume-based limits, as well as exposure and stop-loss limits.

€ thou.	Exposure	Value-at-risk
Natural gas	-4,793	591

The exposure corresponds to the net amount of all long and short positions in the commodity category in question.

➔ **Default or credit risks**

Default or credit risks arise when contractual partners do not fulfill their obligations. Wintershall Dea regularly analyzes the creditworthiness of all major debtors and grants credit limits on the basis of this analysis. Due to the global activities and diversified customer structure of the Wintershall Dea Group, there is no significant concentration of default risk. The carrying amount of all receivables, loans and interest-bearing securities, plus the nominal value of the other financial obligations subject to a default risk, represents the maximum default risk for Wintershall Dea.

➔ **Liquidity risks**

We promptly recognize any risks from cash flow fluctuations as part of our liquidity planning and ongoing earnings monitoring.

25.2 Maturity analysis

The interest and principal payments as well as other payments for derivative financial instruments are relevant for the presentation of the maturities of the contractual cash flows from financial liabilities. Future cash flows are not discounted here.

Derivatives are included based on their net cash flows, provided they have negative fair values and therefore represent a liability. Commodity derivatives that are generally based on future physical delivery and therefore do not result in an outflow of cash are not included. Derivatives with positive fair values are assets and are therefore not taken into account.

Trade payables are essentially non-interest-bearing and due within one year. As a result, the carrying amount of trade payables corresponds to the sum of future cash flows.

Maturities of contractual cash flows from financial liabilities as of April 30, 2019

€ thou.	Liabilities to banks	Derivative liabilities	Other liabilities	Total
2019	1,510,282	365	3,621,241	**5,131,888**
2020	499,555	-	29,085	**528,640**
2021	-	-	25,420	**25,420**
2022	376,102	-	17,049	**393,151**
2023	-	-	590	**590**
2024	376,101	-	1,798	**377,899**
2025 and beyond		-	-	**0**
Total	**2,762,040**	**365**	**3,695,183**	**6,457,588**

Maturities of contractual cash flows from financial liabilities as of December 31, 2018

€ thou.	Liabilities to banks	Derivative liabilities	Other liabilities	Total
2019	10,426	50,134	5,666,190	**5,726,750**
2020	499,587	-	303,983	**803,570**
2021	-	-	1,837	**1,837**
2022	-	-	1,552	**1,552**
2023	-	-	1,029	**1,029**
2024 and beyond	-	-	547	**547**
Total	**510,013**	**50,134**	**5,975,138**	**6,535,285**

25.3 Classes and categories of financial instruments

For trade receivables, miscellaneous receivables and other assets, loans, cash and cash equivalents, as well as trade payables and other liabilities, the carrying amount approximates the fair value. The balance sheet item "Other financial investments" includes investments not listed on an active market whose fair value cannot be reliably determined and which are therefore measured at cost.

Carrying amounts and fair values of financial instruments as of April 30, 2019

€ thou.	Carrying amounts	Total carrying amounts within the scope of IFRS 7	Measurement categories in accordance with IFRS 9[2]	Fair value	of which fair value level 1[3]	of which fair value level 2[4]	of which fair value level 3[5]
Participating interests	1,883	1,883	FVTPL				
Trade receivables	551,412	551,412	AC	551,412			
Derivatives – no hedge accounting	16,684	16,684	FVTPL	16,684		16,684	
of which forward foreign exchange transactions	5,253	5,253		5,253		5,253	
of which forward transactions on commodities	11,431	11,431		11,431		11,431	
Loan and interest receivables	942,889	942,889	AC	942,889			
Miscellaneous receivables and other assets[6]	1,009,077	910,712	AC/FVTPL	910,712			
Cash and cash equivalents	889,210	889,210		889,210	889,210		
Total assets	**3,411,155**						
Liabilities to banks	2,746,382	2,746,382	AC	2,746,382			
Trade payables	327,508	327,508	AC	327,508			
Derivatives – no hedge accounting	34,717	34,717	FVTPL	34,717		34,717	
of which forward foreign exchange transactions	365	365		365		365	
of which forward transactions on commodities	34,352	34,352		34,352		34,352	
Loan and interest liabilities to third parties	3,200,989	3,200,989	AC	3,200,989			
Overnight deposit liabilities, affiliated companies	444,194	444,194	AC	444,194			
Miscellaneous liabilities	476,428	362,006	AC	362,006			
Total liabilities	**7,230,218**						

[2]AC: amortized cost; FVTPL: fair value through profit or loss;
a detailed description of the categories can be found in Note 1.3 on page 12 onwards.

[3] The fair value was determined on the basis of listed unadjusted prices on active markets.

[4] The fair value was determined based on parameters for which directly or indirectly quoted prices on active markets were available.

[5] The fair value was determined based on parameters for which there was no observable market data.

[6] Excluding the derivatives shown separately. If other receivables are measured at fair value through profit or loss, their measurement is generally based on parameters observable on the market. These are adjusted to reflect the valuation-related properties of the individual assets at fair value.

Carrying amounts and fair values of financial instruments as of December 31, 2018

€ thou.	Carrying amounts	Total carrying amounts within the scope of IFRS 7	Measurement categories in accordance with IFRS 9[7]	Fair value	of which fair value level 1[8]	of which fair value level 2[9]	of which fair value level 3[10]
Participating interests	1,883	1,883	FVTPL				
Trade receivables	669,783	669,783	AC	669,783			
Derivatives – no hedge accounting	11,250	11,250	FVTPL	11,250		11,250	
of which forward foreign exchange transactions	1,577	1,577		1,577		1,577	
of which forward transactions on commodities	9,673	9,673		9,673		9,673	
Loan and interest receivables	820,016	820,016	AC	820,016			
Miscellaneous receivables and other assets[11]	319,267	248,284	AC/FVTPL	248,284			
Cash and cash equivalents	218,958	218,958	AC	218,958	218,958		
Total assets	**2,052,407**						
Liabilities to banks	509,813	509,813	AC	509,813			
Trade payables	348,011	348,011	AC	348,011			
Derivatives – no hedge accounting	86,715	86,715	FVTPL	86,715		86,715	
of which forward foreign exchange transactions	50,133	50,133		50,133		50,133	
of which forward transactions on commodities	36,582	36,582		36,582		36,582	
Loan and interest liabilities to third parties	2,101,263	2,101,263	AC	2,101,263			
Overnight deposit liabilities, affiliated companies	3,341,700	3,341,700	AC	3,341,700			
Miscellaneous liabilities	277,396	254,864	AC	254,864			
Total liabilities	**6,751,613**						

Offsetting of financial assets and financial liabilities as of April 30, 2019

€ thou.	Offset amounts			Amounts that cannot be offset		
	Gross amount	Amount offset	Net amount	Due to global netting agreements	Relating to financial collateral	Potential net amount
Derivatives with a positive fair value	37,023	-20,339	16,684	-5,253	-	11,431
Derivatives with a negative fair value	55,056	-20,339	34,717	.5,253	-	29,464

Offsetting of financial assets and financial liabilities as of Monday, December 31, 2018

€ thou.	Offset amounts			Amounts that cannot be offset		
	Gross amount	Amount offset	Net amount	Due to global netting agreements	Relating to financial collateral	Potential net amount
Derivatives with a positive fair value	24,615	-13,365	11,250	-1,577	-	9,673
Derivatives with a negative fair value	100,080	-13,365	86,715	-1,577	-	85,138

[7]AC: amortized cost; FVTPL: fair value through profit or loss;
a detailed description of the categories can be found in Note 1.3 on page 12 onwards.

[8] The fair value was determined on the basis of listed unadjusted prices on active markets.

[9] The fair value was determined based on parameters for which directly or indirectly quoted prices on active markets were available.

[10] The fair value was determined based on parameters for which there was no observable market data.

[11] Excluding the derivatives shown separately. If other receivables are measured at fair value through profit or loss, their measurement is generally based on parameters observable on the market. These are adjusted to reflect the valuation-related properties of the individual assets at fair value.

The table "Offsetting of financial assets and financial liabilities" shows the extent to which financial assets and financial liabilities were offset in the balance sheet, as well as potential effects from the offsetting of instruments subject to a legally enforceable global netting agreement (primarily in the form of EFET agreements for gas purchase and supply agreements that have been concluded) or a similar agreement.

Net gains and losses from financial instruments comprise the results of valuations, premium and discount amortization, the recognition and reversal of impairments, results from the translation of foreign currencies as well as interest, dividends and all other effects on earnings resulting from financial instruments. The line item "Financial instruments measured at fair value through profit or loss" only contains gains and losses from instruments that are not designated as hedging instruments in accordance with IFRS 9.

Net gains and net losses from financial instruments

€ m	4/30/2019	2018
Receivables and loans	-18	35
thereof interest	37	76
Available-for-sale financial assets	-	3
thereof interest	-	-
Financial liabilities measured at amortized cost	-98	-100
thereof interest	-32	-33
Financial instruments measured at fair value through profit or loss	4	-73

25.4 Derivative instruments and hedge accounting

The use of derivative instruments

Wintershall Dea is exposed to currency, interest rate and commodity price risks during the normal course of business. These risks are hedged using derivative instruments as necessary in accordance with a centrally defined strategy. Hedging is only employed for existing hedged items from the product business, cash investments, restoration obligations and financing, as well as for planned capital measures. The risks associated with the hedged items and the derivatives are constantly monitored. Where derivatives have a positive market value, Wintershall Dea is exposed to credit risks from derivative transactions in the event of nonperformance of the other party. To minimize the default risk on derivatives with positive market values, transactions are exclusively conducted with creditworthy banks and partners and are subject to predefined credit limits.

The contracting and execution of derivative financial instruments for hedging purposes are conducted according to internal guidelines, and are subject to strict control mechanisms.

The fair values of derivative financial instruments are calculated using valuation models that use input parameters observable on the market.

Fair value of derivative instruments

€ thou.	4/30/2019	2018
Foreign currency derivatives	4,888	-48,556
Commodity derivatives	-22,921	-26,909
Total	**-18,033**	**-75,465**

Other explanatory information

26. Cash flow statement

The cash flow from operating activities included the following payments:

€ thou.	4/30/2019	2018
Income tax payments	**206,262**	**403,209**
Interest payments	**16,194**	**48,726**
Dividends received	**-**	**70,277**

Interest payments included €12,382 thousand (2018: €20,167 thousand) in interest received and €28,576 thousand (2018: €68,893 thousand) in interest paid.

In the cash flow statement, cash outflows for leases amounting to €12,599 thousand were reported. Amounts recognized in the cash flow statement include interest and principal payments for lease liabilities recognized in the balance sheet, as well as payments for unrecognized short-term leases and leases relating to low-value assets. The repayment portion of the lease liabilities is reported under cash flow from financing activities and the interest portion under cash flow from operating activities.

Reconciliation in accordance with IAS 7:

			Noncash-effective				
€ thou.	**12/31/2018**	**Cash-effective**	Foreign exchange effects	Change in scope of consolidation	Other Effects	Change in fair value	**4/30/2019**
Financial liabilities	**509,813**	2,250,589	-	-	-14,020	**-**	**2,746,382**
Loan liabilities	**1,757,947**	1,410,600	32,183	-	-	**-**	**3,200,730**
Miscellaneous financing-related liabilities	**3,692,441**	-3,150,244	-2,314	-	7,207	**-**	**547,124**
Lease liabilities	**0**	-12,599	815	-	114,619	**-**	**102,835**
Financial and similar liabilities	**5,960,201**	**498,346**	**30,684**	**0**	**107,806**	**0**	**6,597,071**
Assets/liabilities from hedging transactions	-45,779	43,170	-	-	-	6,100	3,491
Total	**5,914,422**	**455,176**	**30,684**	**0**	**107,806**	**-6,100**	**6,593,580**

The reconciliation shows changes in financial liabilities whose payments and disbursements are shown in the cash flow statement under cash flow from financing activities.

The miscellaneous financial liabilities mainly comprise liabilities from accounts used for cash pooling in the consolidated financial statements of BASF companies. They are reported under other liabilities under the balance sheet item miscellaneous liabilities, which represent financial instruments.

The assets/liabilities from hedging transactions are components of the balance sheet items derivatives with positive/negative market values and only comprise transactions that hedge risks resulting from financial liabilities and financial liabilities by means of micro hedges.

The hedging transactions described here are economic hedging transactions.

27. Capital structure management

The aim of capital structure management is to maintain the financial flexibility needed to further develop the business portfolio and take advantage of strategic opportunities. The objectives of the company's financing policy are to ensure solvency, limit financial risks and optimize the cost of capital.

The equity of the Wintershall Dea Group as reported in the balance sheet amounted to €3,273,169 thousand as of April 30, 2019 (December 31, 2018: €3,466,856 thousand); the equity ratio was 22.9% on April 30, 2019 (December 31, 2018: 25.37%).

In the past, the Wintershall Dea Group preferred to borrow capital through BASF in the form of group loans and overnight deposits. The latter was realized via cash pooling at BASF SE. On March 1, 2019, Wintershall Dea entered into a syndicated financing agreement in euros and US dollars with a total volume of €6.47 billion. In addition to the Wintershall Dea Group's own financing, the financing agreement serves to facilitate the full repayment of the shareholder financing to BASF and to replace DEA's existing external financing.

28. Share price-based compensation program and BASF incentive share program

➔ Share price-based compensation program

The share price-based compensation program (BASF: long-term incentive (LTI) program/Wintershall Dea: BASF option program (BOP)) that has been in place since 1999 for executives within the BASF Group was continued as of April 4, 2019. However, no grants were made during the reporting period.

In particular, the Board of Directors and senior executives are eligible to participate in the BASF option program (BOP). A total of 25 people participated in the 2018 share program, meaning that they hold entitlements under the option program.

The program provides for the granting of virtual options. The option rights are settled in cash when they are exercised.

Participation in the BOP program is voluntary. In order to take part in the program, a participant must make a personal investment: a participant must hold BASF shares amounting to 10% to 30% of his or her individual variable compensation for a two-year period from the granting of the option (holding period). The number of shares to be held is determined by the amount of variable compensation and the volume-weighted average market price for BASF shares on the first trading day after the Annual Shareholders' Meeting of BASF. On May 27, 2018, the average price for the BOP 2018 program was EUR 85.45.

The participant receives four option rights per invested share in BASF. Each option consists of two parts, right A and right B, which may be exercised if defined thresholds have been met:

The threshold of right A is met if the price of the BASF share has increased by more than 30% in comparison with the base price on the option grant date (absolute threshold). The value of right A is the difference between the market price of BASF shares on the exercise date and the base price; it is limited to 100% of the base price. If the cumulative percentage performance of BASF shares exceeds the percentage performance of the MSCI World Chemicals IndexSM (MSCI Chemicals), right B may be exercised (relative threshold). The value of right B is the base price of the option multiplied by twice the percentage by which the BASF share outperforms the MSCI Chemicals Index on the exercise date. It is limited to the closing price on the date of exercise

less the nominal value of the BASF share. From the 2013 BOP program onward, right B may only be exercised if the price of the BASF share equals at least the base price. During the exercise period, there are certain times (closed periods) during which the options may not be exercised. Each option can only be exercised in full. This means that one of the thresholds must be exceeded. If the other threshold is not exceeded and the option is exercised, the other option right lapses. A participant's maximum gain from exercising an option is limited to five times the original individual investment starting with the 2013 BOP program. The maximum gain from exercising an option is limited to 10 times the original individual investment for programs from previous years. Option rights are nontransferable and are forfeited if the option holders no longer work for the BASF Group or have sold part of their individual investment before the expiry of the two-year vesting period. They remain valid in the event of retirement.

With the exceptions mentioned above, the basic structure of the options existing as of April 30, 2019 corresponds to the programs 2011 to 2018.The models used in the valuation of the option plans are based on the arbitrage-free valuation model according to Black-Scholes. The fair values of the options are determined using the binomial model.

Fair value of options and parameters for the global BOP program used as of April 30, 2019

		4/30/2019	12/31/2018
Fair value	EUR	16.15	10.5
Dividend yield	%	4.41	5.3
Risk-free rate	%	-0.21	0.00
Volatility of BASF shares	%	23.44	25.32
Volatility of MSCI Chemicals	%	14.24	15.97
Correlation BASF share price - MSCI Chemicals	%	75.33	78.27

At the balance sheet date April 30, 2019, the fair values and measurement parameters relate to the BOP program for 2018. The fair value calculation was based on the assumption that options will be exercised in a manner dependent on their potential gains. For the programs from preceding years, corresponding fair values and valuation parameters were determined/used.

Volatility was determined on the basis of the monthly closing prices over a historical period corresponding to the remaining term of the options.

The number of options held amounted to 285,647 as of April 30, 2019 (previous year: 292,910).

As a result of a resolution passed by the Board of Executive Directors of BASF in 2002 to settle option rights in cash, all outstanding option rights under the 2010 to 2018 BOP programs were measured at fair value as of April 30, 2019. A proportionate provision is recognized for programs in the vesting period. The provision set up for this purpose as of 30 April 2019 amounted to TEUR 2,451 (previous year: TEUR 1,092).

➔ BASF employee participation program

The "plus" employee participation program is open to all employees except the executives who are entitled to take part in the BASF option program. The program was launched in 1999. Employees who participate in the "plus" incentive share program acquire shares in BASF from their variable compensation. For every 10 BASF shares purchased as part of the program, a participant receives one BASF share at no cost after one, three, five, seven and ten years of holding these shares. As a rule, the first and second block of ten shares entitles the participant to receive one BASF share at no extra cost in each of the next 10 years.

The right to receive free BASF shares lapses if a participant sells the individual investment in BASF shares, if

the participant stops working for a group company or one year after retirement.

The number of free shares to be granted amounted to 12,319 as of the reporting date for the short fiscal year (previous year: 12,319).

The free shares to be provided are measured at the fair value on the date on which the employees acquire the subscription right by way of their investment. Fair value is determined on the basis of the BASF share price, taking into account the present value of dividends, which are not paid during the term of the program. The weighted-average fair value on the grant date amounted to €87.38 for the 2018 program, and €87.38 for the 2018 program.

29. Compensation paid to the Board of Directors and Supervisory Board

The compensation paid to the management amounted to €1,060 thousand in the short fiscal year (2018: €3,322 thousand). In the short fiscal year 2019, 0 option rights were granted to active members of the Board of Directors under the BASF share option program. The fair market value of these options came to €30.71 as of July 1, 2018. Together with the option rights granted in previous years, active and former members of the Board of Directors hold a total of 72,262 option rights.

€ thou.	1/1/ - 4/30/2019	12/31/2018
Total compensation paid to the Board of Directors	1,060	3,322
Market value of options granted to the Board of Directors in the fiscal year on the grant date	-	707
Total remuneration paid to the Board of Directors	**1,582**	**4,029**
Compensation paid to the Supervisory Board	20	61
Pension expenses for members of the Board of Directors of Wintershall	1,437	1,322
Total compensation paid to former members of the Board of Directors	358	1,273
Pension provisions for former members of the Board of Directors and their surviving dependents	25,617	25,249

For the active members of the Board of Directors during the period from January to April 2019, the existing options from the BASF share option program for the years 2012 to 2018 have been settled in the total amount of €522 thousand.

30. Related party transactions

A related party is a natural person or legal entity that can exert influence on the Wintershall Dea Group or over which the Wintershall Dea Group exercises control, joint control or a significant influence. In particular, related parties include nonconsolidated subsidiaries, joint ventures and associated companies, as well as BASF SE and its subsidiaries. The following tables show the volume of business with related parties that are included in the consolidated financial statements at amortized cost or accounted for using the equity method.

Revenue with related parties

€ thou.	Revenue	
	Jan. - Apr. 2019	2018
Nonconsolidated subsidiaries	857	3,291
Associates	2,745	152,408
Joint ventures	2,593	7,647
Sister companies	52,461	195,481
Parent companies	160,993	417,957
Total	**219,649**	**776,784**

Trade receivables from, and trade payables to, related parties

€ thou.	Trade receivables		Trade payables	
	4/30/2019	12/31/2018	4/30/2019	12/31/2018
Nonconsolidated subsidiaries	1,197	4,203	543	2,350
Associates	7,965	12,712	2,404	6
Joint ventures	2,359	5,173	3,833	3,740
Sister companies	12,559	16,435	3,286	3,328
Parent companies	29,129	50,344	1,234	2,614
Trade receivables from, and trade payables to, related parties	**53,209**	**88,867**	**11,300**	**12,038**

Miscellaneous receivables from, and liabilities to, related parties

€ thou.	Miscellaneous receivables		Miscellaneous liabilities	
	4/30/2019	12/31/2018	4/30/2019	12/31/2018
Nonconsolidated subsidiaries	40,302	27,205	436	34
Associates	2,722	1,301	110,886	132,739
Joint ventures	165,029	168,457	328,196	366,645
Sister companies	588,785	-	3,083,430	1,900,892
Parent companies	5,232	1,577	10,163	2,892,563
Miscellaneous receivables and other assets	**802,070**	**187,578**	**3,533,111**	**5,292,873**

Revenues with, as well as trade receivables from, and trade payables to, related parties mainly comprised transactions with the company's own products, brokerage and licensing transactions, as well as other typical business transactions.

Miscellaneous receivables and liabilities resulted mainly from financing transactions, outstanding dividend payments and profit and loss transfer agreements, as well as other financing-related and operating transactions and scenarios. As of April 30, 2019, the receivable from the assumption of losses vis-à-vis BASF Handels- und Export GmbH amounted to €588,758 thousand. As of December 31, 2018, the liability from the profit and loss transfer agreement amounted to €342,865 thousand.

The miscellaneous receivables from joint ventures resulted, in particular, from the transfer of the financing function for the regulated gas transportation activities to the joint venture W & G Infrastruktur Finanzierungs-GmbH, Kassel, which was established in 2017.

The outstanding balances with related parties were not secured in general and were settled in cash. The amount of valuation allowances on trade receivables from associated companies did not change as against December 31, 2018 (€0 thousand).

Accordingly, the addition to these valuation allowances recognized as an expense amounted to €0 thousand in the short fiscal year (previous year: €0 thou.).

The amount of valuation allowances on miscellaneous receivables from nonconsolidated subsidiaries amounted to €54,374 thousand as of April 30, 2019. There was no reversal recognized in income (previous year: €0 thou.).

In the short fiscal year, no reportable transactions were concluded with members of the Board of Directors and their related parties.

The following table shows the remuneration paid to key management personnel.

Remuneration paid to key management personnel

€ thou.	Jan. - Apr. 2019	2018
Short-term benefits	1,080	3,383
Post-employment benefits	27,412	27,844
Other long-term benefits	-	-
Termination benefits	-	-
Share-based payment	-	707

31. Services rendered by the auditor of the annual financial statements

Companies in the Wintershall Dea Group have made use of the following services provided by KPMG AG:

€ thou.	Jan. - Apr. 2019	2018
Audit of the annual financial statements	732	784
Other assurance services	14	108
Total	**746**	**892**

The auditor's services mainly comprised services for the audit of the financial statements and, to a lesser extent, assurance services.

The audit of the financial statements related to expenses for the audit of the consolidated financial statements of the Wintershall Dea Group, as well as the legally required annual financial statements and the subsidiaries and joint operations included in the consolidated financial statements. Fees for other assurance services mainly comprised project audits in connection with regulatory requirements and other assurance services.

32. Report on post-balance sheet date events

The merger[12] of Wintershall Holding GmbH (Wintershall) and DEA Deutsche Erdoel AG (DEA) on April 30, 2019, which was successfully completed on May 1, 2019, changed the related parties of the Wintershall DEA Group. In addition to BASF (parent company until April 30, 2019), Letterone is a new shareholder of Wintershall DEA and thus a new member of the related parties.

Furthermore, as part of the merger of Wintershall and DEA, the Board of Management announced the planned personnel reduction on 21 February 2019. Wintershall Dea GmbH and DEA Deutschland AG currently employ 4,200 people (including joint ventures). The plan is to reduce the number of jobs by 1,100 in a socially responsible manner, with around 800 job cuts affecting Germany, 200 affecting Norway and 100 affecting the rest of the world. A major part of the job cuts will affect the group functions at the Hamburg and Kassel locations. In addition, further job cuts are planned at the production sites, particularly in Germany and Norway. The employee representatives of these companies are currently negotiating a social restructuring plan with the company representatives of both companies. The negotiations are not expected to have been concluded before the end of August 2019. Effects on the assets, liabilities, financial position and financial performance of the Wintershall Dea Group have been estimated for restructuring provisions and provisions have been set up accordingly.

On May 2, 2019 Wintershall Dea GmbH and Wintershall Norge AS utilized the credit lines provided by the bank consortium by drawing another €2,822,075 thousand respectively €511,951 thousand ($574,000 thousand). Correspondingly, the financial liabilities increased compared to the balance as of April 30, 2019.

[12] For more detailed information on the merger, see Note 2.4.

Kassel, July 16, 2019

Mehren Moraeus Hanssen Wieland Dijkgraaf Smith

The following independent auditor's report, prepared in accordance with § 322 HGB "Handelsgesetzbuch":"German Commercial Code", refers to the complete consolidated financial statements, comprising the consolidated statement of financial position, consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows and notes to the consolidated financial statements of Wintershall for the financial year as of and for short fiscal year ended 30 April, 2019. The above-mentioned auditor's report and consolidated financial statements are both translations of the respective German-language documents. The group management report is not part of this Offering Memorandum.

[Note: This is a translation of the German original. Solely the original text in German language is authoritative.]

Independent Auditor's Report

To the Wintershall Dea GmbH, Celle/Kassel

Opinions

We have audited the consolidated financial statements of Wintershall Dea GmbH, Celle/Kassel and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at April 30, 2019 the consolidated statement of profit and loss, consolidated statement of changes in equity and consolidated statement of cash flows [where relevant: and the group segment reporting] for the financial year from January 1, 2019 to April 30, 2019, and notes to the consolidated financial statements, including the recognition and measurement policies presented therein. In addition, we have audited the group management report of Wintershall Dea GmbH for the short fiscal year January 1, 2019 to April 30, 2019.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) of the German Commercial Code (HGB), and in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at April 30, 2019, and of its financial performance for the short fiscal year from January 1, 2019 to April 30, 2019 and
- the accompanying group management report as a whole provides an appropriate view of the group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the group management report does not cover the content of the parts of the group management report listed in the appendix.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Section 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der

Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

Responsibilities of the Board of Directors and the Supervisory Board for the consolidated financial statements and the group management report

Board of Directors is responsible for the preparation of the consolidated financial statements that comply, in all material respects, with the requirements of German commercial law and that the consolidated financial statements, in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the group. In addition, the Board of Directors is responsible for such internal controls as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the group's ability to continue as a going concern. It also has the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting provided no actual or legal circumstances conflict therewith.

Furthermore, the Board of Directors is responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the Board of Directors is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial

statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the Board of Directors and the reasonableness of estimates made by management and related disclosures.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with German Legally Required Accounting Principles.

– Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express [audit] opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our [audit] opinions.

– Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.

– Perform audit procedures on the prospective information presented by management in the group management report. On the basis of sufficient appropriate audit evi dence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on t he prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Frankfurt am Main, July 19, 2019

KPMG AG
Wirtschaftsprüfungsgesellschaft
[Original German version signed by:]

Janz
Wirtschaftsprüfer
[German Public Auditor]

Strzalkowski
Wirtschaftsprüfer
[German Public Auditor]

Audited Consolidated Financial Statements of Dea
(prepared in accordance with IFRS as adopted by the EU)
as of and for the short fiscal year ended 30 April 2019

Wintershall Dea Deutschland AG
(formerly DEA Deutsche Erdoel AG)
Consolidated Financial Statements
Short Fiscal Year
1 January - 30 April 2019

Wintershall Dea Deutschland AG - Consolidated Income Statement

€m	(Notes)	Jan. - Apr. 2019	Jan. - Dec. 2018
Sales and other operating revenues	(2)	458	1,892
Cost of sales	(3)	-304	-759
Gross profit		154	1,133
Exploration costs	(4)	12	-111
General and administration expenses		-213	-125
Net impairment of assets	(9)	-75	-168
Net impairment of operating receivables	(18)	-4	1
Operating result		-126	730
Financial income	(6)	22	109
Financial expenses	(6)	-33	-89
Net impairment of financial receivables	(18)	8	9
Result from continuing operations before taxes	(7)	-129	759
Income taxes	(8)	-8	-478
Result from continuing operations		-137	281
Result from discontinued operations	(1)	-	53
Net result		-137	334
Thereof attributable to:			
Shareholders of the parent company		-137	330
Non-controlling interests		-	4

Wintershall Dea Deutschland AG - Consolidated Statement of Comprehensive Income

€m	Jan. - Apr. 2019	Jan. - Dec. 2018
Net result	-137	334
Items that may be reclassified to profit or loss		
Currency translation adjustments	19	6
Fair valuation of financial instruments in hedge relationship	-68	66
Items that will not be reclassified to profit or loss		
Remeasurement of defined benefit plans	2	-22
Other comprehensive income (after taxes)	**-47**	**50**
Total comprehensive income	**-184**	**384**
Thereof attributable to:		
Shareholders of the parent company	-184	380
Non-controlling interests	-	4

Wintershall Dea Deutschland AG - Consolidated Balance Sheet

Assets (€m)	(Notes)	30-04-2019	31-12-2018
Non-current assets			
Intangible assets	(9)	1,728	855
Property, plant and equipment	(9)	3,616	3,320
Investment property		2	2
Financial investments		3	3
Financial receivables	(10)	1	1,916
Other receivables and other assets	(11)	9	56
Deferred tax assets	(8)	121	51
		5,480	6,203
Current assets			
Inventories	(12)	84	83
Financial receivables	(10)	1,882	29
Trade accounts receivable	(11)	251	264
Other receivables and other assets	(11)	175	110
Income tax assets	(8)	0	0
Cash and cash equivalents	(13)	171	305
		2,563	791
		8,043	6,994

Equity and Liabilities (€m)	(Notes)	30-04-2019	31-12-2018
Equity	(14)		
Shareholder's equity		3,122	1,840
Non-current liabilities			
Provisions	(15)	706	657
Debt to banks	(16)	-	1,441
Financial debt	(16)	51	1,041
Income tax liabilities	(8)	26	26
Other liabilities	(17)	16	4
Deferred tax liabilities	(8)	942	739
		1,741	3,908
Current liabilities			
Provisions	(15)	426	185
Debt to banks	(16)	1,893	6
Financial debt	(16)	260	396
Trade accounts payable	(17)	353	298
Income tax liabilities	(8)	120	124
Other liabilities	(17)	128	237
		3,180	1,246
		8,043	6,994

Wintershall Dea Deutschland AG - Consolidated Cash Flow Statement

€m (16)	Jan. - Apr. 2019	Jan. - Dec. 2018
Result from continuing operations	-137	281
Depreciation/impairment losses/reversal of impairment losses	212	486
Changes in provisions	145	-2
Changes in deferred taxes	-5	287
Gain/losses from disposal of assets	2	-30
Other non-cash income/expenses	7	28
Changes in working capital	19	23
Changes in other balance sheet items	-55	-40
Cash flow from operation activities - continuing operations	**188**	**1,033**
Cash flow from operating activities - discontinued operations	-	31
Cash flow from operating activities	**188**	**1,064**
Cash outflows for additions to intangible assets, property, plant and equipment and investment property	-342	-948
Cash inflows from disposal of fixed assets	0	76
Cash outflows for acquisitions	-740	-182
Cash inflows from (cash outflows for) divestures	-	63
Cash inflows from (cash outflows for) financial assets	-55	219
Cash flow from investment activities - continuing operations	**-1,137**	**-772**
Cash flow from investment activities - discontinued operations	-	-9
Cash flow from investment activities	**-1,137**	**-781**
Payment into capital reserve	941	-
Profit transfer to parent company	-390	-130
Repayments of debt to banks	-1,598	-325
Proceeds from debt to banks	2,023	363
Repayments of other financial debt	-400	-
Proceeds from other financial debt	243	-
Repayments of lease liabilities	-6	-
Cash flow from financing activities - continuing operations	**813**	**-92**
Cash flow from financing activities - discontinued operations	-	-3
Cash flow from financing activities	**813**	**-95**
Net change in cash and cash equivalents	**-136**	**188**
Effects of foreign exchange rates changes and other changes in value	2	1
Cash and cash equivalents at beginning of reporting period	305	116
Cash and cash equivalents at end of reporting period	**171**	**305**
Less: Cash and cash equivalents of discontinued operations at end of reporting period	-	-
Cash and cash equivalents of continuing operations at end of reporting period	**171**	**305**
Supplementary information on cash flows from operating activities - continuing operations		
Income tax paid (less refunds)	11	8
Interest paid	67	98
Interest received	2	53
Dividends received	-	0

Wintershall Dea Deutschland AG - Consolidated Statement of Changes in Equity

€m	Subscribed capital	Capital reserve	Retained earnings	Currency translation adjustments	Fair valuation of financial instruments	Shareholder's equity	Non-controlling interests	Total
As at 01-01-2018	344	980	606	-90	-27	1,813	5	1,818
Adjustments on adoption of IFRS 9 (net of tax)			-3			-3		-3
As at 01-01-2018 (restated)	344	980	603	-90	-27	1,810	5	1,815
Fair value of derivative financial instruments with no impact on profit or loss					66	66		66
Currency translation adjustments			0	6		6		6
Remeasurement of defined benefit plans			-22			-22		-22
Other comprehensive income			-22	6	66	50		50
Net result			330			330	4	334
Total comprehensive income			308	6	66	380	4	384
Profit and loss transfer/ distribution			-350			-350		-350
Other changes			0	0		0	-9	-9
As at 31-12-2018	344	980	561	-84	39	1,840	-	1,840
As at 01-01-2019	344	980	561	-84	39	1,840	-	1,840
Fair value of derivative financial instruments with no impact on profit or loss					-68	-68		-68
Currency translation adjustments			0	19		19		19
Remeasurement of defined benefit plans			2			2		2
Other comprehensive income			2	19	-68	-47		-47
Net result			-137			-137		-137
Total comprehensive income			-135	19	-68	-184		-184
Profit and loss transfer/ distribution			191			1,91		191
Capital increase		1,275				1,275		1,275
Other changes								
As at 30-04-2019	344	2,255	617	-65	-29	3,122	-	3,122

About this report

Wintershall Dea Deutschland AG (formerly DEA Deutsche Erdoel AG) is a German limited company and is headquartered at Überseering 40 in 22297 Hamburg, Germany. It is registered at the Hamburg local court under HRB 6882. The nature of the operations and principal activities of Wintershall Dea Deutschland AG (WD Deutschland AG) are described in the management report. The presented consolidated financial statements as at 30 April 2019 were approved for publication by the Board of Management of WD Deutschland AG on 18 June 2019. In accordance with the resolution adopted at the annual general meeting, PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft audited the consolidated financial statements and the consolidated management report of WD Deutschland AG and issued its unqualified audit opinion. The consolidated financial statements are available from Wintershall Dea Deutschland AG, Überseering 40, 22297 Hamburg. The consolidated financial statements are filed electronically with the operator of the German Government Gazette and promulgated therein after their filing.

With effect as of 30 April 2019, 24:00 hrs, the parent company of WD Deutschland AG has changed (see note 25 "events after the balance sheet date"). In the future, the company will be controlled by Wintershall Dea GmbH (formerly Wintershall Holding GmbH). As at balance sheet date 30 April 2019, the parent company is still L1E Acquisitions GmbH.

Following the resolution adopted at the Annual General Meeting of 23 April 2019 and the entry in the Commercial Register on 25 April 2019, WD Deutschland AG declared the period from 1 January until 30 April 2019 a short fiscal year. Since the short fiscal year only comprises a 4 months period, a year-on-year comparison with the 12 months period in 2018 is of limited value.

The Annual General Meeting has further decided to change the name of the company in Wintershall Dea Deutschland AG. The change of the name was entered in the Commercial Register on 7 May 2019. The seat continues to be Hamburg.

Basis of preparation

The consolidated financial statements were prepared in accordance with the International Financial Reporting Standards (IFRS) applicable in the EU, as well as in accordance with the supplementary accounting regulations applicable pursuant to Section 315e, Para. 1 of the German Commercial Code (HGB). All figures for the previous year were determined in conformity with the same principles unless new accounting methods have been used prospectively for the reporting period.

The financial statements are prepared in euros (€). The amounts, including figures for previous years, are generally reported in millions of euros (€m). If necessary, amounts are disclosed in thousands of euros (€k). This rounding effect does not produce any loss of information. The income statement is prepared in accordance with the cost-of-sales method. Various items of the Income Statement and the Balance Sheet are combined to improve the transparency of presentation. These items are shown and explained separately in the Notes.

The financial statements have been prepared under the historical cost convention, except for derivative financial instruments and certain other financial assets and financial liabilities, which have been measured at fair value.

Summary of significant accounting policies

Scope of consolidation

The consolidated financial statements include the accounts of WD Deutschland AG and its subsidiaries over which the company has control. WD Deutschland AG controls an investee if it has power over the investee. In addition, WD Deutschland AG is exposed to, or has rights to, variable returns from its involvement with the investee and WD Deutschland AG has the ability to use its power over the investee to affect the amount of WD Deutschland AG's return. A subsidiary is de-consolidated from the date that control ceases. There are 36 consolidated companies (2018: 16), 16 of them abroad (2018: 6). Participation in 3 foreign subsidiaries (2018: 2) of minor importance to the WD Deutschland AG Group are reported as financial investments measured at fair value in accordance with IFRS 9. In total, these subsidiaries account for less than 1 % of the consolidated revenue and income as well as of consolidated debt. In the reporting period, 20 foreign subsidiaries were consolidated for the first time (see note 1).

Consolidation principles

The financial statements of the domestic and foreign companies included in the Consolidated Financial Statements of WD Deutschland AG are drawn up in conformity with uniform accounting and valuation methods. Expenses and earnings as well as accounts receivable and payable between the consolidated subsidiaries are eliminated. Intercompany gains or losses are eliminated, unless they are negligible. Capital consolidation is performed by offsetting the carrying amounts of subsidiaries against their underlying equity. Depreciation charged in the companies' individual statements on shares in, and loans to, consolidated subsidiaries is reversed.

Business combinations

Cost of an acquisition is measured at the fair value of the assets given and liabilities incurred or assumed at the date of exchange. Identifiable assets acquired and liabilities assumed in a business combination (including contingent liabilities) are measured initially at their fair values at the acquisition date, irrespective of the extent of any non-controlling interest. Non-controlling interest in a subsidiary represents the portion of the subsidiary not owned by WD Deutschland AG. The results of the subsidiaries acquired or disposed of during the year are included in the consolidated statement of income from the date of acquisition or until their disposal, respectively.

Joint arrangements

Joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor. There are joint arrangements at WD Deutschland AG Group in the course of development and production activities. They are classified as joint operations since the arrangements transfer the rights and obligations relating to the assets and liabilities to the investors. The Group's shares in joint operations are accounted for by recognising its respective share in assets and liabilities as well as its income and expenses.

Currency translation

In the companies' individual statements, foreign currencies transactions are translated at exchange rates prevailing at the date of the transaction. Monetary foreign currency items are measured at the current exchange rate at each balance sheet date. Exchange gains or losses incurred by the balance sheet date are recognised in the income statement.

The financial statements of Group companies with functional currencies different from the Group's presentation currency (Euro) are translated using the current rate method. All balance sheet items are translated at the current exchange rates prevailing at the balance sheet date. Differences from previous-year translation are recognised in other comprehensive income without impact on profit or loss. Income statement items are translated generally at annual average rates. The use of average rates for the income statement creates additional differences compared with the application of current exchange rates for balance sheet items which are also recognised in other comprehensive income.

The following exchange rates were applied in translating foreign currencies to euros:

1 € =	**Rate on balance sheet date**		**Average rate**	
	30-04-2019	31-12-2018	Jan. - Apr. 2019	Jan. - Dec. 2018
1 Pound sterling	1.16	1.12	1.15	1.13
100 Norwegian kroner	10.34	10.05	10.30	10.42
100 Polish zloty	23.33	23.25	23.27	23.48
1 Mexican peso	0.047	0.044	0.046	0.044
1 United States Dollar	0.89	-	0.88	-

Realisation of income

Revenues are recognised when a performance obligation has been satisfied by transferring a promised good or service to a customer. The transfer criteria is fulfilled when the customer obtains control. They are measured at the transaction price that is allocated to the respective performance obligation.

At WD Deutschland AG Group revenues primarily consist of oil and gas sales. Oil and gas revenues are recognised at the time of delivery to the contractual delivery point. This is generally the case, if oil passes the vessel's rail or, in case of oil and gas supply via pipeline, when passing agreed delivery points. Revenues derived from services are of minor significance for the WD Deutschland AG Group.

Income taxes

Tax positions under respective local tax laws and tax authorities' views can be complex and subject to different interpretations by tax payers and local tax authorities. Different interpretations of tax laws may result in additional tax payments for previous years and are included in management considerations. In the WD Deutschland AG Group, despite the existence of a fiscal unit, actual and deferred taxes are recognised on the basis of a tax allocation contract.

Under the liability method, deferred tax assets and liabilities are recognised for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets are recognised if sufficient future taxable profit is available, including knowledge about income from forecast operating earnings, the reversal of existing taxable temporary differences and established tax planning opportunities. As of each period-end, the WD Deutschland AG Group evaluates the recoverability of deferred tax assets on the basis of projected future taxable profits. According to the level of historical taxable income and projections for future taxable income over the periods in which the deferred tax assets are deductible, the WD Deutschland AG Group believes it is probable the company will realise the benefits of these deductible differences. As future developments are uncertain, assumptions are necessary to estimate future taxable profits as well as the period in which deferred tax assets will recover. Estimates are revised in the period in which there is sufficient evidence to revise the assumption.

Intangible assets

Intangible assets include capitalised exploration expenditure, other intangible assets such as cost recovery rights, licence rights in the production phase, commercial and technical software and goodwills. They are reported at amortised costs.

The exploration phase comprises the period from the receipt of exploration rights until their expiry or until technical feasibility of a field development and economic viability have been demonstrated. The exploration expenditure capitalised during this phase includes, for example, concession acquisition costs, licences and exploration rights and exploration wells. Exploration wells are accounted for at their historic cost of acquisition or production according to the successful efforts method; i.e. expenses incurred on exploration wells are generally capitalised only if they were successful, in the sense that they led in particular to the discovery of oil and gas deposits. Once the reserves are proved and commercial viability is established and the development is highly probable, the exploration wells are reclassified into property, plant and equipment and intangible exploration rights are reclassified into other intangible assets. During the exploration phase, the exploration expenditure capitalised is not subject to scheduled amortisation/depreciation. With the start of production, it is amortised/depreciated according to the unit-of-production method.

Other intangible assets have a finite useful life and are therefore subject to systematic linear or production-related depreciation. The useful life of concessions and other licence rights corresponds to the contractual term or comprises the period until the end of economic production. Software for commercial or technical applications is depreciated under the straight-line method over three years. The useful economic life and amortisation methods are subject to annual review.

Goodwill is not subject to systematic amortisation. It is subject to an impairment test on an annual basis or whenever there are indications of a diminution in value (impairment test). Goodwill is part of cash-generating units. The goodwill impairment test is performed at the level of a cash-generating unit or a group of cash-generating units. This is the lowest level at which goodwill is monitored for internal management purposes.

Property, plant and equipment

Property, plant and equipment comprise land and buildings, oil and gas assets, other plant, machinery and equipment as well as fixtures and fittings and office equipment. They are valued at amortised acquisition or production cost. Borrowing costs that can be directly allocated to the acquisition or production of an asset are capitalised as part of acquisition or production costs if a considerable period is necessary to convert the asset into its intended state for use or sale ("qualified asset"). The cost of property, plant and equipment includes the estimated cost of de-installation or demolition and removal and of the reconditioning of the site under public or private law obligations, to the extent related provisions are set up. Maintenance and repair costs are stated as expenses.

Oil and gas assets are generally depreciated using the unit-of-production method. Basically, in the case of capitalised wells the depreciation is based on the current production of the period in relation to proved developed producing reserves and in the case of acquisition costs and production facilities/support equipment the current production of the period is set in relation to total proved reserves.

Other property, plant and equipment, with the exception of land and similar rights, is depreciated using the straight-line method. The typical useful lives of the WD Deutschland AG Group's non-production-related property, plant and equipment are as follows:

	Years
Buildings	24 - 50
Technical plant and machinery	5 - 15
Factory and office equipment	3 - 20

Impairment test

An impairment loss is recognised for intangible assets as well as for property, plant and equipment and investment properties if the recoverable amount of the asset is less than its carrying amount. Exploration assets are required to be tested for impairment as soon as the technical feasibility and profitability of a resource can be proven. The presence of facts and circumstances indicating an impairment also gives rise to an impairment test. If the asset is part of a cash-generating unit (the smallest identifiable group of assets generating cash flows, which are largely independent of the cash inflows of other assets or other groups of assets), then an impairment is derived on the basis of the recoverable amount of the cash-generating unit. In the event that the carrying amount of a cash-generating unit to which a goodwill was allocated exceeds the recoverable amount, a resulting impairment loss is initially applied to the allocated goodwill. Any further

impairment loss required will be taken into account through a pro-rata reduction in the remaining carrying amounts of the cash-generating unit. A reversal of an impairment loss up to the value of amortised cost is made if the reasons for an earlier impairment no longer exist. In this case, the increased book value resulting from a reversal must not exceed the amortised cost of acquisition or production. Impairment losses are reported net of reversals of impairment losses. Impairment losses on goodwill are not reversed.

Within the scope of the impairment test, the recoverable amount of the cash-generating unit is determined. The recoverable amount is defined as the higher of fair value less cost of disposal or value in use. The fair value represents the best possible estimate for the amount for which an independent third party would acquire the cash-generating unit on the balance sheet date; the cost of disposal is deducted. Value in use reflects the present value of the future cash flows which are expected to be generated with the cash-generating unit. If either of these amounts exceeds the carrying amount, it is not always necessary to determine both amounts. These values are generally determined on the basis of discounted cash flow calculations which, in turn, are generally based on current corporate planning. The cash flow forecasts pertain to the life-of-field-period for the individual concession/licence or groups of concessions/licences. The calculations are based on historical experience as well as expectations of future market trends. The principal assumptions underlying the determination by management of the recoverable amount are the forecasts for market prices of oil and natural gas, the estimated reserves, the production forecast as well as the discount rates. The discount rates applied are based on weighted average capital costs taking into consideration specific country risks. The calculation was not related to the actual capital structure of the company but was derived by peer group.

Financial assets

Financial assets are classified in the following measurement categories:

- Financial assets to be measured at fair value through profit or loss (FVPL)
- Financial assets to be measured at amortised costs

Financial assets are classified as at amortised costs only if the asset is held within a business model whose objective is to collect the contractual cash flows and if the contractual term give rise to cash flows that are solely payments of principal and interest.

Financial assets are recognised in the balance sheet if a company is a party to a contract for the asset in question. Market-conform purchases or sales of financial assets are recognised or derecognised on the day of trading. Financial assets are derecognised when the contractual rights to cash flows from the asset expire or the entity transfers the financial asset. The latter applies when all the essential risks and rewards of ownership of the asset are transferred, or the entity no longer has control of the asset.

Except for trade accounts receivables from sales revenues, at initial recognition, financial assets are measured at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction cost that are directly attributable to the acquisition of the financial asset. Trade accounts receivable from sales revenues are recognised initially at the amount of consideration that is unconditional unless they contain significant financing components.

After initial recognition, financial assets are measured depending on their classification either at amortised cost using the effective interest method or at fair value through profit or loss.

For financial assets measured at amortised costs expected credit losses are recognised. The assessment of credit losses is carried out on a forward looking basis. Impairment losses are presented in separate line items in the income statement either as impairment losses on operating receivables or as impairment losses on financial receivables. Reversals of impairment losses are credited against the same line item.

Inventories

Inventories are carried at cost of acquisition or production or at the lower net realisable value. Production costs reflect the full costs directly related to production and are determined on the basis of the normal capacity. To the extent that the net realisable value of previously impaired inventories has increased, the resulting reversal is recognised in the same expense item in which the original impairment was recorded.

Provisions

Provisions are set up for all legal or factual obligations to third parties as at the balance sheet date which are based on past events and will probably lead to an outflow of resources in the future and the extent of which can be reliably estimated. Possible obligations to third parties or existing obligations where an outflow of resources is improbable or the extent thereof cannot be reliably determined, are not to be recognised as provisions. They have to be disclosed as contingent liabilities in the notes unless the possibility of an outflow of resources with economic benefits is remote.

Provisions are carried at their foreseeable settlement amount and not netted against any recovery claims. The settlement amount comprises cost increases to be taken into account as of the balance sheet date. In the case of non-current provisions, the amounts are discounted to the present value, applying the country-specific or currency-specific market interest rate applicable as of the respective balance sheet date. Provisions based on a large number of similar events are reported at their expected value. Releases of provisions are written back against the expense item against which the provision was originally set up.

Decommissioning provisions cover the updated commitments for the plugging of wells, the de-installation of onshore and offshore production facilities and the reconditioning of operations and drilling sites. Their extent is based on the anticipated full costs, taking into account the empirical data and the cost benchmarks determined by the Association of German Crude Oil and Natural Gas Producers, with comparable assumptions available for foreign activities. Should any changes in interest rates or estimates in terms of the time or the level of payouts lead to changes in this provision, then the carrying amount of the associated asset will be adjusted accordingly. If the reduction is higher than the book value, the excess amount must be recorded with direct impact on income.

Provisions for pensions are recognised for defined benefit plans. This relates to commitments by the company to cover vested entitlements of employees in active service and current benefits to active and former employees or their dependents. These commitments relate in particular to old-age pension payments. The specific commitments are based on benefits that vary throughout the industry; however, as a rule they are measured according to employees' length of service and remuneration.

The company pension plan consists both of defined-benefit and contribution-based benefit plans. Provisions for defined-benefit plans are based on the actuarial projected benefit obligation, measured using the projected unit credit method. This benefit/years of service method takes into account not only the pension benefits and benefit entitlements known as of the balance sheet date, but also anticipated future increases in salaries and pension benefits. The calculation is based on actuarial reports, taking into account appropriate biometric parameters (for Germany, in particular the “Richttafeln 2018G" by Klaus Heubeck; for Norway, the mortality table “K2013”). The provision is reduced by the fair value of the plan assets set up to cover the pension commitments. The service cost, i.e. the increase in the obligation resulting from the work performed by employees in the period under review, is disclosed in operating result and the interest expenses/income are reported in financial expenses.

Results of the remeasurement of defined-benefit plans are fully recognised in the fiscal year in which they occur. They are reported outside profit or loss in the consolidated statement of comprehensive income and immediately assigned to retained earnings. Therefore, they remain outside profit or loss in subsequent periods as well.

In the case of contribution-based benefit plans, the company does not incur any further obligations beyond making contribution payments to special-purpose funds. The contribution payments are recorded as expenses.

Financial liabilities

Financial liabilities are classified in the following measurement categories:

- Financial liabilities to be measured at fair value through profit or loss (FVPL)
- Financial liabilities to be measured at amortised costs

Financial liabilities are measured at its fair value plus, in the case of a financial liability not at fair value through profit or loss, transaction cost that are directly attributable to the acquisition of the financial liabilities.

After initial recognition, financial liabilities are measured depending on their classification either at amortised cost using the effective interest method or at fair value through profit and loss.

Lease agreements

A lease is a contract in which the right to control the use of an identified asset is conveyed for an agreed-upon period in return for compensation.

As from 1 January 2019, the present value for future lease payments is generally recognised as a financial liability at the commencement date for all lease agreements where the Group acts as the lessee. Lease payments are split into principal and interest portions using the effective interest method. Correspondingly, the right of use asset is recognised at the present value of the liability, adding any directly attributable costs. Payments made before the commencement date and incentives received from the lessor are also included in the carrying amount of the right of use asset.

The right of use asset is generally depreciated on a straight-line basis over the lease term. Right of use assets, that are allocated to the asset category "oil and gas assets", are depreciated on a straight-line basis or according to the unit-of-production-method. The provisions of IAS 36 concerning the determination and recognition of impairments of assets also apply to right of use assets.

If the expected lease payments change as a result of index-linked consideration, for example, or on the basis of new assessments of contractual options, the liability is remeasured. The adjustment to the new carrying amount is generally carried out without impact on profit or loss trough corresponding adjustment to the right of use asset.

For leases of low-value assets and short-term leases with a maximum term of 12 months the Group exercises the optional application exemptions. The lease payments under these contracts are generally recognised on a straight-line basis over the lease term as expense in the income statement.

The accounting rules for lease agreements are not applied on lease agreements for other intangible assets.

Until 31 December 2018, lease transactions were accounted for in accordance with IAS 17.

Derivative financial instruments

Derivative financial instruments are reported as other assets or other liabilities. Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently measured to their fair values at the end of each reporting period. The accounting for subsequent changes in fair value depends on whether the derivate is designated as a hedging instrument, and if so, the nature of the item being hedged.

At inception of the hedge relationship, the group documents its risk management objective and strategy for undertaking its hedge transactions as well as the economic relationship between hedging instrument and hedged items including whether changes in the cash flows of the hedging instrument are expected to offset changes in the cash flow of hedged items.

The group has designated derivatives as hedging instruments within the scope of cash flow hedges. Cash flow hedges are used to hedge the risk of variability in cash flows related to highly probable forecast transactions. The effective portion of changes in the fair value of derivates that are designated as cash flow hedges is recognised as other comprehensive income within equity. The gains or losses relating to the ineffective portion are recognised immediately in profit or loss.

Amounts accumulated in equity are reclassified in the periods when the hedged item affects profit or loss. When a hedging instrument expires, or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gains or losses in equity at that time remains in equity until the forecast transaction occurs. When the forecast transaction is no longer expected to occur, the cumulative gains or losses are immediately reclassified to profit or loss.

Changes in the fair values of any derivative instrument that does not qualify for hedge accounting are recognised immediately in profit or loss.

Agreements concluded for the purpose of receiving or supplying non-financial items in accordance with the company's expected buying, selling or utilisation demand and held for this purpose (own-use contracts) are accounted for not as financial derivatives but as pending transactions. If the agreements contain embedded derivatives, then the derivatives will be accounted for separately from the underlying agreement if the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the underlying agreement.

Discontinued operations and assets held for sale

Discontinued operations are reported when a component of an entity that either has been disposed of, or is classified as "held for sale" represents a separate major line of business or geographical area of operations. In the consolidated income statement, the result from discontinued operations is reported separately from the result from continuing operations. In the consolidated cash flow statement, the cash flows from discontinued operations are presented separately from cash flows of continuing operations. Previous periods are, in each case, presented on a comparable basis. The disclosures in the notes, except for note (1), that refer to the consolidated income statement and the consolidated cash flow statement relate to continuing operations. In order to present the financial effects of discontinued operations, income and expenses as well as receivables and liabilities arising from intragroup transactions are eliminated. Non-current assets classified as "held for sale" are measured at the lower of their carrying amount and fair value less costs to sell, unless these assets are not part of the measurement scope as defined in IFRS 5. Depreciation and amortisation ceases from the date of classification as "held for sale".

Important estimates and assumptions

Preparation of the consolidated financial statements on the basis of IFRS requires management to make estimates and assumptions that affect the amounts reported for assets, liabilities, income and expenses as well as disclosed contingent liabilities and fair values. The assumptions and estimates mainly concern the following areas:

Oil and gas reserves

Oil and natural gas reserves are applied to determine the recoverable amount in the framework of the impairment test as well as for the production-related depreciation and amortisation using the unit-of-production method. Reserves are estimated by the Group's own qualified engineers and geoscientists applying standardised valuation methods, and are classified in line with international industry standards. This process is subject to defined principles. Furthermore, the estimates are audited by an independent consultant (RPS Group) on an annual basis.

Impairment tests

Key assumptions within impairment tests for intangible assets and property, plant and equipment relate to estimated reserves, forecasts for market prices of crude oil and natural gas, production forecasts and discount rates.

Impairment on financial assets

The loss allowances for financial assets are based on assumptions about probability of default and expected credit losses. The inputs to the impairment calculation are based on the group's past history, existing market conditions as well as forward looking estimates.

Derivative financial instruments

In accounting for derivative financial instruments, assumptions have to be made as to whether the principles of hedge accounting apply. In addition, for certain contracts a decision is required as to whether they are to be recognised as derivatives or treated as pending transactions like what are known as own-use contracts.

Provisions

Decommissioning provisions mainly require estimates and assumptions with regard to terms, exchange rates, costs to be considered and discount rates. Future actual cash outflows can differ, owing to changes in relation to these items.

With regard to pension provisions, the discount rate is one of the very important estimators. The discount factor for pension obligations is determined on the basis of yields on high quality, fixed-rate corporate bonds on the financial markets as of the balance sheet date.

Lease agreements

When determining right of use assets and corresponding lease liabilities, especially assumptions regarding the exercise of extension or termination options as well as discount rates are to be made.

All assumptions and estimates are based on conditions and evaluations made as at the balance sheet date. In addition, with regard to expected future business trends, the future development (considered realistic at the current time) of the economic environment in the industries and the regions in which the WD Deutschland AG Group operates is taken into account. If the actual trend deviates from the assumed development of conditions, then the assumptions and, if necessary, the carrying amounts of the assets and liabilities concerned will be adjusted accordingly. As of the date of preparation of the consolidated financial statements, it is not expected that there will be a material change in the assumptions and estimates.

Changes in accounting policies

The International Accounting Standards Board (IASB) and the IFRS IC have adopted a new International Financial Reporting Standard (IFRS), an Interpretation and amendments to existing Standards, which became effective for the WD Deutschland AG Group as of 1 January 2019.

IFRS 16 (2016) "Leases" replaces the previous regulations of IAS 17, IFRIC 4, SIC 15 and SIC 27. In the context of the transition to IFRS 16, €72m were capitalised as right of use assets and lease liabilities were recognised in the same amount as of 1 January 2019. The Group transitioned in accordance with the modified retrospective approach. The prior-year figures were not adjusted. The Group has made use of the optional application exemptions provided for short-term leases with a maximum term of 12 months and

leases for low-value assets and generally expenses the payments in the income statement according to the straight-line method.

Reconciliation of lease liabilities according to IFRS 16	€m
Minimum lease payments under operating lease agreements as of 31 December 2018	97
less short-term leases	-1
less leases of low value assets	0
less lease agreements with commencement date after 1 January 2019	-16
less others	3
Gross lease liabilities as of 1 January 2019	**83**
Effect from discounting	-11
Lease liabilities as of 1 January 2019	**72**

The weighted-average incremental borrowing rate for lease liabilities initially recognised as of 1 January 2019 was 4.7 %.

Further changes in accounting standards

The following interpretation and amendments to existing standards have no material impact on the WD Deutschland AG consolidated financial statements:

- IFRS Interpretation 23 (2017) "Uncertainty over Income Tax Treatments"
- Amendments to IFRS 9 (2017) "Prepayments Features with Negative Compensation"
- Amendments to IAS 28 (2017) "Long-term Interests in Associates and Joint Ventures"
- Annual Improvements to IFRS Standards 2015 - 2017 (2017)
- Amendments to IAS 19 (2018) "Plan Amendment, Curtailment or Settlement"

New accounting policies

The IASB has adopted a further standard and amendments to existing standards, which are not yet mandatory in the European Union (EU) for fiscal years which begin on 1 January 2019. EU endorsement is still pending in some cases.

The following changes in standards are not expected to have any material effect on the WD Deutschland AG Group's consolidated financial statements:

Standards	IASB Effective Date
Amendments to Reference to the Conceptional Framework in IFRS Standards (2018)	1 January 2020
Amendments to IFRS 3 (2018) "Business Combinations"	1 January 2020
Amendments to IAS 1 and IAS 8 (2018) "Definition of Material"	1 January 2020
IFRS 17 (2017) "Insurance Contracts"	1 January 2021

Selected key financial data by region (voluntary disclosure)

The WD Deutschland AG Group operates within several geographical areas. The following representation at country level is in accordance with internal management reporting and does not represent segment information as defined by IFRS 8.

	January - April 2019					
€m/kboed	Germany/ Denmark	Norway	North Africa [1]	Mexico	Other [2]	Total
Production (kboed) [3]	30	44	38	4	-	116
Revenues	139	215	83	21	-	458
Depletion, depreciation, amortisation	-16	-33	-80	-7	-1	-137
Net impairment of assets	-	-1	-73	-	-1	-75
EBITDAX	71	147	56	9	-29	254
Exploration cost	0	-3	2	-4	17	12
Capital expenditure (without acquisitions)	21	223	96	1	1	342

1) Comprising Egypt and Algeria
2) Incl. rest of the world, central functions and investment property
3) On working interest basis

	January - December 2018					
€m/kboed	Germany/ Denmark	Norway	North Africa [1]	Mexico	Other [2]	Total
Production (kboed) [3]	32	52	34	3	-	121
Revenues	402	928	220	53	-	1,603
Depletion, depreciation, amortisation	-47	-130	-114	-24	-3	-318
Net impairment of assets	-	-9	-159	-	-	-168
EBITDAX	231	697	157	18	-60	1,043
Exploration cost	-19	-65	-16	-5	-6	-111
Capital expenditure (without acquisitions)	50	533	345	18	2	948

1) Comprising Egypt and Algeria
2) Incl. rest of the world, central functions and investment property
3) On working interest basis

(1) Acquisitions, disposals and discontinued operations

Acquisitions

With purchase contract dated 4 December 2018, the WD Deutschland AG Group have acquired 100 % of the shares of Sierra Oil & Gas, a leading Mexican independent oil and gas company. The transaction comprises 22 companies including acquired holding companies. After having obtained required official approval, the agreement became effective as of 19 March 2019. The initial consolidation was carried out as of 31 March 2019. With the deal, which comprises 6 exploration and appraisal blocks in Mexico, WD Deutschland AG enhances its presence in the Mexican E&P market.

The transaction was accounted for as a business combination. The following table comprises the fair values of assets acquired and liabilities assumed at the date of acquisition. The amounts are determined on a preliminary basis. The final evaluation has not yet been completed.

€m	
Purchase price	568
Identifiable assets acquired and liabilities assumed	
Intangible assets and property, plant and equipment	615
Receivables and other assets	45
Cash and cash equivalents	20
Provisions	-98
Liabilities	-100
Deferred tax	-146
	336
Goodwill	232
Net assets acquired	568

The acquired goodwill is mainly resulting from the recognition of deferred taxes and a change in macroeconomic parameters as of the date of initial consolidation. The goodwill is not deductible for tax purpose.

€567m of the purchase price have already been paid in cash. The net cash outflow for the acquisition is shown within cash flow from investing activities. The contract also comprises an earn-out clause, which provides a further payment depending on the exploration success. The acquisition-date fair value of this contingent consideration amounts to zero.

Acquisition related cost of €3m were recognized as administration expenses.

The net result of the acquired companies since the date of the initial consolidation amounts to €-37m. The companies do not show any revenues. If the acquisition had been completed as of 1 January 2019, the net result of the Group would have been €-174m.

Discontinued operations

In the previous year, the result from discontinued operations comprised the disposed storage business. The sale of the storage business took place with effect as of 31 December 2018.

€m	Jan. - Dec. 2018
Sales and other operating revenues	35
Cost of sales	-12
Financial result	3
Result before taxes	26
Income taxes	
from ordinary activities	-8
on proceeds from disposal	-23
Result after taxes [1)]	**-5**
Gain on deconsolidation (after deduction of disposal costs)	58
Total result from discontinued operations	**53**

1) Thereof attributable to non-controlling interests €4m.

In connection with the sale, a purchase price of €106m was paid to WD Deutschland AG in 2018. After deduction of disposal costs and disposed cash the net inflow from divestures amounted to €63m and was shown within cashflow from investing activities.

(2) Sales and other operating revenues

€m	Jan. - Apr. 2019	Jan. - Dec. 2018
Oil		
Germany/Denmark	70	187
Norway	125	554
North Africa	33	78
Mexico	15	40
	243	859
Gas		
Germany/Denmark	69	215
Norway	88	364
North Africa	50	138
Mexico	6	12
	213	729
Others		
Germany/Denmark	0	0
Norway	2	10
North Africa	-	4
Mexico	-	1
	2	15
Sales revenues	458	1,603
Other operating revenues	0	289
	458	1,892

The oil revenues comprise losses from commodity derivatives amounting to €8m (2018: losses of €50m).

(3) Cost of sales

€m	Jan. - Apr. 2019	Jan. - Dec. 2018
Cost of operations		
Production costs	101	265
Royalties	31	99
Change in over-/underlift position	-1	8
Tariffs, transport and lease expenses	31	97
Depletion, depreciation, amortisation	134	314
Other	0	-38
	296	745
Development costs	8	14
	304	759

Other cost of operations for the reporting period include net gains from the disposal of fixed assets of €0m (2018: net gains of 38m).

(4) Exploration

Exploration costs in the income statement comprise, among other things, expenses related to seismology, geology, geophysics, unsuccessful exploration wells, additions and reversals of provisions and allocable administrative expenses. Impairment losses and reversals are not included in the exploration costs.

Provisions comprise commitments from exploration (mainly working programmes) amounting to €172m (2018: €101m).

The cash flow from operating activities attributable to exploration amounts to €-15m (2018: €16m). In addition, the cash flow from investment activities by the exploration division amounts to €-5m (2018: €-48m).

(5) Staff costs

Total staff costs are included in the following items in the income statement:

€m	Jan. - Apr. 2019	Jan. - Dec. 2018
Cost of sales	29	83
Exploration costs	8	21
General and administration expenses	16	50
	53	154

€m	Jan. - Apr. 2019	Jan. - Dec. 2018
Wages and salaries	44	124
Social security and other benefits	5	15
Expenses relating to post-employment benefits	4	15
	53	154

In the fiscal year, the average size of the WD Deutschland AG Group's workforce (excluding discontinued operations) converted to employee equivalents was 987 (2018: 967), of whom 810 (2018: 808) were in Germany. Full-time employees are included in the employee equivalents at 100 %. Part-time employees or employees with agreements subject to time limits are recorded only to the extent of their part-time quota or their employment time in relation to the annual time worked. In addition, the number of apprentices employed as at 30 April 2019 (headcount) was 8 (31 December 2018: 8).

(6) Financial income and financial expenses

€m	Jan. - Apr. 2019	Jan. - Dec. 2018
Interest income from third parties	2	2
Interest income from affiliated companies	18	94
Foreign currency exchange gains, net	2	13
Income from financial derivatives, net	0	-
Income from investments	-	0
Other financial income	-	0
Financial income	**22**	**109**
Interest expenses to third parties	26	77
Interest expenses to affiliated companies	38	50
Less capitalised borrowing costs	-39	-76
Losses from financial derivatives, net	-	0
Other financial expenses	3	10
	28	61
Interest from additions to		
Provisions for pensions and similar obligations less plan assets (net pension obligations)	-3	3
Abandonment provisions	8	24
Other provisions	0	1
	5	28
Financial expenses	**33**	**89**

(7) EBITDAX

EBITDAX is used for the purpose of internal management control and is derived from the result from continuing operations before taxes adjusted by the following items:

a) Interest income and expenses shown as financial income and expenses in the income statement, but adjusted for interest effects regarding pension provisions and pension plan assets which are shown separately in the line "pension items".
b) Income and expenses attributable to exploration, but excluding depletion/depreciation/ amortisation and impairment losses and reversal of impairment losses, interest income and expenses, currency effects and pension items for exploration, since these are adjusted in separate line items.
c) Depletion, depreciation, amortisation and impairment losses less reversal of impairment losses of assets as shown in the income statement.
d) Acquisition, disposal and restructuring costs and further extraordinary items. This represents all fees, costs and expenses, stamp duty, registration and other taxes incurred by the company in connection with an acquisition or a disposal and material items of an unusual or non-recurring nature (e.g. resulting from restructuring activities).
e) Realised and unrealised foreign exchange gains and losses (including hedging results).
f) Gains over book value or losses on book value arising from the disposal of any fixed assets (other than the sale of trading stock).
g) Income from pension plan assets, interest expenses, service costs or other charges attributable to a post-employment benefit scheme.

€m	Jan. - Apr. 2019	Jan. - Dec. 2018
Result from continuing operations before taxes	-129	759
a) Interest and other financing costs	16	-10
b) Exploration costs	-13	111
c) Depletion, depreciation, amortisation and net impairment losses of assets	212	486
d) Acquisition, disposal and restructuring costs and extraordinary items as well as income from investments	169	-269
e) Realised and unrealised gains/losses from foreign currency valuation and financial derivatives	-3	-12
f) (Gain)/loss attributable to the disposal of fixed assets	2	-39
g) Pension items	0	17
EBITDAX	254	1,043

(8) Income taxes

€m	Jan. - Apr. 2019	Jan. - Dec. 2018
Current income taxes		
Germany/Denmark	16	45
Norway	-3	142
North Africa	-	4
Mexico	0	0
Other	0	0
	13	191
Deferred taxes		
arising from deductible temporary differences	-4	255
resulting from taxable loss carry-forwards	-1	32
	-5	287
	8	478

Current income taxes relating to income from other periods, amount to €3m (previous year: expenses from other periods of €2m).

The average consolidated income tax rate on earnings generated by companies liable to German taxation generally amounts to 30.56 % (2018: 30.56 %). It results from the applicable corporation tax rate of 15.0 % and the solidarity surcharge of 5.5 % as well as the average trade income tax rate of the WD Deutschland AG Group. By way of derogation from this, for German companies that have activities in countries with which no double taxation agreement exists, a tax rate of 15.83 % (without trade income tax) is applied. Current taxes of foreign subsidiaries are based on local tax laws and applicable tax rates in the individual foreign countries. Deferred tax assets and liabilities in Germany and abroad are measured at the tax rates that are expected to apply in the period when the asset is realised or the liability is settled.

Taxes on income are derived from the expected tax expenses as follows:

€m	Jan. - Apr. 2019	Jan. - Dec. 2018
Result from continuing operations before taxes	-129	759
Expected tax expenses 30.56 % (previous year: 30.56 %)	-39	232
Changes in expected tax expenses due to:		
Tax rates differences	22	239
Taxes relating to a different accounting period	-3	2
Tax effects on		
other tax-free earnings and earnings from foreign operations	-3	-5
expenses not deductible for tax purposes	0	1
different trade income tax assessment bases and tax rates	1	-38
changes in tax loss carry-forwards	2	8
tax provision	4	12
Other	24	27
Changes in deferred taxes due to tax rate changes	0	0
Effective tax expenses	8	478
Effective tax rate in %	-6	63

Income tax assets and liabilities:

	30-04-2019		31-12-2018	
€m	Assets	Liabilities	Assets	Liabilities
Germany/Denmark	-	29	-	23
Norway	-	109	-	120
North Africa	-	2	-	2
Mexico	0	0	0	0
Other	0	6	0	5
	0	146	0	150
Non-current	-	26	-	26
Current	0	120	0	124

Income tax liabilities consist primarily of income taxes for the respective current year and prior-year periods that have not been definitively audited by the tax authorities.

The deferred tax assets and liabilities (gross) are allocable to the following balance sheet items:

€m	30-04-2019		31-12-2018	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Non-current assets	12	1,262	24	946
Current assets	1	18	1	16
Tax-related special items	-	6	-	7
Non-current liabilities				
Pension provisions	51	-	52	-
Other non-current provisions/ liabilities	243	-	196	18
Other current provisions/liabilities	108	0	15	0
	415	1,286	288	987
Loss carry-forwards	50	-	11	-
Gross	465	1,286	299	987
Netting	-344	-344	-248	-248
Net amount	121	942	51	739

Deferred tax assets and liabilities for each company are netted. Deferred taxes on loss carry-forwards are netted against deferred tax liabilities.

Deferred tax assets as a rule comprise capitalised tax credit claims resulting from the expected utilisation of loss carry-forwards in subsequent years. The realisation of these loss carry-forwards is ensured to an adequate level of certainty. The amount of loss-carry-forwards not covered by deferred tax claims totals €173m (2018: €106m).

In the reporting period, deferred taxes of €31m (2018: €-16m) were netted against equity with no effect on profit or loss. They result from the valuation of derivative financial instruments with no effect on profit or loss, amounting to €30m (2018: €-29m), from the remeasurement of defined benefit plans amounting to €1m (2018: €8m). In the previous year, €5m resulting from IFRS 9 restatement were netted against equity with no impact on profit or loss.

Effects resulting from currency translation of deferred tax items in foreign financial statements amounting to €-21m (2018: €14m) were recognised with no impact on profit or loss.

The initial consolidation of the Sierra Oil & Gas Group led to a change in deferred taxes with no impact on profit or loss in the amount of €-146m.

Of the total amount of deferred tax assets and deferred tax liabilities, €107m (2018: €16m) and €18m (2018: €16m) are expected to be realised within twelve months.

(9) Intangible assets and property, plant and equipment

Intangible assets

€m	Exploration	Other intangible assets	Goodwill	Total
At cost of acquisition and production				
1 January 2019	643	642	112	1,397
Changes in scope of consolidation	612	1	232	845
Additions	5	3	-	8
Transfers	-	-	-	-
Currency translation adjustments	12	21	4	37
Disposals	-	-3	-	-3
30 April 2019	1,272	664	348	2,284
Accumulated amortisation and impairment losses				
1 January 2019	-380	-162	-	-542
Changes in scope of consolidation	-	-	-	-
Amortisation	-	-10	-	-10
Transfers	-	-	-	-
Currency translation adjustments	-5	-2	-	-7
Disposals	-	3	-	3
Impairment losses	-	-	-	-
Reversal of impairment losses	-	-	-	-
30 April 2019	-385	-171	-	-556
Carrying amount 30 April 2019	887	493	348	1,728
At cost of acquisition and production				
1 January 2018	697	310	113	1,120
Additions	30	300	-	330
Transfers	-74	43	-	-31
Currency translation adjustments	-3	-1	-1	-5
Disposals	-7	-10	-	-17
31 December 2018	643	642	112	1,397
Accumulated amortisation and impairment losses				
1 January 2018	-387	-145	-	-532
Amortisation	-	-27	-	-27
Transfers	4	-	-	4
Currency translation adjustments	2	0	-	2
Disposals	1	10	-	11
Impairment losses	-	-	-	-
Reversal of impairment losses	-	-	-	-
31 December 2018	-380	-162	-	-542
Carrying amount 31 December 2018	263	480	112	855

Property, plant and equipment

€m	Land and buildings	Oil and gas assets	Other plant, machinery and equipment	Fixtures and fittings and office equipment	Total
At cost of acquisition and production					
1 January 2019	90	9,136	1	54	9,281
Changes in scope of consolidation	1	-	0	1	2
Adjustment according to IFRS 16	11	61	0	0	72
Additions	0	372	0	1	373
Transfers	0	0	0	0	0
Currency translation adjustments	0	165	0	1	166
Disposals	0	-4	-	0	-4
30 April 2019	102	9,730	1	57	9,890
Accumulated depreciation and impairment losses					
1 January 2019	-64	-5,853	-1	-43	-5,961
Changes in scope of consolidation	-	-	-	-	-
Depreciation	-2	-124	0	-1	-127
Transfers	-	-	-	-	-
Currency translation adjustments	0	-112	0	0	-112
Disposals	0	1	-	0	1
Impairment losses	-1	-87	-	-	-88
Reversal of impairment losses	-	13	-	-	13
30 April 2019	-67	-6,162	-1	-44	-6,274
Carrying amount 30 April 2019	35	3,568	0	13	3,616
At cost of acquisition and production					
1 January 2018	102	8,439	93	55	8,689
Changes in scope of consolidation	-13	-4	-100	-1	-118
Additions	0	963	9	3	975
Transfers	1	30	0	0	31
Currency translation adjustments	0	-68	-	0	-68
Disposals	0	-224	-1	-3	-228
31 December 2018	90	9,136	1	54	9,281
Accumulated depreciation and impairment losses					
1 January 2018	-72	-5,542	-80	-43	-5,737
Changes in scope of consolidation	11	3	79	1	94
Depreciation	-3	-284	0	-4	-291
Transfers	0	-4	-	0	-4
Currency translation adjustments	0	43	-	0	43
Disposals	0	99	0	3	102
Impairment losses	-	-178	-	-	-178
Reversal of impairment losses	-	10	-	-	10
31 December 2018	-64	-5,853	-1	-43	-5,961
Carrying amount 31 December 2018	26	3,283	0	11	3,320

Capitalised borrowing costs

In connection with the acquisition and production of qualified assets, in the reporting period borrowing costs amounting to €39m (2018: €76m) were capitalised as part of acquisition and production costs. In the reporting period the financing cost rate applied in this context was between 3.6 % and 4.6 % (2018: between 3.7 % and 4.3 %) as well as between 7.6 % and 7.8 % (2018: between 6.7 % and 7.3 %) for qualified assets of DEA Norge AS.

Impairment losses and reversal of impairment losses

For the impairment tests conducted, the recoverable amount was determined on the basis of the fair value less costs of disposal. The assumptions regarding oil and gas prices are based on forward prices for the first 3 years. From the 4th year a transition to a consensus price is applied. The consensus price is inflated by 2 % p. a. for the following years. The interest rates used for discounting future cash flows after tax range between 7.5 % and 10.5 % (2018: 7.0 - 9.5 %).

The net impairment of assets in the reporting period relates primarily to cash generating units in the following countries:

€m	Impairment	Reversal of impairment	Recoverable amount
Cash generating units in Germany	1	-	-
Cash generating units in Egypt	79	13	1,108
Cash generating units in Algeria	7	-	272
Cash generating units in Norway	1	-	-
	88	13	

The impairments had to be carried out because of lower profitability of assets. The reversals of impairment losses mainly arose from higher profitability.

The goodwill is allocated to the producing licences in Norway (€115m) and to exploration licences in Mexico (€233m). The goodwill in Mexico occurred in the scope of the initial consolidation of Sierra Oil & Gas as of 31 March 2019. For the impairment test of the goodwill in Norway an interest rate of 7.5 % (2018: 7.0 %) was applied. As in the previous year, there was no need for impairment.

(10) Financial receivables

€m	30-04-2019		31-12-2018	
	non-current	current	Non-current	current
Loans to related companies and participations	1	1,882	1,916	29
Other loans	0	-	0	-
	1	1,882	1,916	29

As of 31 December 2018, the non-current loans to related companies and participations mainly comprised a loan which had been granted in 2015 by WD Deutschland AG to L1E Funding GmbH in return for a debt assumption. In the reporting period, the loan was transferred from L1E Funding GmbH to L1E Acquisitions GmbH and subsequently replaced by a short-term on-demand loan. The on-demand loan amount to €1,700m as of 30 April 2019 and carries a fixed interest rate of 3 % p. a.

(11) Trade accounts receivable/other receivables and other assets

€m	30-04-2019		31-12-2018	
	non-current	current	non-current	current
Trade accounts receivable				
Trade accounts receivable from sales revenues	-	227	-	218
Other trade accounts receivable	-	24	-	46
	-	251	-	264
Other receivables and other assets				
Derivatives	7	-	46	10
Receivables from other taxes	-	43	-	31
Prepayments	-	71	-	27
Prepaid expense	2	23	2	12
Receivables from working interest reductions	-	9	8	12
Receivables from production underlift	-	12	-	6
Miscellaneous other assets	-	17	-	12
	9	175	56	110
	9	426	56	374

The carrying amounts of the financial assets largely correspond to their fair values.

(12) Inventories

€m	30-04-2019	31-12-2018
Raw materials, supplies and merchandise	83	82
Finished goods	1	1
	84	83

In the reporting period, net impairment losses amounting to €0m (2018: €0m) had to been taken into account.

(13) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and bank deposits with original maturities of up to three months.

(14) Equity

The subscribed capital and capital reserves relate to WD Deutschland AG. The subscribed capital is divided up into 13,440,000 shares with full voting rights. The shares in the company are completely held by L1E Acquisitions GmbH. A domination and profit and loss transfer agreement exists with L1E Acquisitions GmbH as controlling enterprise, that was terminated with effect as of 30 April 2019 24:00 hrs.

In the reporting period, capital increases in the amount of €1,275m took place. They were carried out as cash payments (€334m) and through capitalisation of shareholder loans (€941m).

(15) Provisions

The following discount rates are applied to determine the present value of non-current provisions:

	30-04-2019	31-12-2018
Decommissioning provisions	3.00 - 6.50 %	3.25 - 7.25 %
Provisions for anniversaries	1.00 %	1.39 %
Provisions for early retirement benefits/ severance payments/performance plan	0 % and 1.00 %	0.22/0.25 % and1.00 %
Other provisions		
with terms of 5 – 10 years	2.75 %	3.25 %
with terms of 1 – 4 years	1.75 and 3.25 %	2.25 and 3.50 %

€m	Decommissioning provisions	Other provisions	Pension Provisions	Total
As at 01-01-2019	474	182	186	842
Changes in the scope of consolidation	-	98	-	98
Addition	40	184	5	229
Release	-1	-30	-	-31
Interest component	8	0	-3	5
Other changes	8	1	-1	8
Amounts used	0	-17	-2	-19
As at 30-04-2019	529	418	185	1.132
Non-current	502	19	185	706
Current	27	399	-	426
	529	418	185	1.132

€m	Decommissioning provisions	Other provisions	Pension Provisions	Total
As at 01-01-2018	571	208	157	936
Changes in the scope of consolidation	-44	-1	-11	-56
Addition	14	30	15	59
Release	-84	-8	-	-92
Interest component	26	1	3	30
Other changes	-2	0	31	29
Amounts used	-7	-48	-9	-64
As at 31-12-2018	474	182	186	842
Non-current	446	25	186	657
Current	28	157	-	185
	474	182	186	842

Decommissioning provisions

The addition was essentially owing to lower discount rates year-on-year (€39m, in the previous year reversal of €-53m). The expected settlement date of the provision depends on the ratio of produced reserves to expected reserves and varies within a range of less than one year up to approx. 30 years.

Pension provisions

The company pension plan consists of defined-benefit and defined-contribution schemes. Defined-benefit schemes exist in Germany and Norway.

WD Deutschland AG has transferred assets to WillisTowers Watson Treuhand e. V. within the framework of Contractual Trust Arrangements (CTA) and to Willis Towers Watson Pensionsfonds AG for insolvency insurance of parts of the company pension plan. Willis Towers Watson Pensionsfonds AG falls under the scope of the Act on Supervision of Insurance Undertakings and Oversight by the Federal Financial Supervisory Agency (BaFin). Insofar as a regulatory deficit occurs in the pension fund, supplementary payment shall be requested from the employer. Independently of the aforementioned rules, the liability of the employer shall remain in place. The bodies of Willis Towers Watson Treuhand e. V. and Willis Towers Watson Pensionsfonds AG are responsible for ensuring that the funds under management are used in compliance with the contract and thus fulfil the requirements for recognition as plan assets.

Within the scope of the Contractual Trust Arrangement (CTA), €2m (2018: €8m) were transferred to Willis Towers Watson Treuhand e. V. in the reporting period.

The amount of the provision for defined-benefit pension schemes was determined by actuarial methods on the basis of the following underlying assumptions.

	30-04-2019		31-12-2018	
	Germany	Norway	Germany	Norway
Discount rate	1.55 %	2.50 %	1.75 %	2.80 %
Salary growth rate	2.35 %	2.75 %	2.35 %	2.75 %
Pension growth	1.00 and 1.60 %	0 - 2.50 %	1.00 and 1.60 %	0 - 2.50 %

Composition of plan assets (fair value) €m	30-04-2019				31-12-2018			
	Germany	thereof active market	Norway	thereof active market	Germany	thereof active market	Norway	thereof active market
Equity instruments	130	130	-	-	119	119	-	-
Interest-bearing instruments	265	265	-	-	262	262	-	-
Assets held by insurance company	-	-	18	-	-	-	17	-
Other	12	12	-	-	2	2	-	-
	407	407	18	-	383	383	17	-

Pension assets are continuously monitored and managed from a risk and return perspective. The allocation of funds to different asset-classes is based on detailed analysis of the plan assets and pension obligations as well as their interactions. In 2018, a comprehensive Asset-Liability-Management-Study (ALM-Study) was conducted. As target values, several key asset indicators are considered relative to the amount of pension obligations in various scenarios. Thereby, particularly sensitivities of the obligation and pension assets to changes in market interest rates are taken into account. By comparing different asset allocations, those portfolios are identified that achieve the best target value within a given risk budget. On the basis of these efficient portfolios, the strategic asset allocation is derived. Based on the results of the ALM-Study, the asset allocation was further refined by the addition of several new asset classes. The new strategic asset allocation was implemented in Q4/2018.

The focus of the strategic investment policy continues to be on European government and corporate bonds with strong creditworthiness (investment grade ratings). The portfolio also includes higher yielding asset classes such as high-yield corporate bonds and emerging-market bonds. Compared to bonds, global equities have a lower portfolio weight. The investment in equities is intended to earn a risk premium in excess of bonds over the long term.

€m	Present value of defined benefit obligations	Fair value of plan assets	Total
As at 01-01-2019	**586**	**-400**	**186**
Current service cost	5	-	5
Interest expense/(income)	4	-7	3
	9	**-7**	**2**
Remeasurements			
Return on plan assets, excluding amounts already recognised in interest income	-	-25	-25
Gains/losses from changes in financial assumptions	21	-	21
Experience gains/losses	3	-	3
	24	**-25**	**-1**
Effect of exchange rate differences	1	-1	0
Contribution to the funded plans:			
Employer	-	-2	-2
Employee	0	0	0
Benefit payments	-10	10	0
As at 30-04-2019	**610**	**-425**	**185**
As at 01-01-2018	**592**	**-435**	**157**
Current service cost	15	-	15
Interest expense/(income)	10	-7	3
	25	**-7**	**18**
Remeasurements			
Return on plan assets, excluding amounts already recognised in interest income	-	20	20
Gains/losses from changes in financial assumptions	-2	-	-2
Gains/losses from changes in demographical assumptions	6	-	6
Experience gains/losses	7	-	7
	7	**20**	**27**
Effect of exchange rate differences	0	0	0
Contribution to the funded plans:			
Employer	-	-8	-8
Employee	0	0	0
Benefit payments	-30	29	-1
Changes in the scope of consolidation	-12	1	-11
As at 31-12-2018	**586**	**-400**	**186**

The present value of the defined benefit obligations less plan assets measured at fair value results in the net defined benefit obligation arising from funded and unfunded plans and is recognised as provisions for pensions and similar obligations in the balance sheet. Of the present value of defined benefit obligations €578m (2018: €558m) refer to benefit obligations in Germany and €32m (2018: €28m) to benefit obligations in Norway.

Domestic company pensions are subject to an obligation to review for adjustment every three years pursuant to the Act on the Improvement of Company Pensions (Sec 16 of the German Company Pension Act (BetrAVG)). Additionally, some commitments grant annual adjustments of pensions, which may exceed the legally mandated adjustment obligation.

The weighted average duration of the pension obligations is 16 years in Germany (2018: 16 years) and 14 or 28 years in Norway (2018: 15 or 27 years).

An increase or decrease in the discount rate and in salary and pension growth would have the following impact on the defined benefit obligations:

	Change in actuarial assumptions	Impact on defined benefit obligations			
		30-04-2019		31-12-2018	
€m		in Germany	in Norway	in Germany	in Norway
Discount rate	Increase by 0.5 percentage points	-44	-4	-41	-4
	Reduction by 0.5 percentage points	50	5	48	4
Salary growth	Increase by 0.5 percentage points	4	2	5	1
	Reduction by 0.5 percentage points	-4	-2	-5	-1
Pension growth	Increase by 0.5 percentage points	28	3	27	2
	Reduction by 0.5 percentage points	-26	-3	-25	-2
Life expectancy	Increase by 1 year	29	1	28	1

The sensitivity analyses are based on a change in one assumption, with all other assumptions remaining unchanged. Actual developments will probably be different from this. The methods for calculating the aforementioned sensitivities and for calculating the pension provisions are in agreement.

The dependence of pension provisions on market interest rates is limited by an opposite effect. The background to this is that the commitments stemming from company pension plans are primarily covered by funds, and plan assets mostly exhibit a negative correlation with the market yields of fixed-interest securities. Consequently, declines in market interest rates are typically reflected in an increase in plan assets, and vice-versa.

For defined-contribution plans, expenses of €1m (2018: €0m) were incurred in the reporting period.

In the year 2019 contributions into the CTA will be processed in a magnitude that achieve a constant funding level. The amount to be contributed will depend on i.a. plan-asset performance and interest rate developments.

(16) Debt to banks and financial debt

€m	30-04-2019		31-12-2018	
	non-current	current	non-current	current
Debt to banks	-	1,893	1,441	6
Financial debt to related companies	-	242	1,041	396
Other financial debt	51	18	-	-
	51	2,153	2,482	402

Debt to banks

With effect from 2 April 2015, WD Deutschland AG assumed the rights and obligations of a senior secured reserve-based lending facility (RBL facility), which had been concluded between L1E Funding GmbH and a banking syndicate as of 30 December 2014. The RBL is a revolving USD2,300m credit facility with a term ending in December 2021.

In the reporting period, WD Deutschland AG completely repaid the existing USD loan (USD1,500m) and an EUR loan in the amount of €1,625m was drawn. At DEA Norge AS, the existing USD loan was increased by USD150m. As of 30 April 2019, a total loan amount of €1,892m was utilised by WD Deutschland AG Group. The floating interest rate was LIBOR plus a margin of 2.75 % during the reporting period.

The RBL facility is secured by a pledge over the shares of certain group companies and by a charge over some of the bank accounts of the pledged companies and over all existing hedging transactions within the WD Deutschland AG Group. Regarding the unrealised market values of our derivatives we refer to note 19. The pledged amount of the shares is represented by the accounting value of net assets of the respective group companies.

Following the merger with Wintershall Dea GmbH (see note 25), the utilised RBL loans were completely repaid on 2 May 2019 and are therefore shown as short-term liabilities at the balance sheet date.

Financial debt to related parties

	30-04-2019				31-12-2018			
	Carrying amount €m	Currency	Term	Interest rate	Carrying amount €m	Currency	Term	Interest rate
Shareholder loan from 25 February 2015	-	-	-	-	472	EUR	2024	LIBOR plus margin
Revolving shareholder loan	-	-	-	-	175	USD	2024	LIBOR plus margin
Total shareholder loans	-	-			647			
On-demand loan from L1E Finance GmbH & Co. KG	242	USD	repayable at any time[1)]	8.50 %	-	-	-	-
Loan from DEA Finance SA	-	-	-	-	400	EUR	2022	7.55 %
Liability from net profit transfer	-	-	-	-	390	EUR	-	-

1) Maximum term until 31 May 2019

In the run-up to the merger with Wintershall Dea GmbH, the loan granted by DEA Finance SA was completely repaid by DEA Norge AS. The repayment was financed, inter alia, by a short-term loan from L1E Finance GmbH & Co. KG which has also been repaid on 2 May 2019.

Moreover, after partial settlement with financial receivables, both shareholder loans were capitalised into the capital reserves of WD Deutschland AG.

The carrying amounts are close to their fair values.

Liabilities arising from financing activities reconcile to the cash flows in the cash flow statement as follows:

€m	01-01-2019	Cash flows from repayments/ proceeds	Changes in scope of consolidation	First time adaption IFRS 16	Foreign currency valuation	Changes in accrued interest	Other changes	30-04-2019
Debt to banks	1,447	425	-	-	26	-5	-	1,893
Financial debt to related companies	1,437	-547	-	-	3	7	-658	242
Lease liabilities	-	-6	1	72	2	-	-	69

€m	01-01-2018	Cash flows from repayments/ proceeds	Foreign currency valuation	Changes in accrued interest	Other changes	31-12-2018
Debt to banks	1,334	39	68	6	-	1,447
Financial debt	1,129	-130	7	20	411	1,437

(17) Trade accounts payable/other liabilities

€m	30-04-2019		31-12-2018	
	non-current	current	non-current	current
Trade accounts payable	-	353	-	298
Other liabilities				
Derivatives	12	36	-	-
Liabilities arising from other taxes	-	11	-	7
Prepayments - contract liabilities	4	28	4	3
Liabilities from production overlift	-	21	-	2
Accrued future overlifts oil	-	7	-	19
Liabilities from acquisitions/ divestures	-	6	-	195
Other miscellaneous liabilities	-	19	-	11
	16	128	4	237
	16	481	4	535

Trade accounts payable and financial instruments reported under other liabilities generally have short residual terms of maturity. The carrying amounts accounted for therefore are close to their fair values. The derivatives are recorded at fair value.

(18) Lease agreements

The lease agreements of the Group are essentially related to transport and production vessels, office buildings, drilling rigs and other assets used in operations.

The capitalised right of use assets are allocated to the following asset categories:

€m	Land and buildings	Oil and gas assets	Other plant, machinery and equipment	Fixtures and fittings and office equipment	Total
Carrying amount as of 30 April 2019	11	56	0	1	68
Additions	-	-	-	0	0
Depreciation	1	6	0	0	7

Lease liabilities are recognised as other financial liabilities:

€m	30-04-2019
Non-current lease liabilities	51
Current lease liabilities	18
Total	69

Some of the leases contain price-adjustment clauses as well as extensions and termination options. Such options are taken into account in the determination of the lease term only if extension or non-termination options can be assumed with reasonable certainty. On this basis, possible additional lease payments amounting to €2m were not included in the measurement of the lease liabilities.

Future lease commitments relating to leases that have not yet commenced as of 30 April 2019, amount to €17m.

The following amounts have been recognised in the income statement:

€m	Jan. - Apr. 2019
Depreciation right of use assets	7
Interest expenses on lease liabilities	1
Expense relating to short-term leases	1
Expense relating to leases of low-value assets (not including short-term leases)	0
Expense from variable lease payments	0

The cash flow statement comprises cash outflows for leases amounting to €6m. In addition to the cash payments for the interest and principal portions of recognised lease liabilities, amounts reported in the cash flow statement also include payments for unrecognised short-term leases and for leases of low-value assets. Cash payments for the principal portion are within cash flow from financing activities and those for the interest portion are reported within the cash flow from operating activities.

(19) Reporting on financial instruments

Financial assets measured at fair value

The following overview represents the financial instruments to be recognised at fair value and the essential parameters on which the measurement is based. The individual levels are defined according to IFRS 13 as follows:

Level 1: Measurement at (unadjusted) prices quoted for identical assets or liabilities on active markets.

Level 2: Measurement based on inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3: Measurement on the basis of unobservable inputs.

Fair value hierarchy	30-04-2019			
€m	Total	Level 1	Level 2	Level 3
Financial investments	3			3
Derivative financial assets	7		7	
Derivative financial liabilities	48		48	

Fair value hierarchy	31-12-2018			
€m	Total	Level 1	Level 2	Level 3
Financial investments	3			3
Derivative financial assets	56		56	
Derivative financial liabilities	-		-	

Fair values of derivative financial assets and liabilities are determined using customary market valuation methods taking into account the market data available on the measurement date as well as the default risk. For financial investments costs are an appropriate estimate of fair value.

No transfers between the levels occurred during the period under review or during the previous year.

In the reporting period, fair values of level 3 instruments have not changed. In the previous year, they developed as follows:

Development of level 3 financial instruments €m	As of 01-01-2018	Changes recognised in profit or loss	Transfer	Changes with a cash effect	As of 31-12-2018
Financial investments	4		-2	1	3

Netting agreements

In the reporting period, trade accounts payable amounting to €-m (2018: €23m) were netted with trade accounts receivable amounting to €-m (2018: €24m) on the basis of an unconditional netting agreement.

Valuation categories

Financial assets and liabilities have been assigned to the following valuation categories according to IFRS 9:

	30-04-2019				
€m	Amortised costs	FVPL	FV (in hedge relationship)	Beyond the scope of IFRS 9/IFRS 7	Total
Financial investments	-	3	-	-	3
Financial receivables	1,883	-	-	-	1,883
Trade accounts receivable	251	-	-	-	251
Other accounts receivable and other assets					
Derivatives	-	-	7	-	7
Other	13	-	-	164	177
Cash and cash equivalents	171	-	-	-	171
Debt to banks	1,893	-	-	-	1,893
Financial liabilities	311	-	-	-	311
Trade accounts payable	353	-	-	-	353
Other liabilities					
Derivatives	-	-	47	-	47
Other	38	-	-	59	97

€m	31-12-2018 Amortised costs	FVPL	FV (in hedge relationship)	Beyond the scope of IFRS 9/IFRS 7	Total
Financial investments	-	3	-	-	3
Financial receivables	1,945	-	-	-	1,945
Trade accounts receivable	264	-	-	-	264
Other accounts receivable and other assets					
Derivatives	-	-	56	-	56
Other	17	-	-	93	110
Cash and cash equivalents	305	-	-	-	305
Debt to banks	1,447	-	-	-	1,447
Financial liabilities	1,437	-	-	-	1,437
Trade accounts payable	298	-	-	-	298
Other liabilities					
Derivatives	-	-	-	-	-
Other	220	-	-	21	241

Financial risks and sensitivity analysis

As an E&P enterprise operating on an international scale, the WD Deutschland AG Group is exposed to credit, liquidity, interest rate and market risks (price and currency risks) within the ordinary course of its business. Our subsidiaries are subject to a strict risk management regime. The scope of action, responsibilities and controls is enshrined in binding, internal corporate instructions. Financial derivatives are used exclusively to hedge the risk related to underlying operations, not for speculative purposes.

Market risks

Market risks result in particular from changes in oil and gas commodity prices, changes in USD/EUR and USD/NOK exchange rates and corresponding unexpected negative changes regarding planned incoming and outgoing payments. In addition, currency risks arising from financial transactions between companies in the WD Deutschland AG Group may result if the functional currencies of the two partners do not match.

Risk management strategy for commodity risks

Commodity price risks are mitigated in the WD Deutschland AG Group using systematic risk management methods. The principles are defined in WD Deutschland AG's commodity hedge policy.

All hedging transactions serve the exclusive purpose of covering the risk from operational transactions as well as underlying transactions accounted for or expected with a high degree of probability. According to our hedging policy, we intend to continue hedging oil and gas prices in the

future in order to stabilise the RBL borrowing base and thus give the management time to adapt the strategy to a low price scenario. The extent of the amounts to be hedged depends on economic exposure and prevailing oil and gas prices. The maximum hedge volume is set to 50 % of the economic exposure after tax.

Physical forward sales are used in the gas sector to stabilise parts of the gas revenues until 2023. In addition, financial derivatives are used to hedge oil price risks arising from payments received for future oil revenues. As of 30 April 2019, parts of our oil sales are hedged until 2022. The German oil production currently serves as a hedge item for achieving the hedging target. The price of the hedged item is defined via a price formula in the sales contract. The instruments used are Brent dated oil swaps for which a liquid market exists. Furthermore, a regression analysis shows a high correlation between Brent dated oil and the price formula. This is also the basis to determine the hedge ratio in order to achieve the highest level of hedge efficiency.

Derivative financial instruments

Derivative financial instruments are measured at fair value. In interpreting positive or negative fair values, it has to be considered that they are offset by underlying transactions with compensating risks. All derivative financial instruments are reported as assets or liabilities. Measurement of the fair values of financial derivatives is performed by using current market price quotations within a trading system developed externally for the commodity markets. On this basis commodity price swaps are valued by means of internal computations of the relevant swap curves and subsequent discounting as at the balance sheet date. Credit Value Adjustments (CVA) and Adjustments for Own Credit Risk (DVA) are applied to all derivatives. The CVA adjustment depends on the expected positive risk exposure and on the creditworthiness of the counterparty. DVA is determined by the expected negative exposure and the credit quality of the WD Deutschland AG. The exposure calculation implied all derivatives and is based on a Monte Carlo approach by using market values and market-based default probabilities.

Effects of hedge accounting on financial positions and performance:

Crude oil swaps €m	30-04-2019/ Jan. - Apr. 2019	31-12-2018/ Jan. - Dec. 2018
Carrying amount		
Other assets	7	56
Other liabilities	48	-
Nominal amount	643	692
Maturity date	5/2019 - 12/2022	1/2019 - 12/2022
Amounts recognised in profit or loss or other comprehensive income		
Change in fair value of hedging instrument recognised in OCI	105	-45
Reclassified from OCI to profit or loss (revenues)	-8	-50

Hedge ineffectiveness is determined at inception of the hedge relationship and through periodic prospective effectiveness assessment to ensure that an economic relationship exists between the hedged item and hedging instrument. At WD Deutschland AG Group sources of ineffectiveness result from CVA/DVA adjustments and from a change in the correlation of the hedged item and the hedging instrument.

Hedge ineffectiveness as of 30 April 2019 is calculated as follows:

€m	Jan. - Apr. 2019	Jan. - Dec. 2018
Change in fair value of the hedging instrument	-41	56
Change in fair value of the hedged item	41	-57
Hedge ineffectiveness	0	1

In the reporting period, hedge ineffectiveness to be recognised in profit or loss amounts to €0m (2018: €0m).

Sensitivity analysis for financial instruments in the scope of IFRS 7

To quantify the risk relating to market price fluctuations and financial instruments deployed, we use the sensitivity method. In quantifying market prices using the sensitivity method, a statement is made concerning the impact on earnings of a percentage-based change in market prices. The sensitivity figures shown below in accordance with the regulations of IFRS 7 refer only to financial instruments recognised in the balance sheet. Therefore, the reporting of the risk position of the WD Deutschland AG Group is incomplete.

The following table presents changes in the market values of concluded commodity hedge instruments that would have resulted from a 10 % increase or decline in the oil price. The underlying transactions are not taken into account. The calculation of oil price sensitivities is based on Brent quotations. Moreover, changes to the market values of loan liabilities in USD as well as USD receivables arising from Egyptian activities that would have occurred both in the event of an increase and a decline by 10 % in the USD forward curve in relation to the EUR or NOK, respectively, are presented. The presentation of market value changes is in each case shown after taxes. The corporate tax rate of 30.56 % (2018: 30.56 %) is applied.

€m	January - April 2019		January - December 2018	
	Changes impacting on profit and loss	Impacts on other comprehensive income	Changes impacting on profit and loss	Impacts on other comprehensive income
Increase in USD by 10 %	8		-86	
Decrease in USD by 10 %	-10		107	
Increase in oil price by 10 %		-48		-58
Decrease in oil price by 10 %		43		52

Credit risk

Credit risk is the risk that a counterparty will not meet its obligation under a financial instrument or customer contract, leading to financial loss. WD Deutschland AG Group is exposed to credit risk from its operating activities (primarily trade accounts receivable) and from its financing activities, including deposits with banks and financial institutions, favourable derivative financial instruments (positive fair value) and other financial receivables.

Risk management

Credit risk is managed on a group basis. To manage credit risk, the WD Deutschland AG Group has group-wide procedures in place covering the application for credit approvals, granting and renewal of counterparty limits, proactive monitoring of exposures against these limits and requirements triggering secured payment terms. As part of these processes, the credit exposures with all counterparties are regularly monitored and assessed on a timely basis. For banks and financial institutions, only independently rated parties with an investment grade rating are accepted.

If customers are independently rated, these ratings are used. Otherwise, if there is no independent rating, risk control assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. Individual risk limits are set based on internal or external ratings in accordance with set limits. There are no significant concentrations of credit risk, whether through exposure to individual customers or regions. Country specific payment risks are within limits stipulated by the management and closely monitored.

A default event occurs if management has one or more reasons to believe that a customer will not repay his liability towards WD Deutschland AG Group, mainly due to financial difficulty of the customer. A delay of payments in the cause of regular business practices does not alone indicate a customer default. An assessment of the overall situation is required on a case-by-case basis.

The maximum risk of default corresponds to the carrying amounts (less loss allowance) of the financial assets. For some trade accounts receivable the Group obtains security in the form of guarantees, deeds of undertaking or letters of credit which can be called upon if the counterparty is in default under the terms of agreement.

Financial assets are written off when there is no reasonable expectation of recovery of contractual cash flows. The loss from financial assets that are written off is not material for both, the reporting period and the previous year.

Impairment of financial assets

In order to determine the impairment losses of financial assets, WD Deutschland AG Group is using the general three-stage approach or the simplified approach according to IFRS 9, as applicable. For all financial assets, for which the simplified approach does not apply, it is assessed, at each reporting date, whether the credit risk on a financial instrument has increased significantly since initial recognition.

The following financial assets are subject to the expected credit loss model:

- Trade accounts receivables
- Other receivables
- Financial receivables and deposit with banks

For all trade accounts receivables, WD Deutschland AG Group applies the simplified approach. Accordingly, the loss allowance is measured at an amount equal to the lifetime expected credit losses. For trade accounts receivables the contractual payment term is usually 30 days. Deviating from this general rule terms of up to 2 years are considered for the calculation of expected credit losses due to different regional payment practice.

The loss allowance for other receivables, financial receivables and deposits with banks is measured at an amount equal to 12-month expected credit loss.

The loss allowance was determined as follows:

€m	Financial receivables	Trade accounts receivable	Other receivables	Total
As at 01-01-2019	8	20	1	29
Impairment losses	0	9	0	9
Reversal of impairment losses	-8	-5	0	-13
Currency translation adjustments	-	-	-	-
As at 30-04-2019	-	24	1	25

€m	Financial receivables	Trade accounts receivable	Other receivables	Total
As at 01-01-2018	17	22	0	39
Impairment losses	1	19	1	21
Reversal of impairment losses	-10	-21	0	-31
Currency translation adjustments	-	-	-	-
As at 31-12-2018	8	20	1	29

The identified impairment loss regarding deposits with banks was immaterial and therefore not recognised.

Liquidity risk

Our liquidity risk management ensures that the required liquidity to meet financial obligations is available at all times and that the liquidity position of the WD Deutschland AG Group is optimised. Centralised financial planning for the WD Deutschland AG Group is the basis of the liquidity risk management. Financial planning for the respective currencies is effected for the following twelve months on a monthly basis and for the following two months on a daily basis.

We monitor our liquidity risk by reviewing our cash flow requirements on a regular basis taking into consideration our funding sources, existing bank facilities and cash flow generation from our producing asset base. Specifically, we ensure that we have sufficient liquidity to meet our operational funding requirements and debt servicing. As part of the liquidity risk management, we also carry out sensitivity analyses and monitor compliance with the financial covenants defined in the RBL facility. In particular, the ratio of net debt to EBITDAX should not exceed a factor of 3 : 1. The calculation is based on definitions determined in the agreement. In the event of non-compliance with the financial covenants - if not cured through additional equity ("equity cure") - the lenders are allowed to declare that the loan is immediately due and payable. The financial covenants were complied with at all times during the reporting period.

Financial liabilities within the scope of application of IFRS 7 in the next several years are expected to result in the following amortisation payments:

€m	Carrying amounts 30-04-2019	Amortisation payments 1st succeeding year	2nd - 5th succeeding year	from 6th succeeding year
Debt to banks	1,893	1,893		
Financial debt to related parties	242	242		
Lease liabilities	69	19	44	14
Derivative financial liabilities	48	36	12	
Miscellaneous financial liabilities	391	391		

€m	Carrying amounts 31-12-2018	Amortisation payments 1st succeeding year	2nd - 5th succeeding year	from 6th succeeding year
Debt to banks	1,447	6	1,441	
Other financial debt	1,437	396	400	647
Miscellaneous financial liabilities	518	518		

Interest rate risk

As of 30 April 2019, the WD Deutschland AG Group has financial debt that bear floating interest rates. Following the merger, the financial debt will be replaced by a new group financing. Therefore an interest rate risk with regard to the financial debt as of 30 April 2019 does not exist.

(20) Capital management

In the future, the capital management system of WD Deutschland AG will be determined by the strategic objectives of the new shareholder Wintershall Dea GmbH. As mentioned above, the existing financing will be replaced by a new group financing.

(21) Contingent and financial liabilities

WD Deutschland AG Group is subject to statutory liability with regard to participations in various joint ownerships.

In the course of their regular business activities, WD Deutschland AG Group companies are involved in legal disputes. Irrespective of the outcome of such legal disputes, we do not expect any significant negative effects on the economic and financial position of the WD Deutschland AG Group.

The WD Deutschland AG Group has commitments from firm contracts for property, plant and equipment and from field development projects amounting to €204m (2018: €238m) and exploration commitments in the context of concession agreements amounting to €125m (2018: €75m).

(22) Related party disclosures

The WD Deutschland AG Group is controlled by L1E Acquisitions GmbH (incorporated in Germany) which owns 100 % of the shares in WD Deutschland AG. The Group's ultimate parent is LetterOne Holdings S.A. (incorporated in Luxembourg). Related companies are all companies in which LetterOne Holdings S.A. or their controlling shareholders have at least a significant holding.

	LetterOne Group affiliated companies	
€m	30-04-2019/ Jan. - Apr. 2019	31-12-2018/ Jan. - Dec. 2018
Financial receivables	1,700	1,944
Trade accounts receivable	4	0
Receivable from net loss transfer	182	-
Financial debt	242	1,047
Liabilities from net profit transfer	-	390
Trade accounts payable	9	5
General and administrative expenses	6	2
Interest income	18	94
Interest expenses	38	50
Other financial expenses	1	4

All transactions are subject to market terms and conditions.

Related persons are the members of the Board of Management and Supervisory Board of WD Deutschland AG and of the parent company. No business relations exist with members of the Board of Management and of the Supervisory Board or individuals close to them.

No renumeration was paid to the members of the Supervisory Board of WD Deutschland AG in the short fiscal year. Each Supervisory Board member receives fixed remuneration to an unchanged amount of €20k per calendar year for his or her activities. The Chairman receives twice this amount, and his Deputy one-and-a-half times the annual fixed remuneration. In addition, expenses incurred are refunded. Some employee representatives on the Supervisory Board have labour contracts with WD Deutschland AG. Remuneration occurs in accordance with relevant contractual conditions.

Remuneration paid to members of the Board of Management consists of a fixed and a performance-related variable component as current remuneration components. The remuneration paid to the Board of Management of WD Deutschland AG for the fiscal year amounted to €3m (2018: €4m), including variable remuneration of €2m (2018: €1m). In addition, the fixed remuneration component for members of the Board of Management includes non-cash and other perquisites essentially comprising the values to be recognised subject to tax directives for the use of company cars and insurance premiums for accident insurance.

Furthermore, (direct) pension commitments have been granted to the members of the Board of Management, entitling them to life-long pensions and benefits for their surviving dependants. The present value of the overall commitment (defined benefit obligation) amounts to €178k as at 30 April 2019 (31-12-2018: €168k). Pension service costs total €-k (2018: €-k).

The Members of the Board also receive a remuneration component with a long-term incentive effect in the form of a performance cash plan with an overall 5-year performance period and deferred annual cash payments after performance periods of 3, 4 and 5 years. The key performance indicator is a defined increase in the net asset value of the WD Deutschland AG Group (calculated as an annualised "internal rate of return"). The annually-determined net asset value is based primarily on the discounted cash flow method and has to be reviewed by the Personnel Committee and approved by the Supervisory Board. As of 31 December 2018, the fair value of the long-term performance plan amounted to €907k. In the course of the merger with Wintershall Dea GmbH, the performance plan was paid off. The payments are part of the above mentioned variable remuneration.

(23) Joint Operations

The following joint operations are structured as separate entities:

Name	Nature of the joint arrangements	Principal place of business	Ownership interest/ voting rights %
SUEZ OIL COMPANY (Suco)	Operating company for the development and production phase	Cairo, Egypt	50.00
DEMINEX EGYPT OIL COMPANY (Deoco)	Operating company for the development and production phase; performed by Suco as a service	Cairo, Egypt	50.00
DISOUQ PETROLEUM COMPANY (DISOUCO)	Operating company for the development and production phase; performed by Suco as a service	Cairo, Egypt	50.00
Groupement Reggane	Operating company for the development and production phase	Algiers, Algeria	19.50

(24) Auditor's fees

WD Deutschland AG Group recognised the following fees as expenses for the services rendered by the auditors of the consolidated financial statements, PricewaterhouseCoopers GmbH Wirtschafts-prüfungsgesellschaft (PwC) and companies belonging to PwC's international network:

€k	Jan. - Apr. 2019	Jan. - Dec. 2018
Audit services	358	645
Tax services	22	39
Other services	-81	697

Thereof attributable to PwC Germany:

€k	Jan. - Apr. 2019	Jan. - Dec. 2018
Audit services	239	266
Tax services	21	34
Other services	-90	697

The fees for audit services primarily contain the fees for the audit of the consolidated financial statements and for the audits of the financial statements of WD Deutschland AG and its subsidiaries. In particular, the fees for tax services include compensation for consultation in the preparation of tax returns and other national and international tax-related matters. The fees for other services are mainly related to project-specific advisory and assurance services and comprise in the reporting period a gain from the reversal of accruals in the amount of €121k.

(25) Events after the balance sheet date

On 27 September 2018, the shareholder, L1E Acquisitions GmbH, Letterone Holdings S.A., BASF SE, BASF Handels- und Exportgesellschaft mit beschränkter Haftung and former Wintershall Holding GmbH entered into a business combination agreement regarding the combination of the oil and gas business of Letterone with the oil and gas business of BASF. To effect this business combination, L1E Acquisitions GmbH has contributed all shares in the company into Wintershall with effect as of 30 April 2019, 24:00 hrs, against issuance of new shares as well as an assumption of a loan liability (on-demand loan) of the shareholder to the company by Wintershall. In order to prepare and implement the closing, the restructurings and set-offs of existing loan and financing agreements mentioned under note (10) and (16) have been carried out.

(26) List of holdings of Wintershall Dea Deutschland AG according to Section 313 Para. 2 of the German Commercial Code (HGB)

	Share of capital %
Affiliated companies which are included in the consolidated financial statements	
Coronado Energia S. de R.L. de C.V., Mexico-Stadt/Mexico	100.00
DEA Cyrenaica GmbH, Hamburg	100.00
DEA E&P GmbH, Hamburg	100.00
DEA Global Limited, London/Great Britain	100.00
DEA International GmbH, Hamburg [1)]	100.00
DEA Nederland B.V., Amsterdam/Netherlands	100.00
DEA Nederland Erdoel B.V., Amsterdam/Netherlands	100.00
DEA Nederland Upstream B.V., Amsterdam/Netherlands	100.00
DEA Nile GmbH, Hamburg	100.00
DEA Norge AS, Stavanger/Norway	100.00
DEA North Africa/Middle East GmbH, Hamburg [1)]	100.00
DEA Suez GmbH, Hamburg[)]	100.00
DEA Suriname GmbH, Hamburg	100.00
DEA Trinidad & Tobago GmbH, Hamburg	100.00
DEA Upstream Polska Sp. z o.o., Warsaw/Poland	100.00
DEA WND GmbH, Hamburg	100.00
DEM México Erdoel S.A.P.I. de C.V., Mexico-City/Mexico	100.00
DEM México-Alemania S. de R.L. de C.V., Mexico-City/Mexico	100.00
DEM México Upstream S.A.P.I. de C.V., Mexico-City/Mexico	100.00
Deutsche Erdoel México S. de R.L. de C.V., Mexico-City/Mexico	100.00
Itza Energia S. de R.L. de C.V., Mexico-City/Mexico	100.00
Nevada Energia S. de R.L. de C.V., Mexico-City/Mexico	100.00
Paricutin Energia LLC, Houston/USA	100.00
Perote Energia S. de R.L. de C.V., Mexico-City/Mexico	100.00
Sierra Blanca Energia S. de R.L. de C.V., Mexico-City/Mexico	100.00
Sierra Blanca P&D S. de R.L. de C.V., Mexico-City/Mexico	100.00
Sierra Coronado E&P S. de R.L. de C.V., Mexico-City/Mexico	100.00
Sierra Nevada E&P S. de R.L. de C.V., Mexico-City/Mexico	100.00
Sierra O&G Exploración y Producción S. de R.L. de CM. Vex Ico., Mexico-City/Mexico	100.00
Sierra Offshore Exploración S. de R.L. de C.V., Mexico-City/Mexico	100.00
Sierra Oil & Gas Holdings L.P., Toronto/Canada	100.00
Sierra Oil & Gas Management Holdings B.V., Amsterdam/Netherlands	100.00
Sierra Oil & Gas S. de R.L. de C.V., Mexico-City/Mexico	100.00
Sierra Perote E&P S. de R.L. de C.V., Mexico-City/Mexico	100.00
Xitle Energia S. de R.L. de C.V., Mexico-City/Mexico	100.00
Affiliated companies which are not included in the consolidated financial statements	
DEA México Holdings GP Limited, Saint John/Canada	100.00
DEA Petróleo e Gás do Brasil Ltda., Rio de Janeiro/Brazil	100.00
DEA Ukraine LLC, Kiev/Ukraine	

1) Application of Section 264 Para. 3 of the German Commercial Code (HGB)

Supervisory Board, Management Board

Supervisory Board

Mario Mehren, Kassel/Hamburg (Chairman) (since 1 May 2019)
Member and Executive Chairman Management Board Wintershall Dea GmbH

Günther Prien, Hamburg (Deputy Chairman)
Chairman of the Joint Works Council, Wintershall Dea Deutschland AG

Uwe Balasus-Lange, Kassel (since 1 January 2019)
Senior Vice President Global Production and Operational Excellence, Wintershall Dea GmbH

Hugo Dijkgraaf, Kassel/Hamburg (since 1 May 2019)
Member Management Board Wintershall Dea GmbH

Daniela Freise, Hamburg
Manager Risk Controlling & Back Office, Treasury, Wintershall Dea Deutschland AG

Franz-Gerd Hörnschemeyer, Hanover
Political Union Secretary, Union of the Mining, Chemical and Energy Industries

Maria Moræus Hanssen, Kassel/Hamburg (since 1 May 2019)
Member Management Board Wintershall Dea GmbH

Rajko Pientka, Hamburg
Political Union Secretary, Union of the Mining, Chemical and Energy Industries

Andreas Schöpf, Lachendorf
Chairman of the Works Council Betriebe Wietze, Wintershall Dea Deutschland AG

Paul Smith, Kassel/Hamburg (since 1 May 2019)
Member Management Board Wintershall Dea GmbH

Thilo Wieland, Kassel/Hamburg (since 1 May 2019)
Member Management Board Wintershall Dea GmbH

Prof. Dr. Mathias Wolkewitz, Kassel (since 1 May 2019)
General Counsel Wintershall Dea GmbH

Lord Edmund John Phillip Browne of Madingley, London (Chairman) (until 30 April 2019)
Executive Chairman, L1 Energy (UK) LLP

Mikhail Fridman, London/Moscow (until 30 April 2019)
Chairman, LetterOne Holdings S.A.

Andreas J. Goss, Duisburg (until 30 April 2019)
Executive Chairman, ThyssenKrupp Steel Europe AG

German Khan, London/Moscow (until 30 April 2019)
Director, LetterOne Holdings S.A.

Dr Jan Konerding, Hamburg (until 30 April 2019)
Auditor, Tax Advisor, Lawyer

Alf Henryk Wulf, Stuttgart (until 30 April 2019)
Executive Chairman, BWCon Baden-Württemberg: Connected e.V.

Board of Management
Dirk Warzecha (Chairman)
Responsible for: Chairing the Board (since 1 May 2019) and Operations

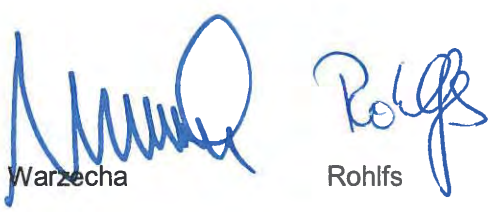
Karsten Rohlfs (since 1 May 2019)
Responsible for: Finance

Maria Moræus Hanssen (Chairwoman) (until 30 April 2019)
Responsible for: Chairing the Board

Dmitry Avdeev (until 30 April 2019)
Responsible for: Finance

Hamburg, 18 June 2019

The Board of Management



Warzecha Rohlfs

The following auditor's report (Bestätigungsvermerk) has been issued in accordance with Section 322 German Commercial Code (Handelsgesetzbuch) on the consolidated financial statements and group management report (Konzernlagebericht) of Wintershall Dea Deutschland AG (formerly DEA Deutsche Erdoel AG), Hamburg as of and for the short fiscal year ended April 30, 2019. The group management report is neither included nor incorporated by reference in this Offering Memorandum.

Independent Auditor's Report

To Wintershall Dea Deutschland AG (formerly DEA Deutsche Erdoel AG), Hamburg

Audit Opinions

We have audited the consolidated financial statements of Wintershall Dea Deutschland AG (formerly DEA Deutsche Erdoel AG), Hamburg, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at April 30, 2019, and the consolidated statement of comprehensive income, consolidated statement of profit or loss, consolidated statement of changes in equity and consolidated statement of cash flows for the short financial year from January 1 to April 30, 2019, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of Wintershall Dea Deutschland AG (formerly DEA Deutsche Erdoel AG) for the short financial year from January 1 to April 30, 2019. We have not audited the content of the statement on corporate governance pursuant to § [Article] 289f HGB [Handelsgesetzbuch: German Commercial Code] and § 315d HGB in accordance with the German legal requirements.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to § 315e Abs. [paragraph] 1 HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at April 30, 2019, and of its financial performance for the short financial year from January 1 to April 30, 2019, and

- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the content of the above mentioned statement on corporate governance referred to above.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German

professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Other Information

The executive directors are responsible for the other information. The other information comprises the statement on corporate governance pursuant to § 289f HGB and § 315d HGB.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to

be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to

continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.

- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Hamburg, June 25, 2019

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

sgd. Thorsten Dzulko	sgd. ppa. Helge Schäper
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Unaudited Condensed Consolidated Interim Financial Statements of the Group (prepared in accordance with IFRS as adopted by the EU) as of and for the two months period ended 30 June, 2019

Wintershall Dea GmbH Consolidated Interim Financial Statements for the Period May 1 – June 30, 2019

(with comparable period Jan – Feb 2019)

Consolidated Statement of Income

EUR million	**May - June 2019**	**Jan - Feb 2019**
Sales revenues gas and oil	724	651
Sales revenues gas transport /midstream	39	37
Sales revenues other	81	88
Net income from equity - accounted investments: gas and oil	3	9
Net income from equity - accounted investments: gas transport / midstream	21	20
Other operating income	44	3
	912	808
Production and operating expenses	-325	-330
Production and similar taxes	-33	-19
Depreciation and amortization	-300	-148
Net impairments on assets	-	-
Cost of sales gas transport / midstream	-6	-7
Exploration expenses	-35	-44
General and administration expenses	-44	-226
Result from operating activities	169	34
Financial income	31	17
Financial expenses	-38	-18
Financial result	-7	-1
Result before taxes	**162**	**33**
Income taxes	-29	-12
Net result	**133**	**21**
Net result attributable to shareholders	**123**	**12**
Net result attributable to non-controlling interests	10	9

Consolidated Statement of Comprehensive Income

EUR million	May - June 2019	Jan - Feb 2019
Net result	**133**	**21**
Actuarial gains/losses	-59	-
Items that will not be reclassified to income statement at a later date, recognized directly in equity	**-59**	**0**
Unrealized gains/losses on currency translation	-27	74
Gains/losses after taxes from investments accounted for using the equity method that are eligible for reclassification	-1	-
Changes in the fair value of financial instruments in hedge relationship	25	-
Income and expenses that will be reclassified to the statement of income at a later date, recognized directly in equity	**-3**	**74**
Other comprehensive income (net tax)	**-62**	**74**
Total comprehensive income	**71**	**95**
Total comprehensive income attributable to shareholders	61	86
Total comprehensive income attributable to non-controlling interests	10	9

Consolidated Balance Sheet

EUR million	June 30, 2019	April 30, 2019
Assets		
Non-current assets		
Goodwill	3,016	1,072
Exploration assets	1,808	140
Other intangible assets	3,290	745
Property, plant and equipment, and investment property	10,595	6,311
Investments valued at equity	2,131	2,191
Other financial assets	5	2
Financial receivables	942	905
Derivative instruments	28	-
Other receivables	77	50
Deferred tax assets	433	270
	22,325	11,686
Current assets		
Inventories	234	143
Financial receivables	938	731
Trade and other receivables	1,242	803
Derivative instruments	73	17
Income tax assets	13	19
Cash and cash equivalents	977	889
	3,477	2,602
	25,802	**14,288**

EUR million	June 30, 2019	April 30, 2019
Equity and Liabilities		
Equity		
Subscribed capital	189	105
Capital reserve	7,411	1,173
Retained earnings and other comprehensive income	1,903	1,841
Shareholder's equity	9,503	3,119
Non-controlling interests	164	154
	9,667	3,273
Non-current liabilities		
Pension provisions	598	344
Decommissioning provisions	2,480	1,633
Other provisions	208	199
Financial debt	2,676	1,526
Derivative instruments	2	-
Income tax liabilities	17	1
Other liabilities	45	20
Deferred tax liabilities	3,913	1,203
	9,939	4,926
Current liabilities		
Decommissioning provisions	52	27
Other provisions	403	103
Financial debt	4,250	1,630
Trade and other payables	1,170	4,104
Derivative instruments	70	35
Income tax liabilities	251	190
	6,196	6,089
	25,802	**14,288**

Consolidated Statement of Changes in Equity

EUR million	Subscribed capital of Wintershall Dea GmbH	Capital reserves of Wintershall Dea GmbH	Retained earnings and net retained profit	Other comprehensive income: Remeasure-ment of benefit plans	Other comprehensive income: Foreign currency translation	Other comprehensive income: Cash flow hedges	Share-holder's equity	Non-controlling interests	Total
As of May 1, 2019	**105**	**1,172**	**2,854**	**-142**	**-834**	**-36**	**3,119**	**154**	**3,273**
Other comprehensive income	-	-	-	-59	-27	24	**-62**	**-**	**-62**
Net result	-	-	123	-	-	-	**123**	**10**	**133**
Total comprehensive Income	0	0	123	-59	-27	24	**61**	**10**	**71**
Capital increase/ decrease	84	6,239	-	-	-	-	**6,323**	**-**	**6,323**
Dividend distribution	-	-	-	-	-	-	**0**	**-**	**0**
Other changes	-	-	-	-	-	-	**0**	**-**	**0**
As of June 30, 2019	**189**	**7,411**	**2,977**	**-201**	**-861**	**-12**	**9,503**	**164**	**9,667**
As of Jan 1, 2019	**105**	**1,266**	**3,134**	**-119**	**-1,017**	**-38**	**3,331**	**136**	**3,467**
Other comprehensive income	-	-	-	-	74	-	**74**	**-**	**74**
Net result	-	-	12	-	-	-	**12**	**9**	**21**
Total comprehensive Income	0	0	12	0	74	0	**86**	**9**	**95**
Capital increase/ decrease	-	-	-	-	-	-	**0**	**-**	**0**
Profit transfer/distribution	-	-	-	-	-	-	**0**	**-**	**0**
Dividend distribution	-	-	-	-	-	-	**0**	**-**	**0**
Other changes	-	-	-	-	-	-	**0**	**-**	**0**
As of Feb 28, 2019	**105**	**1,266**	**3,146**	**-119**	**-943**	**-38**	**3,417**	**145**	**3,562**

Consolidated Statement of Cash Flows

EUR million	May - June 2019	Jan - Feb 2019
Net result	**133**	**21**
Amortization/depreciation/impairment losses/reversal of impairment losses	319	172
Changes in working capital	-14	47
Miscellaneous items	-114	78
Cash flow from operating activities	**324**	**318**
Payments for intangible assets, property, plant and equipment and investment property	-270	-64
Payments for financial assets	0	-
Payments for acquisitions	-	-
Proceeds from the disposal of non-current assets	7	-
Proceeds from divestitures	33	-
Payments for financial receivables	-45	-
Cash flow from investing activities	**-275**	**-64**
Payments to shareholders	-1,300	-
Repayments of shareholder loans	-242	-154
Proceeds from shareholder loans	-	51
Change in financial liabilities (related parties)	-35	-
Repayments of debt to banks	-1,892	-
Proceeds from debt to banks	3,344	21
Repayment of lease liabilities	-10	-6
Cash flow from financing activities	**-135**	**-88**
Change in cash and cash equivalents	**-86**	**166**
Effects of foreign exchange rates changes, consolidation-related changes and other changes in value	174	13
Cash and cash equivalents at beginning of reporting period	**889**	**219**
Cash and cash equivalents at end of reporting period	**977**	**398**

Notes to the Condensed Consolidated Financial Statements

NOTE 1 – CONSOLIDATED FINANCIAL STATEMENTS

Basis of Presentation

Wintershall Dea GmbH (formerly Wintershall Holding GmbH) is a German limited company (registration court: Local Court (Amtsgericht) of Lüneburg; entry no.: HRB 200519) and has its registered office in Celle, Lower Saxony, Germany. The headquarters are in Kassel (Friedrich-Ebert-Strasse 160 in 34119 Kassel) and Hamburg (Überseering 40 in 22297 Hamburg), Germany.

The condensed interim financial statements of Wintershall Dea GmbH and its subsidiaries ("Wintershall Dea" or the "Company") have been prepared in accordance with the International Financial Reporting Standards (IFRS) applicable in the EU.

These interim financial statements have been prepared in accordance with IAS 34 Interim Financial Reporting and should be read in conjunction with the Company's last annual consolidated financial statements as at and for the year ended April 30, 2019. They do not include all of the information required for a complete set of IFRS financial statements. However, selected explanatory notes are included to explain events and transactions that are significant to an understanding of the changes in the Company's financial position and performance since the last annual financial statements.

Effective May 1, 2019, pursuant to the merger contemplated by the Business Combination Agreement, dated as of September 27, 2018, Wintershall Dea Deutschland AG (formerly DEA Deutsche Erdoel AG) was merged with and into Wintershall Dea GmbH. As a result, Wintershall Dea Deutschland AG became a subsidiary of Wintershall Dea GmbH.

Effective with the Merger, Wintershall Dea Deutschland AG and subsidiaries are included in Wintershall Dea consolidated tax groups and related income tax returns within certain jurisdictions.

As the comparative figures do not comprise Wintershall Dea Deutschland AG, reporting and preceding period are only comparable to a limited extend.

Selected exchange rates

EUR 1 =	**Closing rates**		**Average rates**	
	6/30/2019	4/30/2019	5/2019 - 6/2019	1/2019 - 2/2019
Argentina (ARS)	48.33	49.15	49.86	43.18
UK (GBP)	0.90	0.86	0.88	0.88
Norway (NOK)	9.69	9.67	9.77	9.75
Russia (RUB)	71.60	72.21	72.51	75.52
USA (USD)	1.14	1.12	1.13	1.14
Mexico (MXN)	21.82	21.28	21.59	21.84

Discount rates

The discount rates applied for decommissioning provisions remain unchanged between 0.4 % and 8.6 %. Pension provisions are discounted at an interest rate of 1.00 % and 1.20 % in Germany (April 30, 2019: 1.40 %) and at an interest of 2.60 % and 2.50% in Norway (April 30, 2019: 2.60 %) and 0.90 % in Switzerland (April 30, 2019: 0.90 %).

Scope of Consolidation

The consolidated financial statements include the accounts of Wintershall Dea GmbH and its subsidiaries over which the company has control. There are 53 consolidated companies (April 30, 2019: 18). Although Wintershall Dea does not hold the majority of the shares in ZAO Gazprom YRGM Trading, it is entitled to the company's results on the basis of the profit distribution agreements, meaning that the company is fully consolidated in the consolidated financial statements. Following the merger with Wintershall Dea Deutschland AG, 36 companies were consolidated for the first time. One subsidiary was sold and therefore deconsolidated. There are 2 joint ventures and 8 material associated companies that are accounted for using the equity method (April 30, 2019: 10).

Joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor. There are joint arrangements at Wintershall Dea in the course of development and production activities. They are classified as joint operations since the arrangements transfer the rights and obligations relating to the assets and liabilities to the investors. The Company's shares in joint operations are accounted by recognizing its respective share in assets and liabilities as well as its income and expenses. The joint operation AO Achimgaz, Novy Urengoy/Russia, which is operated jointly with Gazprom for the production of natural gas and condensate is proportionately consolidated. Wintershall Dea holds a 50 % interest in the company and controls the company jointly with Gazprom.

Significant Accounting Policy Updates

With the exception of changes in the presentation format as described below, the interim financial statements were prepared using the same fundamental accounting policies and methods of computation as compared with the most recent annual consolidated financial statements for the short fiscal year ended April 30, 2019. See Note 1 to the consolidated financial statements included in the Company's annual report for the short fiscal year ended April 30, 2019 for information on the Company's significant accounting policies.

Changes in Financial Statement Presentation

As a result of the merger and in order to be more aligned with peers, the presentation of the consolidated financial statements has been adjusted. Reclassifications of prior period amounts have been made to improve comparability and conform to the presentation that has been adopted by Wintershall Dea.

Consolidated Statement of Income

The Company adjusted the presentation of consolidated statement of income. The adjustment can be classified in four categories:

a. More detailed split of presented line items
   The consolidated income statement provides a more detailed split of presented line items especially with regard to revenues and net income from equity-accounted investments.

b. Less detailed split of presented line items
   The former break-down of the financial result was replaced by the less detailed line items “financial income” and “financial expenses”.

c. Allocation of former line items into functional areas and allocation from functional areas into separate line items

   Income and expenses previously reported as other operating income and expenses as well as distribution and research costs were mainly allocated to the individual functional areas under the new structure. By contrast, depreciation and amortization, impairments and reversal of impairments on assets were allocated from the individual functional areas into separate line items. In addition, the total item cost of sales was in allocated to “production and operating expenses”, “production and

similar taxes", "cost of sales gas transport/midstream" as well as "general and administration expenses".

d. Accounting adjustments
Foreign currency gains and losses and related income and expenses from derivative financial instruments as well as net impairments on financial receivables are no longer shown in the operating result but are instead recognized as financial result.

Consolidated Balance Sheet

The Company reclassified exploration assets from "property, plant and equipment" to "intangible assets". In addition, non-current provisions from income taxes have been reclassified from "other provisions" to "income tax liabilities" and liabilities from other taxes have been reclassified from current "income tax liabilities" to "trade and other payables". Overlift liabilities have been reclassified from "other provisions" to "trade and other payables".

EUR million	**April 30, 2019**
Exploration assets	140
Provisions from income taxes	1
Liabilities from other taxes	56
Overlift liabilities	29

In addition, "financial receivables" and "derivative instruments" were separated from "other receivables", "decommissioning provisions" were separated from "other provisions" and "financial debt" and "derivative instruments" were separated from "other liabilities".

NOTE 2 – RECENT ACCOUNTING STANDARDS

Recently Adopted Standards

The International Accounting Standards Board (IASB) has not adopted new International Financial Reporting Standards (IFRS), new Interpretations and amendments to existing standards, which became effective for Wintershall Dea as of May 1, 2019. The impact and changes from the adopted new International Financial Reporting Standard for Leases (IFRS 16) has been discussed in detail in Note 1 to the consolidated financial statements of the Company's annual report.

NOTE 3 – ACQUISITION AND DIVESTITURES

Merger with Wintershall Dea Deutschland AG (formerly DEA Deutsche Erdoel AG)

Effective May 1, 2019, BASF SE and LetterOne Holdings S.A. completed the merger of Wintershall Dea GmbH (formerly: Wintershall Holding GmbH) and Wintershall Dea Deutschland AG (formerly: DEA Deutsche Erdoel AG) contemplated by the Business Combination Agreement, dated as of September 27, 2018, by and among the BASF SE (BASF), BASF Handels- und Exportgesellschaft mbH (BHE), LetterOne Holdings S.A. (Letterone), L1E Acquisitions GmbH (L1E Acquisitions) and Wintershall Dea GmbH. BASF and BHE jointly held all shares in Wintershall Dea. L1E Acquisitions, an indirect 100 % subsidiary of Letterone, held all shares in Wintershall Dea Deutschland AG.

With the merger, BASF and Letterone combined the Wintershall business with the Dea business in Wintershall Dea GmbH as jointly owned company upon the terms and conditions set out in the Business Combination Agreement. The main objective was to increase competitiveness and future viability by pooling forces. As Europe's leading independent natural gas and crude oil company, Wintershall Dea has the strength, know-how and international footprint to make inroads in the global market and also seize great opportunities.

As part of the transaction, Letterone has contributed all shares in Wintershall Dea Deutschland AG into Wintershall Dea GmbH against issuance of new shares. Furthermore, Wintershall Dea took over a loan liability from Letterone towards Wintershall Dea Deutschland AG of EUR 1.7 billion.

BASF holds 67 %, and Letterone holds 33 % of the ordinary shares of Wintershall Dea and BASF holds in addition, directly, all Preference Shares in Wintershall Dea. The aggregate amount of Preference Shares held by BASF corresponds to an amount which results in an arithmetical participation of the registered share capital in Wintershall Dea of 72.7 % for BASF and 27.3 % for Letterone. Wintershall Dea is jointly controlled by BASF and Letterone as set out in the governance structure.

Preliminary Allocation of Purchase Price

Based on an evaluation of IFRS 3 "Business Combinations", Wintershall was determined to be the acquirer in the merger. As consideration for the contribution of all shares in Wintershall Dea Deutschland AG, equity interest of Wintershall Dea GmbH (51,716,445 ordinary shares) have been issued to Letterone. The fair value of the consideration is based on the equity value of Wintershall Dea Deutschland AG and its subsidiaries as of May 1, 2019. Transaction costs directly related to the merger were recognized as general and administration expenses. For the reporting period an amount of EUR 3.3 million was recorded.

Wintershall Dea has applied the acquisition method of accounting with respect to the assets and liabilities of Wintershall Dea Deutschland AG and its subsidiaries, which have been measured at fair value as of May 1, 2019. The fair values represent management's best estimate and require a complex series of judgments about future net cash flows, discount rates and other factors. Inputs were generally determined by taking into account historical data, supplemented by current and anticipated market conditions, and growth rates.

The table below presents the preliminary fair value that was allocated to Wintershall Dea Deutschland AG's assets and liabilities based upon fair values as determined by Wintershall Dea. The valuation process to determine the fair values is not yet complete. The Company estimated the preliminary fair value of acquired assets and liabilities as of the date of acquisition based on information currently available and continues to adjust those estimates. As the Company finalises the fair value of assets acquired and liabilities assumed, additional purchase price adjustments may be recorded during the measurement period, but no later than one year from the date of the acquisition.

Assets acquired and liabilities assumed on May 1, 2019

EUR million	Estimated fair value
Fair values of assets acquired	
Exploration assets	1,621
Other intangible assets	2,560
Property, plant and equipment and investment property	4,461
Inventories	84
Financial assets and financial receivables	1,886
Trade and other receivables (incl. derivatives)	477
Income and deferred tax assets	166
Cash	171
Total assets	11,426
Fair values of liabilities assumed	
Provisions	1,472
Financial debt	2,204
Trade and other payables (incl. derivatives)	581
Income tax liabilities	133
Deferred tax liabilities	2,766
Total liabilities	7,156
Net assets (consideration for the merger)	**4,270**

The acquired goodwill amounts to EUR 1,960 million and is mainly resulting from the recognition of deferred taxes. According to current information, none of the goodwill recognized is expected to be deductible for tax purpose.

The consolidated income statement includes revenues of EUR 217 million and net result of EUR 14 million for the acquired companies.

Divesture of storage business

As of May 28, 2019, Wintershall Dea has signed a contract for the sale of the storage business. The sale was completed on June 24, 2019 with effective date January 1, 2019.

In connection with the sale, a purchase price of EUR 40 million was paid to Wintershall Dea. After deduction of disposed cash and cash equivalents the net inflow from divestures amounts to EUR 33 million. The disposal of the companies led to a gain on deconsolidation in the amount of EUR 38 million. No cumulative other comprehensive income was recorded for the storage business.

The following assets and liabilities were derecognized:

EUR million	
Non-current assets	15
Current assets	7
thereof cash and cash equivalents	7
Non-current liabilities	19
Current liabilities	1

NOTE 4 – SUPPLEMENTARY INFORMATION

Sales revenues

Sales revenues from gas and oil comprise gains from gas derivatives in the amount of EUR 19 million and oil swaps used as hedging instruments in the amount of EUR 3 million. Gains from gas derivatives and oil swaps are not considered sales revenues according to IFRS 15.

Production and operating expenses

EUR million	**May - June 2019**	**Jan - Feb 2019**
Production cost	122	63
Change over-/underlift	15	3
Tariffs, transport fees and leases	47	21
Development cost	7	5
Other cost of sales (storage)	1	-
Cost for trade goods	148	237
Other costs	-15	1
Production and operating expenses	**325**	**330**

Other costs mainly comprise income from write-ups of trade and other receivables (EUR 16 million) and restructuring cost (EUR 1 million).

Financial result

EUR million	May - June 2019	Jan - Feb 2019
Interest income from third parties	29	13
Interest income from affiliated companies	-	1
Foreign currency exchange gains, net	-	2
Income from investments	1	-
Other financial income	1	1
Financial income	**31**	**17**
Interest expenses to third parties	19	2
Interest expenses to affiliated companies	1	5
Less capitalised borrowing costs	-6	-
Foreign currency exchange losses, net	9	-
Losses from financial derivatives, net	1	3
Interest from addition to provisions	9	7
Other financial expenses	4	1
Financial expenses	**38**	**18**
Financial result	**-7**	**-1**

Equity

Wintershall Dea GmbH increased its registered share capital from EUR 105 million by EUR 84 million to EUR 189 million by issuance of 51,716,445 ordinary shares and 32,721,027 preference shares with a nominal amount of EUR 1.00 each.

Changes in capital reserves of the company resulting from the contribution of Wintershall Dea Deutschland AG and the assumption of the loan from Letterone, the contribution of BASF loan to capital reserves and addition and withdrawals from capital reserves.

NOTE 5 – COMMITMENTS

Contractual commitments

As of June 30, 2019, Wintershall Dea has commitments from firm contracts for property, plant and equipment as well as from field development projects in the amount of EUR 408 million.

Furthermore, Wintershall Dea is committed to a certain number of exploration wells and seismic in the context of concession agreements. The estimated expenditures amount to EUR 132 million.

Other long-term commitments

The obligations from purchase agreements resulted primarily from long-term purchase commitments for natural gas. The firm purchase commitments amount to EUR 4,453 million as of June 30, 2019 (April 30, 2019: EUR 4,763 million)

EUR million	**June 30, 2019**
2019	530
2020	1,017
2021	1,040
2022	1,031
2023	830
2024 and residual maturities extending beyond this	5
Total	**4,453**

NOTE 6 – RELATED PARTY TRANSACTIONS

A related party is a natural person or legal entity that can exert influence on the Wintershall Dea Group or over which the Wintershall Dea Group exercises control, joint control or a significant influence.

Wintershall Dea is jointly controlled by BASF and Letterone. Therefore, BASF and Letterone and its subsidiaries are considered as related parties. In addition, related parties include non-consolidated subsidiaries, joint ventures and associated companies.

Revenue with related parties

EUR million	**May - June 2019**	**Jan - Feb 2019**
Non-consolidated subsidiaries	0	0
Associates	1	1
Joint ventures	0	0
Shareholder and its affiliates	63	161
Total	**64**	**162**

Trade receivables from, and trade payables to, related parties

EUR million	Trade receivables		Trade payables	
	June 30, 2019	**April 30, 2019**	**June 30, 2019**	**April 30, 2019**
Nonconsolidated subsidiaries	1	1	3	0
Associates	5	8	0	2
Joint ventures	2	2	0	4
Shareholder and its affiliates	34	42	3	5
Trade receivables from, and trade payables to, related parties	**42**	**53**	**6**	**11**

Miscellaneous receivables from, and liabilities to, related parties

EUR million	Miscellaneous receivables		Miscellaneous liabilities	
	June 30, 2019	**April 30, 2019**	**June 30, 2019**	**April 30, 2019**
Nonconsolidated subsidiaries	46	40	22	0
Associates	54	3	172	111
Joint ventures	207	165	223	328
Shareholder and its affiliates	602	594	74	3,094
Miscellaneous receivables and other assets	**909**	**802**	**491**	**3,533**

Revenues with, as well as trade receivables from, and trade payables to related parties mainly comprised transactions with the company's own products, brokerage and licensing transactions, as well as other typical business transactions.

Miscellaneous receivables and liabilities resulted mainly from financing transactions, outstanding dividend payments and profit and loss transfer agreements, as well as other financing-related and operating transactions and scenarios. The receivable from the assumption of losses vis-à-vis BASF Handels- und Export GmbH as of April 30, 2019 amounted to EUR 589 million and remained outstanding as of June 30, 2019.

The miscellaneous receivables from joint ventures resulted in particular, from the transfer of the financing function for the regulated gas transportation activities to the joint venture W & G Infrastruktur Finanzierungs-GmbH, Kassel, which was established in 2017.

The miscellaneous liabilities declined by EUR 3,042 million as against April 30, 2019 (EUR 491 million) mainly due to the replacement of the previous financing (BASF group financing) by external financing arrangement via a consortium of banks.

All transactions are subject to market terms and conditions.

NOTE 7 – REPORTING OF FINANCIAL INSTRUMENTS

The financial instruments comprise both primary and derivative financial instruments and are assigned to the valuation categories according to IFRS 9. Financial instruments on the asset side like financial investments and derivatives are recognised at fair value, while other financial assets, receivables and cash and cash equivalents are recorded at amortised cost. On the liabilities side, the primary financial instruments include liabilities at amortised costs. The primary financial instruments are stated in the balance sheet, with the carrying amounts of financial assets reflecting the expected credit losses.

Fair values of derivative financial instruments are determined using customary market valuation methods taking into account public market data available on the measurement date as well as the counterparty default risk.

The group has designated oil-sales derivatives as hedging instruments within the scope of cash flow hedges. Cash flow hedges are used to hedge the risk of variability in cash flows related to highly probable forecast transactions. The effective portion of changes in the fair value of derivates that are designated as cash flow hedges is recognised as other comprehensive income within equity. The gains or losses relating to the ineffective portion are recognised immediately in profit or loss. As of June 30, 2019, parts of our oil sales are hedged until 2022. The price of the hedged item is defined via a price formula in the sales contract. The instruments used are Brent dated oil swaps for which a liquid market exists. Furthermore, a regression analysis shows a high correlation between Brent dated oil and the price formula. This is also the basis to determine the hedge ratio in order to achieve the highest level of hedge efficiency.

Derivatives related to the gas trading business are measured and disclosed based on a net risk exposure in accordance with IFRS 13.48.

In the context of financing activities, embedded derivatives have been identified which are required to be separated. The contractual terms of the credit facilities entered into by the company contain early termination options as well as in individual cases extension options within the discretion of the company. Early termination and extension options represent embedded derivatives which have to be separated and measured at fair value through profit and loss. Changes in fair value are based on changes of interest rates and companies own credit risk. To determine the fair value an option pricing model is used, taking into account simulations of interest rates and companies own credit risk. The market value as of June 30, 2019 amounts to EUR 30 million.

The carrying amounts of the primary financial assets and liabilities are close to their fair values, either because if short maturities or due to market-driven interest rates in case of non-current loans.

The following overview represents the financial instruments to be recognized at fair value and the essential parameters on which the measurement is based. The individual levels are defined as follows in accordance with IFRS 13:

Level 1: Measurement at (unadjusted) prices quoted for identical assets or liabilities on active markets.

Level 2: Measurement based on inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3: Measurement on the basis of unobservable inputs.

Fair value hierarchy		**June 30, 2019**		
EUR million	**Total**	**Level 1**	**Level 2**	**Level 3**
Derivative financial assets	101	-	71	30
thereof commodity derivatives	56	-	56	-
thereof currency derivatives	15	-	15	-
thereof embedded derivatives	30	-	-	30
Derivative financial liabilities	72	-	72	-
thereof commodity derivatives	57	-	57	-
thereof currency derivatives	15	-	15	-

Fair value hierarchy		**April 30, 2019**		
EUR million	**Total**	**Level 1**	**Level 2**	**Level 3**
Derivative financial assets	17	-	17	-
thereof commodity derivatives	12	-	12	-
thereof currency derivatives	5	-	5	-
Derivative financial liabilities	35	-	35	-
thereof commodity derivatives	34	-	34	-
thereof currency derivatives	1	-	1	-

No transfers between the levels occurred during the period under review or during the previous year.

NOTE 8 - FINANCING

Following the merger with Wintershall Dea Deutschland AG, the previous financing (BASF group financing) was replaced by external financing arrangement via a consortium of banks. The first tranche was drawn as of April 30, 2019 and the second tranche was drawn as of May 2, 2019. Thereof an amount of EUR 5,540 million was utilised as of June 30, 2019. The floating interest rate was 6-month LIBOR plus a margin and a supplement of 0.1 percent point for the USD facilities and 6-month-EURIBOR (0%-floor) plus a margin for the EUR facilities.

For WIGA, the external financing arrangement interest rate was at 0.9 % for the period. For the overnight drafts in Argentina the interest rates range between 62.5 % and 64.5 % for the reporting period.

Maturities of liabilities to banks (repayment amounts):

EUR million	**June 30, 2019**	**April 30, 2019**
Following year 1	4,202	1,510
Following year 2	-	500
Following year 3	935	376
Following year 4	-	-
Following year 5	935	376
Total	**6,072**	**2,762**

An arrangement fee of EUR 16 million has been capitalised as a reduction of the loan amount. In addition, the financing facility comprises embedded derivatives which are required to be separated. The positive fair value of the embedded derivatives of EUR 18 million was initially recognised as an increase in the loan amount. Both amounts are being amortised over the term of the loans with corresponding impact on the financial result.

Composition of liabilities to banks (including accrued interests):

EUR million	**June 30, 2019**	**April 30, 2019**
USD	2,109	1,605
EUR	3,947	1,117
ARS	33	24
Total	**6,089**	**2,746**

A credit facility of EUR 900 million was agreed with the bank consortium which can be utilised if necessary.

NOTE 9 – SELECTED KEY FINANCIAL DATA BY REGION (voluntary disclosure/unaudited)

Wintershall Dea operates within several geographical areas in the E&P business as well as in the midstream business. The midstream business comprises the transportation activities.

The following representation is in accordance with the internal management reporting and does not represent segment information according to IFRS 8.

	May - June 2019					
	E & P				Gas transport/ Midstream	Other
EUR million/mboed	Northern Europe	Russia	North Africa/ Middle East	Latin America		
Production (mboed) [1]	212	279	75	78		-
thereof gas	112	225	41	69		-
thereof oil	100	54	34	9		-
Sales revenues	418	88	55	94		150
EBITDAX	241	60	54	69		-11
thereof income from at equity participations	-4	8	-1	-		-
Depletion, depreciation, amortisation	-219	-2	-33	-38		0
Net impairment of assets	-	-	-	-		-
Exploration costs	-20	-	1	-16		-
Income tax	2	-11	3	-4		-14
Capital expenditures (without acquisitions) [2]	197	5	53	15		0
EBITDA					53	
thereof income from at equity participations					21	
Net income					40	
Capital expenditures (without acquisitions) [2]					0	

[1] On working interest basis; including proportionate production from at equity valued companies
[2] Cash outflows for intangible assets, property, plant and equipment and investment property

	January - February 2019					
	E & P				Gas transport/ Midstream	Other
EUR million/mboed	Northern Europe	Russia	North Africa/ Middle East	Latin America		
Production (mboed) [1]	122	305	29	70		-
thereof gas	54	247	-	64		-
thereof oil	68	58	29	6		-
Sales revenues	328	121	-	72		218
EBITDAX	220	113	0	50		-25
thereof income from at equity participations	1	7	1	-		-
Depletion, depreciation, amortisation	-110	-4	0	-27		0
Net impairment of assets	-	-	-	-		-
Exploration costs	-22	-	0	-22		-
Income tax	-2	-21	0	-7		0
Capital expenditures (without acquisitions) [2]	45	3	0	15		1
EBITDA					49	
thereof income from at equity participations					20	
Net income					37	
Capital expenditures (without acquisitions) [2]					0	

[1] On working interest basis; including proportionate production from at equity valued companies
[2] Cash outflows for intangible assets, property, plant and equipment and investment property

NOTE 10 – EVENTS AFTER THE INTERIM PERIOD

No events subject to mandatory disclosure occurred after the interim reporting period that have not been reflected in the consolidated financial statements.

Kassel and Hamburg, August 22, 2019

Management Board

Mario Mehren
Chairman of the Board and
Chief Executive Officer

Maria Moræus Hanssen
Vice Chairman and
Chief Operating Officer (COO), Region EMEA

Thilo Wieland
Region Russia, Latin America and
Transportation

Hugo Dijkgraaf
Chief Technology Officer (CTO)

Paul Robert Smith
Chief Finance Officer (CFO)

ISSUER

Wintershall Dea Finance B.V.
Bogaardplein 47
2284 DP Rijswijk
The Netherlands

GUARANTOR

Wintershall Dea GmbH
Friedrich-Ebert-Straße 160,
34119 Kassel
Germany

PRINCIPAL PAYING AGENT

Deutsche Bank Aktiengesellschaft
Trust & Agency Services
Taunusanlage 12
60325 Frankfurt am Main
Germany

CALCULATION AGENT

Conv-Ex Advisors Limited
30 Crown Place
London, EC2A 4EB
United Kingdom

JOINT LEAD MANAGERS AND JOINT BOOKRUNNERS

Barclays Bank PLC
5 The North Colonnade
Canary Wharf
London E14 4BB
United Kingdom

Merrill Lynch International
2 King Edward Street
London EC1A 1HQ
United Kingdom

J.P. Morgan Securities plc
25 Bank Street, Canary Wharf
21st Floor
London E14 5JP
United Kingdom

Société Générale
29, Boulevard Haussmann
75009 Paris
France

JOINT BOOKRUNNERS

Citigroup Global Markets Limited
Citigroup Centre
Canada Square
Canary Wharf
London, E14 5LB
United Kingdom

Commerzbank Aktiengesellschaft
Kaiserstrasse 16
(Kaiserplatz)
60311 Frankfurt am Main
Germany

Crédit Agricole Corporate and Investment Bank
12, Place des Etats-Unis,
CS 70052 92547
Montrouge
CEDEX
France

Credit Suisse Securities (Europe) Limited
One Cabot Square
London, E14 4QJ
United Kingdom

Deutsche Bank AG
Taunusanlage 12
60325 Frankfurt am Main
Germany

Goldman Sachs International
Plumtree Court
25 Shoe Lane
London, EC4A 4AU
United Kingdom

HSBC Bank plc
8 Canada Square
London, E14 5HQ
United Kingdom

ING Bank N.V.
Foppingadreef 7
1102 BD Amsterdam
The Netherlands

Mizuho Securities Europe GmbH
Taunusturm (34th Floor)
Taunustor 1
60310 Frankfurt am Main
Germany

Morgan Stanley & Co. International plc
25 Cabot Square
Canary Wharf
London, E14 4QA
United Kingdom

MUFG Securities (Europe) N.V.
World Trade Center
Tower H, 11th Floor
Zuidplein 98
1077 XV Amsterdam
The Netherlands

UniCredit Bank AG
Arabellastrasse 12
81925 Munich
Germany

AUDITORS

To the Guarantor
KPMG AG Wirtschaftsprüfungsgesellschaft
The Squaire, Am Flughafen, 60594 Frankfurt am Main
Germany

PricewaterhouseCoopers International
Hamburg office, Alsterufer 1, 20354 Hamburg
Germany

LEGAL ADVISERS

To the Issuer and the Guarantor as to German law

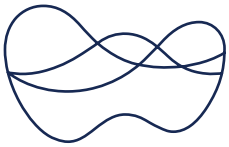
Linklaters LLP
Taunusanlage 8
60329 Frankfurt am Main
Germany

To the Joint Bookrunners as to German law

Freshfields Bruckhaus Deringer LLP
Bockenheimer Anlage 44
60322 Frankfurt am Main
Germany

To the Issuer and the Guarantor as to Dutch law

Linklaters LLP
Zuidplein 180
1077 XV Amsterdam
The Netherlands



wintershall dea

Toppan Merrill, London
19ZCF11901