

## IMPORTANT NOTICE

**THIS OFFERING IS AVAILABLE ONLY TO INVESTORS WHO ARE ADDRESSEES OUTSIDE OF THE UNITED STATES.**

**IMPORTANT: You must read the following disclaimer before continuing.** The following disclaimer applies to the attached preliminary Offering Circular (“**Preliminary Offering Circular**”). You are advised to read this disclaimer carefully before accessing, reading or making any other use of the attached Preliminary Offering Circular. In accessing the attached Preliminary Offering Circular, you agree to be bound by the following terms and conditions, including any modifications to them from time to time, each time you receive any information from the company as a result of such access. In order to be eligible to view the attached Preliminary Offering Circular or make an investment decision with respect to the securities, investors must be outside the United States.

**Confirmation of Your Representation:** This Preliminary Offering Circular is being sent to you at your request and by accepting the e-mail and accessing the attached Preliminary Offering Circular, you shall be deemed to represent to Chinalco Capital Holdings Limited (the “**Issuer**”), Aluminum Corporation of China Overseas Holdings Limited (the “**Guarantor**”), Aluminum Corporation of China (the “**Company**”) and each of Bank of China Limited, BOCI Asia Limited, Barclays Bank PLC, SPDB International Capital Limited, China CITIC Bank International Limited and Haitong International Securities Company Limited (together, the “**Joint Lead Managers**”) that (1) you and any customers you represent are outside the United States and that the e-mail address that you gave us and to which this e-mail has been delivered is not, located in the United States, its territories or possessions, and (2) you consent to delivery of the attached Preliminary Offering Circular and any amendments or supplements thereto by electronic transmission.

The attached Preliminary Offering Circular has been made available to you in electronic form. You are reminded that documents transmitted via this medium may be altered or changed during the process of transmission and, consequently, none of the Issuer, the Guarantor, the Company, the Joint Lead Managers, the Trustee or the Agents (as defined in the attached Preliminary Offering Circular) or any of their respective affiliates, directors, officers, employees, representatives, agents and each person who controls the Issuer, the Guarantor, the Company, the Joint Lead Managers, the Trustee, the Agents or any of their respective affiliates accepts any liability or responsibility whatsoever in respect of any discrepancies between the document distributed to you in electronic format and the hard copy version available to you upon request from the Issuer, the Guarantor, the Company and the Joint Lead Managers.

**Restrictions:** The attached Preliminary Offering Circular and is being furnished in connection with an offering in offshore transactions to persons outside the United States in compliance with Regulation S under the Securities Act of 1933, as amended (the “**Securities Act**”) solely for the purpose of enabling a prospective investor to consider the purchase of the securities described herein. You are reminded that the information in the attached Preliminary Offering Circular is not complete and may be changed.

**NOTHING IN THIS ELECTRONIC TRANSMISSION CONSTITUTES AN OFFER OF SECURITIES FOR SALE IN THE UNITED STATES OR ANY OTHER JURISDICTION WHERE IT IS UNLAWFUL TO DO SO. THE SECURITIES HAVE NOT BEEN, AND WILL NOT BE, REGISTERED UNDER THE SECURITIES ACT OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES OR OTHER JURISDICTION AND THE SECURITIES MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES, EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE OR LOCAL SECURITIES LAWS. THE OFFERING IS MADE SOLELY OUTSIDE THE UNITED STATES IN OFFSHORE TRANSACTIONS IN RELIANCE OF REGULATION S UNDER THE SECURITIES ACT.**

You are reminded that you have accessed the attached Preliminary Offering Circular on the basis that you are a person into whose possession the attached Preliminary Offering Circular may be lawfully delivered in accordance with the laws of the jurisdiction in which you are located and you may not, nor are you authorised to, deliver this document, electronically or otherwise, to any other person. If you have gained access to this transmission contrary to the foregoing restrictions, you are not allowed to purchase any of the securities described in the attached Preliminary Offering Circular.

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**YOU ARE NOT AUTHORISED TO AND YOU MAY NOT FORWARD OR DELIVER THE ATTACHED PRELIMINARY OFFERING CIRCULAR, ELECTRONICALLY OR OTHERWISE, TO ANY OTHER PERSON OR REPRODUCE SUCH PRELIMINARY OFFERING CIRCULAR IN ANY MANNER WHATSOEVER. ANY FORWARDING, DISTRIBUTION OR REPRODUCTION OF THE ATTACHED PRELIMINARY OFFERING CIRCULAR IN WHOLE OR IN PART IS UNAUTHORISED. FAILURE TO COMPLY WITH THIS DIRECTIVE MAY RESULT IN A VIOLATION OF THE SECURITIES ACT OR THE APPLICABLE LAWS OF OTHER JURISDICTIONS.**

**You are responsible for protecting against viruses and other destructive items.** If you receive this document by e-mail, your use of this e-mail is at your own risk and it is your responsibility to take precautions to ensure that it is free from viruses and other items of a destructive nature.

## CHINALCO CAPITAL HOLDINGS LIMITED

(a BVI business company incorporated with limited liability in the British Virgin Islands and a wholly-owned subsidiary of Aluminum Corporation of China Overseas Holdings Limited)

US\$[●]

[●] per cent. Guaranteed Bonds due [●]

Unconditionally and irrevocably guaranteed by

### Aluminum Corporation of China Overseas Holdings Limited

(中鋁海外控股有限公司)

(incorporated with limited liability in Hong Kong and a wholly-owned subsidiary of Aluminum Corporation of China)

With the benefit of a Keepwell Deed and a Deed of Equity Interest Purchase Undertaking provided by



### ALUMINUM CORPORATION OF CHINA (中國鋁業公司)

Issue Price: [●] per cent.

The [●] per cent. Guaranteed Bonds due [●] in the aggregate principal amount of US\$[●] (the "Bonds") will be issued by Chinalco Capital Holdings Limited (the "Issuer") and will be unconditionally and irrevocably guaranteed (the "Guarantee") by its parent company, Aluminum Corporation of China Overseas Holdings Limited (the "Guarantor"). The Issuer and the Guarantor are wholly-owned by Aluminum Corporation of China (the "Company").

Interest on the Bonds will be payable semi-annually in arrear on [●] and [●] in each year. The Bonds will constitute direct, unsecured, unconditional and (subject to Condition 4(a) of the Terms and Conditions of the Bonds) unsecured obligations of the Issuer and shall at all times rank *pari passu* and without any preference or priority among themselves. The payment obligations of the Issuer under the Bonds shall, save for such exceptions as may be provided by mandatory provisions of applicable law, at all times rank at least equally with all the Issuer's other present and future unsecured and unsubordinated obligations. The obligations of the Guarantor under the Guarantee shall, save for such exceptions as may be provided by mandatory provisions of applicable law and subject to Condition 4(a) of the Terms and Conditions of the Bonds, at all times rank at least equally with all its other present and future unsecured and unsubordinated obligations.

All payments of principal, premium and interest by or on behalf of the Issuer or the Guarantor in respect of the Bonds or under the Guarantee shall be made free and clear of, and without withholding or deduction for, any taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or within the British Virgin Islands, Hong Kong or the PRC (as defined herein) or any political subdivision or authority therein or thereof having power to tax, unless such withholding or deduction is required by law. See "Terms and Conditions of the Bonds — Taxation".

The Issuer, the Guarantor and the Company will enter into a keepwell deed on or about [●] 2016 with Bank of Communications Trustee Limited (the "Trustee") as trustee of the Bonds (the "Keepwell Deed") as further described in "Description of the Keepwell Deed". The Keepwell Deed does not constitute a guarantee by the Company of the obligations of the Issuer under the Bonds or of the Guarantor under the Guarantee.

The Guarantor and the Company will enter into a deed of equity interest purchase undertaking on or about [●] 2016 with the Trustee (the "Deed of Equity Interest Purchase Undertaking") as further described in "Description of the Deed of Equity Interest Purchase Undertaking". The Deed of Equity Interest Purchase Undertaking does not constitute a guarantee by the Company of the obligations of the Issuer under the Bonds or of the Guarantor under the Guarantee.

The Bonds will mature on [●] at their principal amount. The Bonds may be redeemed at the option of the Issuer in whole, but not in part, at any time, on giving not less than 30 nor more than 60 days' notice to the Bondholders and in writing to the Trustee and the Principal Paying Agent at their principal amount together with interest accrued up to but excluding the date fixed for redemption in the event of certain changes affecting taxes of the British Virgin Islands, Hong Kong or the PRC or any political subdivision or any authority thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations (including but not limited to any decision by a court of competent jurisdiction). On giving not less than 30 nor more than 60 days' notice to the Trustee in writing and to the Bondholders, the Issuer may at any time and from time to time redeem the Bonds, in whole but not in part, at a Make Whole Price (as defined in the Terms and Conditions of the Bonds) as of, and accrued and unpaid interest, if any, to (but excluding), the redemption date specified in the notice. At any time following the occurrence of a Change of Control (as defined in the Terms and Conditions of the Bonds), the holder of any Bond will have the right, at such holder's option, to require the Issuer to redeem all but not some only of that holder's Bonds on the Change of Control Put Date (as defined in the Terms and Conditions of the Bonds) at a redemption price equal to 101 per cent. of their principal amount, together with accrued interest to but excluding such Change of Control Put Date. See "Terms and Conditions of the Bonds — Redemption and Purchase".

Pursuant to the Notice on Promoting the Reform of the Filing and Registration System for Issuance of Foreign Debt by Corporates (國家發展改革委關於推進企業發行外債備案登記管理制度改革的通知(發改外債[2015]2044號)) promulgated by the National Development and Reform Commission of the PRC (the "NDRC") on 14 September 2015 which came into effect immediately (the "Circular 2044"), the Company has registered the issuance of the Bonds with the NDRC and has obtained a certificate from the NDRC on 22 July 2016 evidencing such registration and intends to provide the requisite information on the issuance of the Bonds to the NDRC within the prescribed timeframe after the issue date of the Bonds and in accordance with the Circular 2044 and any implementation rules, regulations, certificates, circulars or notices in connection therewith issued by the NDRC from time to time.

Investing in the Bonds involves certain risks. See "Risk factors" beginning on page 18.

The Bonds and the Guarantee have not been and will not be registered under the US Securities Act of 1933, as amended (the "Securities Act") and, subject to certain exceptions, may not be offered or sold within the United States. Accordingly, the Bonds are being offered and sold only outside the United States in offshore transactions in reliance of Regulation S under the Securities Act. For a description of these and certain further restrictions on offers and sales of the Bonds and the distribution of this Offering Circular, see the section entitled "Subscription and Sale" on page 160.

The denomination of the Bonds shall be US\$200,000 each and integral multiples of US\$1,000 in excess thereof.

The Offering Circular is for distribution to professional investors only. Investors should not purchase the Bonds in the primary or secondary markets unless they are professional investors and understand the risks involved. The Bonds are not suitable for retail investors.

Application will be made to The Stock Exchange of Hong Kong Limited (the "Hong Kong Stock Exchange") for the listing of the Bonds by way of debt issues to professional investors only (as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong). This document is for distribution to professional investors only. Investors should not purchase the Bonds in the primary or secondary markets unless they are professional investors and understand the risks involved. The Bonds are not suitable for retail investors.

The Hong Kong Stock Exchange has not reviewed the contents of this document, other than to ensure that the prescribed form disclaimer and responsibility statements, and a statement limiting distribution of this document to professional investors only have been reproduced in this document. Listing of the Bonds on the Hong Kong Stock Exchange is not to be taken as an indication of the commercial merits or credit quality of the Bonds or the Issuer, the Guarantor or the Company or quality of disclosure in this document. Hong Kong Exchanges and Clearing Limited and the Hong Kong Stock Exchange take no responsibility for the contents of this document, make no representation as to its accuracy or completeness and expressly disclaim any liability whatsoever for any loss however arising from or in reliance upon the whole or any part of the contents of this document.

The Bonds will be represented initially by interests in a global certificate (the "Global Certificate") in registered form which will be registered in the name of a nominee of, and shall be deposited on or about [●] (the "Issue Date") with, a common depositary for Euroclear Bank S.A./N.V. ("Euroclear") and Clearstream Banking S.A. ("Clearstream"). Interests in the Global Certificate will be shown on, and transfers thereof will be effected only through, records maintained by Euroclear and Clearstream. Except as described herein, certificates for Bonds will not be issued in exchange for interests in the Global Certificate.

Joint Global Coordinators

Bank of China

BOC International

Barclays

SPDB International

Joint Bookrunners and Joint Lead Managers

Bank of China BOC International Barclays  
SPDB International China CITIC Bank International Haitong International

[●] 2016

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## NOTICE TO INVESTORS

Each of the Issuer, the Guarantor and the Company, having made all reasonable enquiries, confirms that (i) this Offering Circular contains all information with respect to the Issuer, the Guarantor, the Company and their respective subsidiaries (together, the “**Group**”) and to the Bonds, the Guarantee, the Keepwell Deed and the Deed of Equity Interest Purchase Undertaking which is material in the context of the issue and offering of the Bonds; (ii) the statements contained in this Offering Circular relating to the Issuer, the Guarantor, the Company and to the Group, are in every material respect true and accurate and not misleading; (iii) the opinions and intentions expressed in this Offering Circular with regard to the Issuer, the Guarantor, the Company and to the Group are honestly held, have been reached after considering all relevant circumstances and are based on reasonable assumptions; (iv) there are no other facts in relation to the Issuer, the Guarantor, the Company, the Group, the Bonds, the Guarantee, the Keepwell Deed or the Deed of Equity Interest Purchase Undertaking the omission of which would, in the context of the issue and offering of the Bonds, make any statement in this Offering Circular misleading in any material respect; and (v) all reasonable enquiries have been made by the Issuer, the Guarantor and the Company to ascertain such facts and to verify the accuracy of all such information and statements.

This Offering Circular includes particulars given in compliance with the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited for the purpose of giving information with regard to the Issuer, the Guarantor and the Company. The Issuer, the Guarantor and the Company accept full responsibility for the accuracy of the information contained in this Offering Circular and confirm, having made all reasonable enquiries, that to the best of their knowledge and belief there are no other facts the omission of which would make any statement herein misleading.

This Offering Circular has been prepared by the Issuer, the Guarantor and the Company solely for use in connection with the proposed offering of the Bonds described in this Offering Circular. The distribution of this Offering Circular and the offering of the Bonds in certain jurisdictions may be restricted by law. Persons into whose possession this Offering Circular comes are required by the Issuer, the Guarantor, the Company and Bank of China Limited (“**BOC**”), BOCI Asia Limited (“**BOCI Asia**”), Barclays Bank PLC, SPDB International Capital Limited, China CITIC Bank International Limited (“**China CITIC Bank**”) and Haitong International Securities Company Limited (together, the “**Joint Lead Managers**”) to inform themselves about and to observe any such restrictions. None of the Issuer, the Guarantor, the Company and the Joint Lead Managers represents that this Offering Circular may be lawfully distributed, or that the Bonds may be lawfully offered, in compliance with any applicable registration or other requirements in any such jurisdiction, or pursuant to an exemption available thereunder, or assume any responsibility for facilitating any such distribution or offering. No action is being taken to permit a public offering of the Bonds or the distribution of this Offering Circular in any jurisdiction where action would be required for such purposes. There are restrictions on the offer and sale of the Bonds and the circulation of documents relating thereto, in certain jurisdictions including the United States, the United Kingdom, the British Virgin Islands, Hong Kong, Singapore, the PRC and Japan, and to persons connected therewith. For a description of certain further restrictions on offers, sales and resales of the Bonds and distribution of this Offering Circular, see “*Subscription and Sale*”.

No person has been or is authorised to give any information or to make any representation concerning the Issuer, the Guarantor, the Company, the Group, the Bonds, the Guarantee, the Keepwell Deed or the Deed of Equity Interest Purchase Undertaking other than as contained herein and, if given or made, any such other information or representation should not be relied upon as having been authorised by the Issuer, the Guarantor, the Company, the Joint Lead Managers, the Trustee or the

Agents (as defined in “*Terms and Conditions of the Bonds*” in this Offering Circular). Neither the delivery of this Offering Circular nor any offering, sale or delivery made in connection with the issue of the Bonds shall, under any circumstances, constitute a representation that there has been no change or development reasonably likely to involve a change in the affairs of the Issuer, the Guarantor, the Company, the Group or any of them since the date hereof or create any implication that the information contained herein is correct as at any date subsequent to the date hereof. This Offering Circular does not constitute an offer of, or an invitation by or on behalf of the Joint Lead Managers, the Trustee or the Agents to subscribe for or purchase any of the Bonds and may not be used for the purpose of an offer to, or a solicitation by, anyone in any jurisdiction or in any circumstances in which such offer or solicitation is not authorised or is unlawful.

This Offering Circular is highly confidential and has been prepared by the Issuer, the Guarantor and the Company solely for use in connection with the proposed offering of the Bonds described herein. None of the Issuer, the Guarantor and the Company has authorised its use for any other purpose. This Offering Circular may not be copied or reproduced in whole or in part. It may be distributed only to and its contents may be disclosed only to the prospective investors to whom it is provided. By accepting delivery of this Offering Circular each investor agrees to these restrictions.

No representation or warranty, express or implied, is made or given by the Joint Lead Managers, the Trustee or the Agents (or any of their respective affiliates, directors, officers, employees, representatives, agents or any person who controls any of them) as to the accuracy, completeness or sufficiency of the information contained in this Offering Circular, and nothing contained in this Offering Circular is, or shall be relied upon as, a promise, representation or warranty by the Joint Lead Managers, the Trustee or the Agents (or any of their respective affiliates, directors, officers, employees, representatives, agents or any person who controls any of them). None of the Joint Lead Managers, the Trustee and the Agents (and their respective affiliates, directors, officers, employees, representatives, agents and each person who controls any of them) has independently verified any of the information contained in this Offering Circular and can give assurance that such information is accurate, truthful or complete.

To the fullest extent permitted by law, the Joint Lead Managers, the Trustee and the Agents disclaim responsibility for the contents of this Offering Circular. Each of the Joint Lead Managers, the Trustee and the Agents accordingly disclaims all and any liability whether arising in tort or contract or otherwise which it might otherwise have in respect of this Offering Circular or any such statement. None of the Joint Lead Managers, the Trustee and the Agents undertakes to review the financial condition or affairs of the Company during the life of the arrangements contemplated by this Offering Circular nor to advise any investor or potential investors in the Bonds of any information coming to the attention of any Joint Lead Manager, the Trustee or any Agent.

This Offering Circular is not intended to provide the basis of any credit or other evaluation nor should it be considered as a recommendation by any of the Issuer, the Guarantor, the Company, the Joint Lead Managers, the Trustee or the Agents (or any of their respective affiliates, directors, officers, employees, representatives, agents or any person who controls any of them) that any recipient of this Offering Circular should purchase the Bonds. Each potential purchaser of the Bonds should determine for itself the relevance of the information contained in this Offering Circular and its purchase of the Bonds should be based upon such investigations with its own tax, legal and business advisers as it deems necessary.

**IN CONNECTION WITH THE ISSUE OF THE BONDS, BOCI ASIA (THE “STABILISING MANAGER”) (OR PERSONS ACTING ON ITS BEHALF) MAY, SUBJECT TO ALL APPLICABLE LAWS AND DIRECTIVES, OVER-ALLOT AND EFFECT TRANSACTIONS WITH A VIEW TO SUPPORTING THE MARKET PRICE OF THE BONDS AT A LEVEL HIGHER THAN THAT WHICH MIGHT OTHERWISE PREVAIL. HOWEVER, THERE IS NO ASSURANCE THAT THE STABILISING MANAGER (OR PERSONS ACTING ON ITS BEHALF) WILL UNDERTAKE STABILISATION ACTION. ANY STABILISATION ACTION MAY BEGIN ON OR AFTER THE DATE ON WHICH ADEQUATE PUBLIC DISCLOSURE OF THE TERMS OF THE OFFER OF THE BONDS IS MADE AND, IF BEGUN, MAY BE ENDED AT ANY TIME, BUT IT MUST END NO LATER THAN THE EARLIER OF 30 DAYS AFTER THE ISSUE DATE OF THE BONDS AND 60 DAYS AFTER THE DATE OF ALLOTMENT OF THE BONDS.**

In making an investment decision, investors must rely on their own examination of the Issuer, the Guarantor, the Company, the Group and the terms of the offering, including the merits and risks involved. See “Risk Factors” for a discussion of certain factors to be considered in connection with an investment in the Bonds. Each person receiving this Offering Circular acknowledges that such person has not relied on the Joint Lead Managers, the Trustee or the Agents or any person affiliated with the Joint Lead Managers, the Trustee or the Agents in connection with its investigation of the accuracy of such information or its investment decision.

### **Industry and Market Data**

Market data and certain industry forecasts and statistics in this Offering Circular have been obtained from both public and private sources, including market research, publicly available information and industry publications. Although this information is believed to be reliable, it has not been independently verified by the Issuer, the Guarantor, the Company, the Joint Lead Managers, the Trustee, the Agents (or any of their respective affiliates, directors, officers, employees, representatives, agents or any person who controls any of them), and none of the Issuer, the Guarantor, the Company, the Joint Lead Managers, the Trustee, the Agents (and their respective affiliates, directors, officers, employees, representatives, agents and each person who controls any of them) makes any representation as to the accuracy or completeness of that information. Such information may not be consistent with other information compiled within or outside the PRC. In addition, third party information providers may have obtained information from market participants and such information may not have been independently verified.

### **Presentation of Financial Information**

This Offering Circular contains the Company’s audited consolidated financial information as at and for the years ended 31 December 2014 and 2015 which is derived from its audited consolidated financial statements for the year ended 31 December 2015 have been audited by Baker Tilly China Certified Public Accountants (“**Baker Tilly**”). The audited consolidated financial statements of the Company were prepared in accordance with the Accounting Standards for Business Enterprises in China (“**PRC GAAP**”).

This Offering Circular also contains the Guarantor's audited consolidated financial information as at and for the years ended 31 December 2014 and 2015 which is derived from its audited consolidated financial statements for the year ended 31 December 2015 have been audited by Baker Tilly. The audited consolidated financial statements of the Guarantor were prepared in accordance with the PRC GAAP.

Each of the Company and the Guarantor has not prepared its consolidated financial statements as at and for the years ended 31 December 2015 in accordance with International Financial Reporting Standards ("IFRS"). As advised by Baker Tilly, there are no material differences between PRC GAAP and IFRS with respect to the determination of the Company's and the Guarantor's respective consolidated financial information as at and for the years ended 31 December 2014 and 2015.

### **Exchange Rate Information**

The Company's consolidated financial statements and the Guarantor's consolidated financial statements are presented in Renminbi. For convenience only and unless otherwise noted, all translations from Renminbi into US dollars in this Offering Circular were made at the rate of RMB6.5798 to US\$1.00, based on the noon buying rate as set forth in the H.10 statistical release of the Federal Reserve Bank of New York on 31 May 2016. No representation is made that the Renminbi amounts referred to in this Offering Circular could have been or could be converted into US dollars at any particular rate or at all, and *vice versa*. For further information relating to exchange rates, see "Exchange Rate Information".

### **Rounding**

In this Offering Circular, where information has been presented in thousands or millions of units, amounts may have been rounded up or down. Accordingly, totals of columns or rows of numbers in tables may not be equal to the apparent total of the individual items and actual numbers may differ from those contained herein due to rounding. References to information in billions of units are to the equivalent of a thousand million units.

### **Certain Definitions and Conventions**

In this Offering Circular, the term "**Group**" refers to Aluminum Corporation of China (中國鋁業公司) and its subsidiaries and the term "**Company**" or "**Chinalco**" refers to Aluminum Corporation of China (中國鋁業公司) individually, in each case unless the context otherwise requires. The term "**Guarantor**" refers to Aluminum Corporation of China Overseas Holdings Limited, a direct wholly-owned subsidiary of the Company. The term "**Issuer**" refers to Chinalco Capital Holdings Limited, a direct wholly-owned subsidiary of the Guarantor.

In this Offering Circular, unless otherwise specified or the context otherwise requires, references to "**China**" or the "**PRC**" are to the People's Republic of China and, for the purpose of this Offering Circular only, excluding Hong Kong, the Macau Special Administrative Region of the PRC and Taiwan; and references to "**Hong Kong**" are to the Hong Kong Special Administrative Region of China.

In this Offering Circular, unless otherwise specified or the context otherwise requires, references to "**Renminbi**", "**RMB**" or "**CNY**" are to the lawful currency of the PRC; references to "**Hong Kong dollars**", "**HK dollars**", "**Hong Kong dollars**", "**HK\$**" or "**HKD**" are to the lawful currency of Hong Kong; and references to "**US dollars**", "**US\$**" or "**USD**" are to the lawful currency of the United States of America.

**“PRC Government”** in this Offering Circular means the central government of the PRC, including all political subdivisions (including provincial, municipal and other regional or local governmental entities) and instrumentalities thereof, or where the context requires, any of them.

## DEFINITIONS AND GLOSSARY

“12th Five-Year Plan”	the Twelfth Five-Year Plan Guidelines for National Economic and Social Development of the PRC (《中華人民共和國國民經濟和社會發展第十二個五年規劃綱要》)
“Alcoa”	Aluminum Company of America
“alloying ingredients”	metals and materials that are melted to form alloys
“aluminium fabrication”	the process of converting primary aluminium or recycled aluminium materials into plates, strips, bars, tubes and other fabricated products
“American Depository Receipts”	a negotiable certificate issued by a U.S. bank representing a specified number of shares (or one share) in a foreign stock that is traded on a U.S. exchange
“anode furnace”	a furnace that refines crude copper into copper anode plates by feeding air to oxidise the impurities in the crude copper and then removing them with heavy oil
“Baotou Aluminum”	Baotou Aluminum Company Limited (包頭鋁業有限公司)
“bauxite”	a mineral ore that is principally composed of aluminium
“Bayer process”	a refining process that employs a strong solution of caustic soda at an elevated temperature to extract alumina from bauxite
“Bayer-sintering combined process” and “Bayer-sintering series process”	the two methods of refining process developed in China which involve the combined application of the Bayer process and the sintering process to extract alumina from bauxite
“billet”	a length of metal that has a round or square cross-section, with an area less than 36 square inches
“Chalco”	Aluminum Corporation of China Limited (中國鋁業股份有限公司)
“Chalco Liupanshui”	Chalco Liupanshui Hengtaihe Mining Co., Ltd. (中鋁六盤水恆泰合礦業有限公司)
“Chalco Trading”	China Aluminum International Trading Co., Ltd. (中鋁國際貿易有限公司)
“Chalieco”	China Aluminum International Engineering Corporation Limited (中鋁國際工程股份有限公司)
“China Copper”	China Copper Co., Ltd. (中國銅業有限公司)

“China Non-ferrous Metals Industry Corporation”	China Non-ferrous Metals Industry Corporation (中國有色金屬工業總公司), the restructured Non-ferrous Metals Company (Headquarters) of the Ministry of Metallurgical Industry
“China Rare Earth”	China Rare Earth & Metals Corporation Limited (中國稀有稀土有限公司)
“Chinalco Central China Copper”	Chinalco Central China Copper Co., Ltd. (中鋁華中銅業有限公司)
“Chinalco Finance”	Chinalco Finance Co., Ltd. (中鋁財務有限責任公司)
“Chinalco Kunming Copper”	Chinalco Kunming Copper Co., Ltd. (中鋁昆明銅業有限公司)
“Chinalco Luoyang Copper”	Chalco Luoyang Copper Co., Ltd. (中鋁洛陽銅業有限公司)
“Chinalco Shanghai Copper”	Chinalco Shanghai Copper Co., Ltd. (中鋁上海銅業有限公司)
“CMC”	Chinalco Mining Corporation International (中鋁礦業國際)
“continuous casting”	the process where molten metal is solidified directly into semifinished billets, blooms or slabs for subsequent rolling in finishing mills, bypassing the ingot stage
“copper alloys”	metal alloys that have copper as their principal component
“copper fabrication”	the process of converting raw copper materials into tubes, pipes, plates, sheets, foils and other fabricated products
“copper oxides”	compounds from the two elements: copper and oxygen
“copper sulphides”	a family of chemical compounds and minerals with the formula $Cu_xS_y$
“crude copper”	impure copper obtained through the thermal treatment of minerals and metallurgical ores and concentrates
“deposit(s)”	as defined in the Chinese National Standard, a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction; the location, quantity, grade (or quality), continuity and other geological characteristics of which are known, estimated or interpreted from specific geological evidence and knowledge; sub-divided, in order of decreasing geological confidence, measured, indicated, inferred and reconnaissance categories, or categories 111 to 334 as categorised in the Chinese National Standard

“Dongdong Coal”	Shanxi Chengcheng Dongdong Coal Co., Ltd. (陝西澄城董東煤炭有限責任公司)
“electrolysis”	a refining process for extracting copper by inserting copper anode plates into electrolytic cells where an electric current passes through a copper-containing electrolyte
“Energy-Saving and Emission Reduction Goals”	the energy-saving and emission reduction goals set out in the 12th Five-Year Plan, by which China expects to cut its per unit GDP energy consumption by 16% compared with the 2010 level by the end of 2015
“Gansu Hualu”	Gansu Hualu Aluminum Company Limited (甘肅華鷺鋁業有限公司)
“Gansu Huayang”	Gansu Huayang Mining Development Company Limited (甘肅華陽礦業開發有限責任公司)
“GDP”	gross domestic product
“Group”	the Company and its subsidiaries
“Guangxi Rare Earth”	Chinalco Guangxi Non-ferrous Rare Earth Development Co., Ltd (中鋁廣西有色稀土開發有限公司)
“Guizhou Yuneng”	Guizhou Yuneng Mining Co., Ltd. (貴州渝能礦業有限責任公司)
“H Shares”	overseas listed foreign shares with a par value of RMB1.00 each, which are listed on the Hong Kong Stock Exchange
“Hong Kong Stock Exchange”	The Stock Exchange of Hong Kong Limited
“IFRS”	the International Financial Reporting Standards, which include standards and interpretations promulgated by the International Accounting Standards Board (IASB), and the International Accounting Standards (IAS) and interpretations issued by the International Accounting Standards Committee (IASC)
“industrial sulphuric acid”	sulphuric acid used for industrial and manufacturing purposes
“ingot”	metal that has been cast into a shape suitable for further processing
“Jiangsu Rare Earth”	Chinalco Jiangsu Rare Earth Co. Ltd. (中鋁稀土江蘇有限公司)
“JORC Code”	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, effective from December 2004
“kWh”	kilowatt hours, a unit of electrical power, meaning one kilowatt of power for one hour

“Lanzhou branch”	Lanzhou Aluminum Co., Ltd. (蘭州鋁業股份有限公司)
“Liancheng branch”	Lanzhou Liancheng Longxing Aluminum Company Limited (蘭州連城隴興鋁業有限責任公司)
“LME”	the London Metal Exchange Limited
“matte”	molten metal sulfide that is formed during copper smelting
“MOFCOM”	Ministry of Commerce of the People’s Republic of China (中華人民共和國商務部)
“NDRC”	National Development and Reform Commission of the People’s Republic of China (中華人民共和國國家發展和改革委員會)
“NI 43-101”	National Instrument 43-101, a mineral resource classification scheme used for the public disclosure of information relating to mineral properties in Canada
“Ningxia Energy”	Chalco Ningxia Energy Group Co., Ltd. (中鋁寧夏能源集團有限公司) (formerly Ningxia Electric Power Group Co., Ltd. (寧夏發電集團有限責任公司))
“non-ferrous metals”	a metal or alloy that does not contain iron in appreciable amounts
“ore-dressing Bayer process”	a refining process Chalco developed to increase the alumina-to-silica ratio of bauxite
“PRC GAAP”	Accounting Standards for Business Enterprises in China
“PRC government”	the government of the PRC, including all governmental subdivisions (including provincial, municipal and other regional or local government entities)
“primary aluminium”	a widely used metal and a key raw material in aluminium fabrication
“pure copper”	copper with a 99.9% purity
“Qinghai Energy”	Qinghai Province Energy Development (Group) Co., Ltd., (青海省能源發展(集團)有限責任公司)
“raw copper”	a widely used metal and a key raw material in copper fabrication
“Research Institute”	Zhengzhou Research Institute (鄭州研究院)
“Rio Tinto”	Rio Tinto plc, a company incorporated in England and Wales, the shares of which are listed on the London Stock Exchange and the New York Stock Exchange

“Rio Tinto Group”	a dual-listed company with listings on both the London Stock Exchange under Rio Tinto and on the Australian Securities Exchange under the name Rio Tinto Limited. The dual-listed company structure grants shareholders of both companies the same proportional economic interests and ownership rights in the consolidated Rio Tinto Group, in such a way as to be equivalent to all shareholders of the two companies actually being shareholders in a single entity
“SAFE”	State Administration of Foreign Exchange of the PRC (國家外匯管理局)
“SASAC”	State-owned Assets Supervision and Administration Commission of the State Council (國務院國有資產監督管理委員會), a special commission of the PRC directly under the State Council that is responsible for managing and drafting laws for state-owned enterprises
“Shanghai Stock Exchange”	the Shanghai Stock Exchange (上海證券交易所)
“Shanxi Jiexiu”	Shanxi Jiexiu Xinyugou Coal Industry (Group) Co., Ltd. (山西介休鑫峪溝煤業(集團)有限公司)
“Shanxi Other Mines”	seven of the Group’s jointly-operated mines, including Shangtan mine, Jindui mine, Shicao mine, Nanpo mine, Xishan mine, Niugaogou mine and Sunjiata mine in Shanxi Province that became the mining areas of the new mine of the Group in 2010
“Shenzhen Stock Exchange”	the Shenzhen Stock Exchange (深圳證券交易所)
“Simandou Project”	the project to develop and operate the Simandou iron ore mine located in Guinea, West Africa
“sintering process”	a refining process employed to extract alumina from bauxite by mixing ground bauxite with supplemental materials and burning the mixture in a coal-fired kiln
“smelting”	the electrolytic process used to produce molten aluminium from alumina
“solvent extraction process”	a refining process that dissolves copper ores, refined copper ores or copper containing calcine in a suitable solvent, and then extracting copper through electro-winning
“State Administration of Non-ferrous Metals Industry”	State Administration of Non-ferrous Metals Industry (國家有色金屬工業局), the enterprise that was subsequently restructured into the “Three Non-ferrous Metals Corporations of China”
“State Council”	State Council of the PRC (中華人民共和國國務院)

“thermal extraction process”	a refining process that mixes copper ores with melting agents at a temperature of 1,100 degrees Celsius, and then extracting copper with quartz sand, anode furnaces and electrolysis
“tonne”	the metric tonne, a unit of weight, that is equivalent to 1,000 kilogrammes or 2,204.6 pounds
“Toromocho Project”	CMC’s wholly-owned copper project situated in the core of the Morococha mining district in central Peru
“Yunnan Copper Co”	Yunnan Copper Co., Ltd. (雲南銅業股份有限公司)
“Yunnan Copper Industry”	Yunnan Copper Industry (Group) Co., Ltd. (雲南銅業(集團)有限公司)
“Yunnan Copper Marketing and Sales”	Yunnan Copper Marketing and Sales Co., Ltd. (雲南銅業營銷有限公司)
“Zunyi Alumina”	Chalco Zunyi Alumina Co., Ltd. (中國鋁業遵義氧化鋁有限公司)

## FORWARD-LOOKING STATEMENTS

The Issuer, the Guarantor and Chinalco have made certain forward-looking statements in this Offering Circular regarding, among other things, the Group's financial condition, future expansion plans and business strategy. These forward-looking statements are based on the Group's current expectations about future events. Although the Issuer, the Guarantor and Chinalco believe that these expectations and projections are reasonable, such forward-looking statements are inherently subject to risks, uncertainties and assumptions, including, among other things:

- the Group's ability to successfully implement the Group's business plans and strategies;
- future developments, trends and conditions in the industry and markets in which the Group operate;
- the Group's business prospects;
- the Group's capital expenditure plans;
- the actions and developments of the Group's competitors;
- the Group's financial condition and performance;
- capital market developments;
- the Group's dividend policy;
- the regulatory environment of the non-ferrous metal industry, particularly the aluminium and copper industries in China;
- any changes in the laws, rules and regulations of the central and local governments in the PRC and other relevant jurisdictions and the rules, regulations and policies of the relevant governmental authorities relating to all aspects of the Group's business;
- changes in political, economic, legal and social conditions in China, including the specific policies of the PRC central and local governments affecting the region where the Group operates, which affect the availability and cost of financing, production capacity, pricing and volume of the Group's products;
- changes or volatility in interest rates, foreign exchange rates, equity prices or other rates or prices, including those pertaining to the PRC and the industry and markets in which the Group operate;
- various business opportunities that the Group may pursue; and
- macroeconomic measures taken by the PRC government to manage economic growth.

The words “anticipate”, “believe”, “estimate”, “expect”, “intend”, “plan” and similar expressions are intended to identify a number of these forward-looking statements. The Group undertakes no obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise. In light of these risks, uncertainties and assumptions, the forward-looking events discussed in this Offering Circular may not occur and the Group’s actual results could differ materially from those anticipated in these forward-looking statements.

These forward-looking statements speak only as at the date of this Offering Circular. The Group expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement contained herein to reflect any change in their expectations with regard thereto or any change of events, conditions or circumstances, on which any such statement was based.

## SUMMARY

*The summary below is only intended to provide a very limited overview of information described in more detail elsewhere in this Offering Circular. As it is a summary, it does not contain all of the information that may be important to investors. Terms defined elsewhere in this Offering Circular shall have the same meanings when used in this summary. Prospective investors should therefore read this entire Offering Circular, including the section entitled “Risk factors” and the financial statements and related notes thereto, before making an investment decision.*

### THE GROUP

The Group is a leading diversified and vertically integrated producer of non-ferrous metals in China with a primary focus on alumina, primary aluminium, copper and various rare earth metals. Chinalco believes that the Group is the largest supplier of non-ferrous metals in China and a leading alumina corporation with significant influence globally. The Group believes that it ranks first in terms of overall corporate strength among copper enterprises in the PRC for the year ended 31 December 2015. In addition, the Group occupies a dominant market position in rare earth metals industry with operations covering the complete industry chain and the Group believes that it has the capacity to lead industry consolidation. The Group principally engages in exploration and mining of mineral resources, refining, smelting, fabrication and trading of non-ferrous metals, mainly bauxite, alumina, primary aluminium, copper and rare earth metals. In addition, the Group also derives revenue from other services including engineering and technical services, mineral resources development, overseas investment and financial services.

Established in 2001, Chinalco is a wholly-owned and directly supervised state-owned backbone enterprise of the SASAC. As at 31 December 2015, the Group has an issued capital of RMB26.2 billion and a total asset value of RMB486.8 billion. The Group has operations in over 20 countries and has over 430 subsidiaries and affiliates worldwide, including six major subsidiaries that are listed in Shanghai, Shenzhen, Hong Kong, Australia and/or New York. According to *Fortune Magazine*, Chinalco has been a Fortune Global 500 company for eight consecutive years since 2008 and was ranked 240th among the Fortune Global 500 in 2015.

The Group's principal lines of business include the following:

**Aluminium business:** The Group's aluminium business is principally conducted through Chalco, which is a leading enterprise in the non-ferrous metal industry, and in terms of scale, Chalco ranked among the top enterprises in the global aluminium industry for the year ended 31 December 2015. Chalco has been listed on the Hong Kong Stock Exchange since December 2001 (stock code: 2600), on the New York Stock Exchange (by way of American Depository Receipts) since December 2001 (ticker symbol: ACH) and on the Shanghai Stock Exchange since April 2007 (stock code: 601600). The Group's aluminium business principally involves bauxite mining, the production and sale of alumina, primary aluminium and aluminium alloy products, the operation of coal and electricity businesses, trading of non-ferrous metal products as well as a logistics business. The aluminium business is the Group's largest business line, accounting for 52.0 per cent. and 51.7 per cent. of the Group's revenue for the years ended 31 December 2014 and 2015 respectively. As at 31 December 2015, the Group owned and operated 20 mines in China that had approximately 270.6 million tonnes of aggregate bauxite reserves and it continues to explore new bauxite reserves to replenish its reserves.

**Copper business:** The Group's copper business is principally conducted by China Copper and CMC, which holds the entire stake of the Toromocho Project in Central Peru, one of the largest copper mines in the world. The Group's copper business principally engages in copper mining, copper refining and production and copper fabrication. The copper business is the Group's second largest business line, accounting for 39.3 per cent. and 36.7 per cent. of the Group's revenue for 2014 and 2015 respectively. China Copper has five principal subsidiaries in this segment, including Yunnan Copper Industry, Chinalco Luoyang Copper, Chinalco Kunming Copper, Chinalco Shanghai Copper and Chinalco Central China Copper. Yunnan Copper Industry is a leading copper producer in China engaging in the production of high-purity copper cathode, copper wire bar for electrical purposes, industrial sulphuric acid, gold ingots, silver ingots, round copper wire for electrical purposes, bluestone and the recycling of various metals such as gold, silver, aluminium, bismuth, tin, platinum and palladium. Chinalco Luoyang Copper, Chinalco Kunming Copper, Chinalco Shanghai Copper and Chinalco Central China Copper engage in copper fabrication. CMC is the Group's core overseas platform for the future acquisition, investment, development and operation of non-ferrous and non-aluminium mineral resources and projects. CMC has been listed on the Hong Kong Stock Exchange since January 2013 (stock code: 3668). As at 31 December 2015, the Group owned 27 copper mines (24 of which are in production and the remaining three are under development) in China with over 9.0 million tonnes of aggregate copper reserves.

**Rare earth metals business:** The Group's rare earth metals business is principally conducted by China Rare Earth, which produces and sells a wide range of rare earth products, such as titanium, molybdenum, tungsten, bismuth, tin, nickel and cobalt.

**Engineering and technical services business:** The Group's engineering and technical services business is principally conducted through Chalieco. Chalieco was listed on the Hong Kong Stock Exchange in July 2012 (stock code: 2068) and is a leading technology, engineering services and equipment provider in the non-ferrous metals industry in the PRC and provides fully integrated engineering solutions covering the complete value chain of the non-ferrous metals industry.

**Other businesses:** The Group also conducts a number of ancillary businesses in support of its principal businesses, including mineral resource development, overseas investment and financial services.

For the years ended 31 December 2014 and 2015, the Group recorded a revenue of RMB273.0 billion and RMB238.8 billion, respectively. As at 31 December 2014 and 2015, the Group's total assets amounted to RMB486.4 billion and RMB486.8 billion, respectively.

The following table sets forth the revenue breakdown by business lines for the periods indicated:

Principal business lines	For the year ended 31 December			
	2014		2015	
	(RMB million)	%	(RMB million)	%
Aluminium	141,999.8	52.0%	123,445.9	51.7%
Copper	107,251.2	39.3%	87,746.0	36.7%
Rare Earth Metals	2,074.5	0.8%	2,123.6	0.9%
Others	21,693.6	7.9%	25,463.6	10.7%
<b>Total</b>	<b>273,019.1</b>	<b>100.0%</b>	<b>238,779.1</b>	<b>100.0%</b>

The following table sets forth the gross profit and gross profit margin by business lines for the periods indicated:

Principal business lines	For the year ended 31 December			
	2014		2015	
	Gross profit (RMB million)	Gross profit margin %	Gross profit (RMB million)	Gross profit margin %
Aluminium	2,058	1.4%	4,288	3.5%
Copper	3,404	3.2%	3,244	3.7%
Rare Earth Metals	249	12.0%	234	11.0%
Others	4,732	9.5%	5,652	11.3%
<b>Total</b>	<b>10,443</b>	<b>4.6%</b>	<b>13,418</b>	<b>5.6%</b>

## COMPETITIVE STRENGTHS

- Strong state-owned enterprise background and government support;
- A leader in the aluminium and copper industries in China and globally with a vertically integrated value chain and diverse product mix;
- Well positioned to benefit from China's rapidly growing economy and favourable industry policies;
- Significant upstream resources and competitive cost structure;
- Advanced technologies in the non-ferrous metals industry;
- Strong liquidity position with access to various sources of capital; and
- Experienced management and operations teams.

## **BUSINESS STRATEGIES**

The Group aims to become a leading international resources and mining company with sustainable growth potential. The Group's principal strategy is to strengthen its aluminium business, optimise its copper business and further develop its rare earth metals business. In addition, the Group intends to further develop other business lines supporting these core businesses and to focus on upstream value chains of relevant industries and high-value products. To achieve this goal, the Group intends to implement the following strategies:

- Strengthen the aluminium business as the Group's core competitive strength;
- Optimise the copper business to enhance market share and competitive advantage;
- Further develop the rare earth metals business to diversify the Group's product mix;
- Further develop the engineering and technical services business as well as other businesses to improve the Group's overall profitability and market competitiveness; and
- Continue to seek overseas expansion.

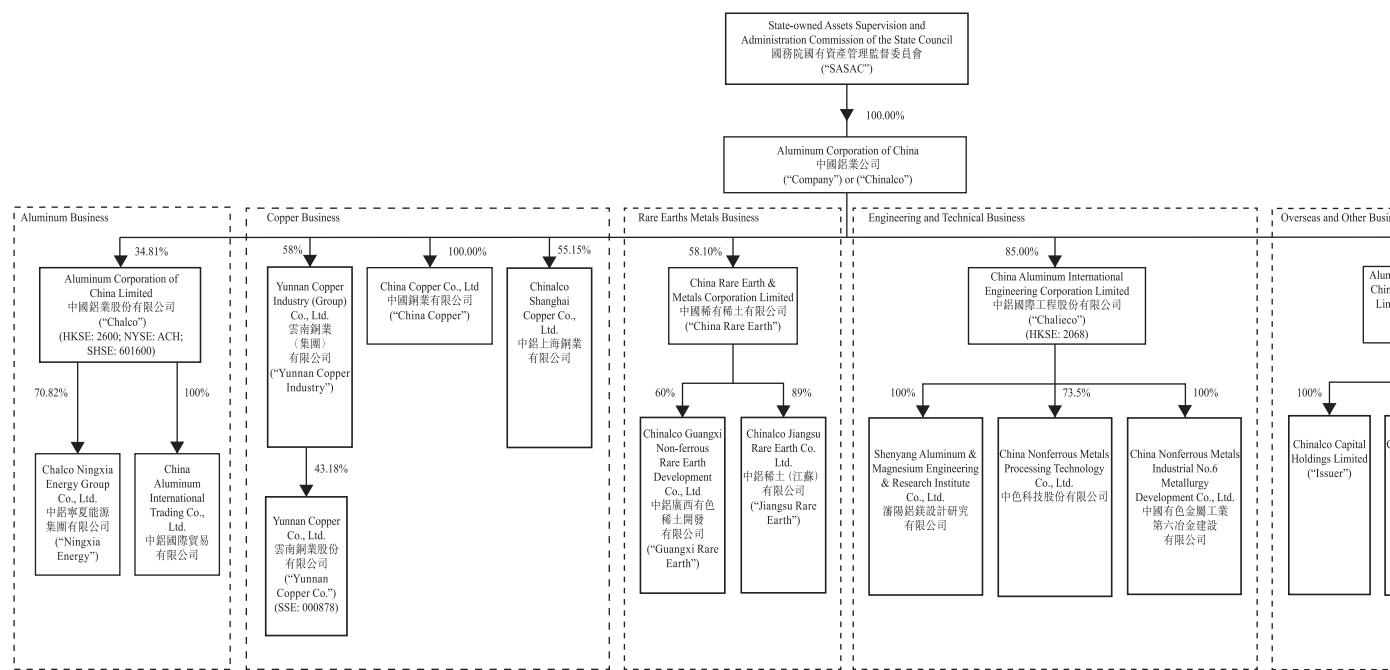
## **THE ISSUER**

The Issuer was incorporated as a company with limited liability on 28 June 2016 under the laws of the British Virgin Islands. The registered office of the Issuer is at the offices of Intertrust Corporate Services (BVI) Limited, 171 Main Street, P.O. Box 4041, Road Town Tortola VG1110, British Virgin Islands. As at the date of this Offering Circular, the Issuer is authorised to issue a maximum of 50,000 shares of one class of shares of par value US\$1.00 and the Issuer has 1,000 shares in issue. The Issuer is a wholly-owned subsidiary of the Guarantor.

## **THE GUARANTOR**

The Guarantor was incorporated as a company with limited liability on 18 July 2007 under the laws of Hong Kong. The registered office of the Guarantor is at Room 4501, 45/F, Far East Finance Centre, No. 16 Harcourt Road, Admiralty, Hong Kong. The Guarantor is a wholly-owned subsidiary of the Company. As at 31 December 2015, it has ten subsidiaries across six countries and one representative office in Beijing. The Guarantor was set up to explore overseas resources and manage the Group's investments in foreign countries. As at 31 December 2014 and 2015, the Guarantor Group had consolidated total assets of RMB151.9 billion and RMB 164.7 billion which contributes to approximately 31.2 per cent. and 33.9 per cent. of the Group's consolidated total assets. For the years ended 31 December 2014 and 2015, the Guarantor Group recorded a net profit of RMB1.47 billion and RMB1.90 billion, respectively.

The following chart sets forth a simplified corporate structure of the Group as at 31 December 2015:



\* CMC is managed by the Group's copper segment

## OFFER STRUCTURE

*The following is a description of the structure of the offering of the Bonds, which should be read in conjunction with the sections entitled “Risk factors”, “Terms and Conditions of the Bonds”, “Description of the Keepwell Deed” and “Description of the Deed of Equity Interest Purchase Undertaking”.*

### **The Bonds and the Guarantee**

The Bonds will be issued by the Issuer. The Bonds will constitute direct, unsubordinated, unconditional and (subject to Condition 4(a) of the Terms and Conditions of the Bonds) unsecured obligations of the Issuer and shall at all times rank *pari passu* and without any preference or priority among themselves. The payment obligations of the Issuer under the Bonds will, save for such exceptions as may be provided by mandatory provisions applicable law, at all times rank at least equally with all the Issuer’s other present and future unsecured and unsubordinated obligations.

On the Issue Date, the Bonds will have the benefit of a Guarantee provided by the Guarantor. Pursuant to the Guarantee, the Guarantor will unconditionally and irrevocably guarantee the due payment of all sums expressed to be payable by the Issuer under the Bonds and the Trust Deed (as defined in the Terms and Conditions of the Bonds). The obligations of the Guarantor under the Guarantee shall, save for such exceptions as may be provided by mandatory provisions of applicable law and subject to Condition 4(a) of the Terms and Conditions of the Bonds, at all times rank at least equally with all its other present and future unsecured and unsubordinated obligations.

The Issuer was incorporated in the British Virgin Islands and is a direct wholly-owned subsidiary of the Guarantor. The Guarantor was incorporated in Hong Kong and is a direct wholly-owned subsidiary of the Company.

### **The Keepwell Deed**

The Issuer, the Guarantor and the Company will execute the Keepwell Deed (as further described in the section entitled “*Description of the Keepwell Deed*”) with and in favour of the Trustee on the Issue Date. Defined terms used in this section shall have the meanings given to them in the Keepwell Deed.

#### ***Maintenance of Consolidated Net Worth; Liquidity***

Pursuant to the Keepwell Deed, the Company will undertake with the Issuer, the Guarantor and the Trustee that it shall cause (i) each of the Issuer and the Guarantor to have a Consolidated Net Worth (as defined in the Keepwell Deed) of at least US\$1.00 (or its equivalent in any other currency) at all times and (ii) each of the Issuer and the Guarantor to have sufficient liquidity to ensure timely payment by it of any amounts payable in respect of the Bonds and the Guarantee in accordance with the Trust Deed and the Conditions and all payments due under the Trust Deed and the Agency Agreement.

### **Relevant Indebtedness**

Pursuant to the Keepwell Deed, the Company will undertake to the Trustee, the Issuer and the Guarantor that at all times during the term of the Keepwell Deed, the Company and its Principal Subsidiaries (other than the Listed Subsidiaries and the Subsidiaries of a Listed Subsidiary) will not create or permit to subsist any mortgage, charge, lien, pledge or other security interest upon the whole or any part of its present or future undertaking, assets or revenues (including any uncalled capital) to secure any Relevant Indebtedness which is issued outside the PRC, or any guarantee or indemnity in respect of any Relevant Indebtedness which is issued outside the PRC, without at the same time or prior thereto according to the Bonds (A) the same security as is created or subsisting to secure any such Relevant Indebtedness, guarantee or indemnity or (B) such other security as either (a) the Trustee may in its absolute discretion deem not materially less beneficial to the interest of the Bondholders or (b) as shall be approved by an Extraordinary Resolution of the Bondholders.

The Company has also given certain other undertakings as further described in “*Description of the Keepwell Deed*”.

The Keepwell Deed is not a guarantee by or any legally binding obligation of the Company of the payment of any obligation, responsibility, indebtedness or liability, of any kind or character whatsoever, of the Issuer or the Guarantor under the laws of any jurisdiction, including the PRC. The performance by the Company of its obligations under the Keepwell Deed may be subject to the receipt of Regulatory Approvals and the Company will undertake to use all reasonable endeavours to obtain the same. See “*Risk factors — The Keepwell Deed is not a guarantee of the payment obligations under the Bonds and the Guarantee*”.

### **The Deed of Equity Interest Purchase Undertaking**

The Guarantor and the Company will execute the Deed of Equity Interest Purchase Undertaking (as further described in the section entitled “*Description of the Deed of Equity Interest Purchase Undertaking*”) with and in favour of the Trustee on the Issue Date. Defined terms used in this section shall have the meanings given to them in the Deed of Equity Interest Purchase Undertaking.

While the Keepwell Deed contains a general obligation requiring the Company to ensure that each of the Issuer and the Guarantor has sufficient liquidity to make timely payment by it of any amounts payable in respect of the Bonds and the Guarantee in accordance with the Trust Deed and the Conditions and all payments due under the Trust Deed and the Agency Agreement, the Deed of Equity Interest Purchase Undertaking provides a specified means by which the Company could assist the Issuer and the Guarantor in meeting their respective obligations under the Bonds, the Guarantee and the Trust Deed upon the occurrence of an Event of Default.

Under the Deed of Equity Interest Purchase Undertaking, upon the receipt of a written purchase notice provided by the Trustee in accordance with the Trust Deed following receipt by the Trustee of written notice of the occurrence of an Event of Default under the Bonds, the Company will agree that it shall, subject to obtaining all Regulatory Approvals, purchase (either by itself or through a Subsidiary of the Company as designated by it) certain Equity Interests held by the Relevant Transferor(s) at the Purchase Price.

The Purchase Price shall be determined in accordance with any applicable PRC laws and regulations effective at the time of determination and the other applicable terms relating to the Purchase, provided that the Purchase Price shall be sufficient to (i) enable the Issuer and the Guarantor to discharge in full their respective obligations under the Bonds, the Guarantee and the Trust Deed, (ii) pay an amount equal to the interest payable in respect of one interest period on the Bonds, and (iii) pay in full all fees, costs, expenses (including without limitation, legal expenses) and other amounts payable to the Trustee and/or the Agents under or in connection with the Bonds, the Trust Deed, the Agency Agreement, the Keepwell Deed and/or the Deed of Equity Interest Purchase Undertaking as at the date of the Purchase Notice plus provisions for fees, costs, expenses and all other amounts which may be incurred after the date of the Purchase Notice, as notified by the Trustee in the Purchase Notice.

Please see “*Risk Factors — Performance by the Company of its undertaking under the Deed of Equity Interest Purchase Undertaking is subject to approvals of the PRC governmental authorities*”, “*Risk Factors — Performance by the Company of its undertaking under the Deed of Equity Interest Purchase Undertaking may be subject to consent from third party creditors and shareholders, and may also be restricted if any of the equity interests is secured in favour of third party creditors*” and “*Risk Factors — The Issuer has limited assets, which affects its ability to make payments under the Bonds and to enable the Company to purchase adequate equity interest from it pursuant to the Deed of Equity Interest Purchase Undertaking*”.

## THE ISSUE

*The following summary contains some basic information about the Bonds and is qualified in its entirety by the remainder of this Offering Circular. Some of the terms described below are subject to important limitations and exceptions. Words and expressions defined in “Terms and Conditions of the Bonds” and “Summary of Provisions Relating to the Bonds in Global Form” shall have the same meanings in this summary. For a more complete description of the terms of the Bonds, please see “Terms and Conditions of the Bonds” in this Offering Circular.*

<b>Issuer</b>	Chinalco Capital Holdings Limited.
<b>Guarantor</b>	Aluminum Corporation of China Overseas Holdings Limited (中鋁海外控股有限公司).
<b>Keepwell Provider and Equity Interest Purchase Undertaking Provider</b>	Aluminum Corporation of China (中國鋁業公司).
<b>Guarantee</b>	<p>The Guarantor will unconditionally and irrevocably guarantee the due payment of all sums expressed to be payable by the Issuer under the Bonds and the Trust Deed, as further described in Condition 3(b) of the Terms and Conditions of the Bonds.</p> <p>The Guarantor's obligations in respect of the Bonds and the Trust Deed will be contained in the Trust Deed (and any supplement thereto).</p> <p>The obligations of the Guarantor under the Guarantee shall, save for such exceptions as may be provided by mandatory provisions of applicable law and subject to Condition 4(a) of the Terms and Conditions of the Bonds, at all times rank at least equally with all its other present and future unsecured and unsubordinated obligations.</p>
<b>Issue</b>	US\$[●] aggregate principal amount of [●] per cent. Guaranteed Bonds
<b>Issue Price</b>	[●] per cent.
<b>Form and Denomination</b>	The Bonds will be issued in registered form in the denomination of US\$200,000 each and integral multiples of US\$1,000 in excess thereof.
<b>Interest</b>	The Bonds will bear interest on their outstanding principal amount from and including [●] 2016 at the rate of [●] per cent. per annum, payable semi-annually in arrear in equal instalments of US\$[●] per Calculation Amount on [●] and [●] in each year.
<b>Issue Date</b>	[●] 2016.
<b>Maturity Date</b>	[●].

<b>Status</b>	The Bonds, when issued, will constitute direct, unsubordinated, unconditional and (subject to Condition 4(a) of the Terms and Conditions of the Bonds) unsecured obligations of the Issuer and shall at all times rank <i>pari passu</i> and without any preference or priority among themselves. The payment obligations of the Issuer under the Bonds shall, save for such exceptions as may be provided by mandatory provisions of applicable law, at all times rank at least equally with all its other present and future unsecured and unsubordinated obligations.
<b>Negative Pledge</b>	The Bonds contain a negative pledge provision as further described in Condition 4 of the Terms and Conditions of the Bonds.
<b>Events of Default</b>	The Bonds will contain certain events of default provisions as further described in " <i>Terms and Conditions of the Bonds — Events of Default</i> ".
<b>Taxation</b>	All payments of principal, premium and interest by or on behalf of the Issuer or the Guarantor in respect of the Bonds or under the Guarantee shall be made free and clear of, and without withholding or deduction for, any taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or within the British Virgin Islands, Hong Kong, the PRC or any political subdivision or authority therein or thereof having power to tax, unless such withholding or deduction is required by law, as further described in Condition 8 of the Terms and Conditions of the Bonds. Where such withholding or deduction is made by the Issuer or the Guarantor, the Issuer shall, or, as the case may be, the Guarantor shall, subject to the limited exceptions specified in the Terms and Conditions of the Bonds, pay such additional amounts as will result in receipt by the holders of the Bonds of such amounts as would have been received by them had no such withholding or deduction been required.
<b>Final Redemption</b>	Unless previously redeemed or purchased and cancelled, the Bonds will be redeemed at their principal amount on the Maturity Date.
<b>Redemption for Taxation Reasons</b>	The Bonds may be redeemed at the option of the Issuer in whole, but not in part, at their principal amount, together with interest accrued up to, but excluding, the date fixed for redemption, at any time in the event of certain changes affecting taxes of the British Virgin Islands, Hong Kong, the PRC or any political subdivision or any authority thereof or therein having power to tax, as further described in " <i>Terms and Conditions of the Bonds — Redemption and Purchase — Redemption for Taxation Reasons</i> ".

<b>Redemption for Change of Control</b>	At any time following the occurrence of a Change of Control, a Bondholder will have the right, at such Bondholder's option, to require the Issuer to redeem all, but not some only, of such Bondholder's Bonds on the Change of Control Put Date at a redemption price equal to 101 per cent. of their principal amount, together with accrued interest to, but excluding, the Change of Control Put Date. Please see " <i>Terms and Conditions of the Bonds — Redemption and Purchase — Redemption for Change of Control</i> ".
<b>Redemption at the Option of the Issuer</b>	The Issuer may at any time and from time to time redeem the Bonds, in whole but not in part, upon giving not less than 30 nor more than 60 days' notice (an " <b>Option Redemption Notice</b> "), at a Make Whole Price as of, and accrued and unpaid interest, if any, to (but excluding), the redemption date specified in the Option Redemption Notice.  Please see " <i>Terms and Conditions of the Bonds — Redemption and Purchase — Redemption at the Option of the Issuer</i> ".
<b>Keepwell Deed</b>	The Issuer, the Guarantor, the Company and the Trustee will enter into the Keepwell Deed, as further described in " <i>Description of the Keepwell Deed</i> ". The Keepwell Deed does not constitute a guarantee by or any legally binding obligation of the Company of the payment of any obligation, indebtedness or liability of the Issuer or the Guarantor.
<b>Deed of Equity Interest Purchase Undertaking</b>	The Guarantor, the Company and the Trustee will enter into the Deed of Equity Interest Purchase Undertaking, as further described in " <i>Description of the Deed of Equity Interest Purchase Undertaking</i> ". The Deed of Equity Interest Purchase Undertaking does not constitute a guarantee by the Company of the obligations of the Issuer under the Bonds or of the Guarantor under the Guarantee.
<b>Clearing Systems</b>	The Bonds will be represented by beneficial interests in the Global Certificate, which will be registered in the name of a nominee of, and deposited on the Issue Date with, a common depositary for Euroclear and Clearstream. Beneficial interests in the Global Certificate will be shown on and transfers thereof will be effected only through records maintained by Euroclear and Clearstream. Except as described herein, certificates for the Bonds will not be issued in exchange for beneficial interests in the Global Certificate.
<b>Governing Law</b>	English law.
<b>Trustee</b>	Bank of Communications Trustee Limited.
<b>Principal Paying Agent and Transfer Agent</b>	Bank of Communications Co., Ltd. Hong Kong Branch.
<b>Registrar</b>	Bank of Communications Co., Ltd. Hong Kong Branch.

**Listing** An application will be made to the Hong Kong Stock Exchange for the listing of, and permission to deal in, the Bonds by way of debt issues to professional investors only.

**Use of Proceeds** See the section entitled “*Use of Proceeds*”.

**ISIN** [●].

**Common Code** [●].

## SUMMARY FINANCIAL INFORMATION OF THE COMPANY

*The following tables set forth the summary consolidated financial information of the Company as at the dates and for the periods indicated. The summary audited consolidated financial information as at and for the years ended 31 December 2014 and 2015 set forth below is derived from the Company's audited consolidated financial statements as at and for the year ended 31 December 2015 which have been audited by Baker Tilly. The information set out below should be read in conjunction with, and is qualified in its entirety by reference to, such audited consolidated financial statements of the Company, including the notes thereto.*

*The Company's consolidated financial statements were prepared and presented in accordance with PRC GAAP. As advised by Baker Tilly, there are no material differences between PRC GAAP and IFRS with respect to the determination of the Company's consolidated financial information as at and for the years ended 31 December 2014 and 2015.*

*For the purpose of the summary financial information, the translation of Renminbi amounts into US dollar amounts has been made at the rate of RMB6.5798 to US\$1.00.*

### CONSOLIDATED INCOME STATEMENT

	Year ended 31 December		
	2014	2015	2015
	(RMB in millions)	(US\$ in millions)	
<b>Total operating income</b>	273,019.1	238,779.1	36,289.7
Including:			
Operating income	272,865.7	238,556.9	36,256.0
Interest income	127.9	199.6	30.3
Fee and commission income	25.4	22.6	3.4
<b>Total operating costs</b>	298,591.7	253,959.3	38,596.8
Including:			
Operating costs	263,542.9	226,173.8	34,374.0
Interest expenses	2.7	28.0	4.3
Fee and commission expenses	1.3	2.0	0.3
Business taxes and levies	917.8	978.6	148.7
Selling expenses	3,057.5	3,180.9	483.4
Administrative expenses	9,331.2	5,934.5	901.9
Financial expenses	13,298.6	15,190.9	2,308.7
Impairment losses of assets	8,439.6	2,470.6	375.5
Add: Gains from changes in fair values	115.6	(157.1)	(23.9)
Investment income	4,046.8	7,327.5	1,113.6
Including: Income from investments in associates and joint ventures	921.8	483.6	73.5
Foreign exchange gains	—	0.4	0.1
<b>Operating profit</b>	(21,410.2)	(8,009.4)	(123.0)
Add: Non-operating income	2,032.0	4,506.6	684.9
Less: Non-operating expenses	227.7	924.5	140.5
Including: Losses from disposal of non-current assets	91.8	459.5	7.5
<b>Total profit</b>	(19,605.9)	(4,427.3)	(672.9)
Less: Income tax expenses	1,495.7	922.1	140.1
<b>Net profit</b>	(21,101.6)	(5,349.3)	(813.0)
Net profit attributable to owners of the Company	(10,731.3)	(5,346.0)	(812.5)
Profit or loss attributable to minority interests	(10,370.3)	(3.4)	(0.5)
<b>Other comprehensive income</b>	857.0	3,803.5	578.1
<b>Total comprehensive income</b>	(20,244.6)	(1,545.9)	(235.0)
Total comprehensive income attributable to owners of the Company	(9,964.3)	(2,000.1)	(304.0)
Total comprehensive income attributable to minority interests	(10,280.3)	454.2	69.0

## CONSOLIDATED BALANCE SHEET

	As at 31 December		
	2014	2015	2015
	(RMB in millions)	(US\$ in millions)	
<b>Current Assets:</b>			
Cash and bank balances	47,633.0	52,533.5	7,984.1
Held-for-trading financial assets	7.0	0.3	0.1
Fair value gain on derivative financial instruments	127.5	2.1	0.3
Notes receivable	4,351.9	2,807.0	426.6
Accounts receivable	14,243.8	14,680.0	2,231.1
Prepayments	6,799.1	7,186.3	1,092.2
Interest receivable	138.6	141.6	21.5
Dividends receivable	222.1	257.6	39.2
Other receivables	7,608.6	9,584.3	1,456.7
Inventories	50,806.6	42,757.2	6,498.3
Divided into holding assets for sale	41.7	216.3	32.9
Non-current assets due within one year	1,414.5	2,043.8	310.7
Other current assets	8,883.0	4,696.1	713.7
<b>Total Current Assets</b>	<b>142,277.3</b>	<b>136,905.7</b>	<b>20,807.0</b>
<b>Non-current Assets:</b>			
Available-for-sale financial assets	100,870.9	106,169.1	16,135.6
Held-to-maturity investments	1,176.0	689.2	104.7
Long-term receivables	1,541.8	2,559.0	388.9
Long-term equity investments	22,181.9	25,966.5	3,946.4
Investment properties	813.3	2,286.4	347.5
Fixed assets	119,716.2	130,548.0	19,840.7
Construction in progress	47,844.0	28,143.9	4,277.3
Materials for construction of fixed assets	388.2	109.8	166.9
Disposal of fixed assets	279.2	453.8	69.0
Intangible assets	30,511.0	33,010.3	5,016.9
Development expenditure	12.2	126.4	19.2
Goodwill	8,150.5	8,249.0	1,253.7
Long-term prepaid expenses	1,439.1	1,330.3	202.2
Deferred tax assets	4,490.4	4,525.1	687.7
Other non-current assets	4,659.7	5,771.4	877.1
<b>Total Non-current Assets</b>	<b>344,074.5</b>	<b>349,938.3</b>	<b>53,183.7</b>
<b>Total Assets</b>	<b>486,351.8</b>	<b>486,844.0</b>	<b>73,990.7</b>
<b>Current Liabilities:</b>			
Short-term borrowings	88,445.0	79,785.2	12,125.8
Customer deposits and deposits from banks and other financial institution	19.9	22.4	3,401.6
Held-for-trading financial liabilities	29.4	316.0	48.0
Fair value loss on derivative financial instruments	—	4.5	0.7
Notes payable	10,757.7	13,530.0	2,056.3
Accounts payable	25,423.6	21,206.4	3,223.0
Receipts in advance	7,786.0	5,285.1	803.2
Financial assets sold under repurchase agreements	—	138.0	21.0
Fees and commissions payable	1.4	2.5	0.4
Employee benefits payable	3,590.1	3,229.8	490.9
Taxes payable	(1,674.5)	(1,079.3)	(164.0)
Interest payable	2,824.5	2,643.9	401.8
Dividends payable	228.6	535.3	81.4
Other payables	14,051.3	12,309.8	1,870.9
Non-current liabilities due within one year	17,064.5	19,106.0	2,903.7
Other current liabilities	51,712.6	37,106.6	5,639.5
<b>Total Current Liabilities</b>	<b>220,260.1</b>	<b>194,142.1</b>	<b>29,505.8</b>

	As at 31 December		
	2014	2015	2015
	(RMB in millions)	(US\$ in millions)	
<b>Non-current Liabilities:</b>			
Long-term borrowings	153,560.6	161,628.8	24,564.4
Bonds payable	42,190.6	42,945.5	6,526.9
Long-term payables	2,638.6	6,366.9	967.6
Long-term employee benefits payable	3,590.6	3,285.7	499.4
Special payables	1,292.2	580.7	88.3
Provisions	963.9	896.3	136.2
Deferred income	1,520.0	2,697.8	410.0
Deferred tax liabilities	4,673.0	4,154.4	631.4
Other non-current liabilities	211.8	137.1	20.8
<b>Total Non-current Liabilities</b>	<b>210,641.3</b>	<b>222,693.2</b>	<b>33,845.0</b>
<b>Total Liabilities</b>	<b>430,901.5</b>	<b>416,835.3</b>	<b>63,350.8</b>
Owners' equity:			
Paid-in capital (share capital)	22,822.4	26,192.1	3,980.7
Other equity investments	4,933.8	8,026.2	1,219.8
Capital reserves	9,302.6	15,265.0	2,320.0
Other comprehensive income	(6,446.4)	(3,100.5)	(471.2)
Including: Translation of foreign currency financial statements	(7,714.0)	(4,891.4)	(743.4)
Special reserves	139.6	112.2	17.1
Surplus reserves	1,419.4	1,419.4	215.7
General risk reserves	172.2	226.3	34.4
Unappropriated profits	(25,036.0)	(35,041.7)	(5,325.7)
Translation difference arising on translation of financial statements denominated in foreign currencies	(5,773.6)	(7,541.7)	1,146.2
<b>Total Owners' Equity Attributable to the Company</b>	<b>7,307.7</b>	<b>13,099.1</b>	<b>1,990.8</b>
Minority interests	48,142.6	56,909.7	8,649.2
<b>Total Owners' Equity</b>	<b>55,450.3</b>	<b>70,008.7</b>	<b>10,639.9</b>
<b>Total Liabilities and Owners' Equity</b>	<b>486,351.8</b>	<b>486,844.0</b>	<b>73,990.7</b>

## **SUMMARY FINANCIAL INFORMATION OF THE GUARANTOR**

*The following tables set forth the summary consolidated financial information of the Guarantor as at the dates and for the periods indicated. The summary audited consolidated financial information as at and for the years ended 31 December 2014 and 2015 set forth below is derived from Guarantor's audited consolidated financial statements as at and for the year ended 31 December 2015 which have been audited by Baker Tilly. The information set out below should be read in conjunction with, and is qualified in its entirety by reference to, such audited consolidated financial statements of Guarantor, including the notes thereto.*

*The Guarantor's consolidated financial statements were prepared and presented in accordance with PRC GAAP. As advised by Baker Tilly, there are no material differences between PRC GAAP and IFRS with respect to the determination of the Guarantor's consolidated financial information as at and for the years ended 31 December 2014 and 2015.*

*For the purpose of the summary financial information, the translation of Renminbi amounts into US dollar amounts has been made at the rate of RMB6.5798 to US\$1.00.*

### **CONSOLIDATED INCOME STATEMENT**

	<b>Year ended 31 December</b>		
	<b>2014</b>	<b>2015</b>	<b>2015</b>
	(RMB in millions)	(US\$ in millions)	
<b>Total operating income</b>	—	2,735.8	415.8
Including:			
Operating income	—	2,735.8	415.8
<b>Total operating costs</b>	821.2	3,452.9	524.8
Including:			
Operating costs	—	2,004.3	304.6
Selling expenses	—	258.7	39.3
Administrative expenses	38.1	110.9	16.9
Financial expenses	783.0	1,079.0	164.0
Investment income	2,291.0	2,708.4	411.6
Including: Income from investments in associates and joint ventures	(6.0)	3.8	0.6
<b>Operating profit</b>	1,469.8	1,991.2	302.6
Add: Non-operating income	0.8	19.1	2.9
Less: Non-operating expenses	0.02	0.003	0.0004
Including: Losses from disposal of non-current assets	—	0.003	0.0004
<b>Total profit</b>	1,470.6	2,010.4	305.5
Less: Income tax expenses	—	107.5	16.3
<b>Net profit</b>	1,470.6	1,902.9	289.2
Net profit attributable to owners of the Company	1,478.0	1,906.7	289.8
Profit or loss attributable to minority interests	(7.4)	(3.8)	(0.6)
<b>Other comprehensive income</b>	(336.8)	2,675.0	406.5
<b>Total comprehensive income</b>	1,133.8	4,577.9	695.7
Total comprehensive income attributable to owners of the Company	1,186.3	4,243.5	644.9
Total comprehensive income attributable to minority interests	(52.5)	334.3	50.8

## CONSOLIDATED BALANCE SHEET

	As at 31 December		
	2014	2015	2015
	(RMB in millions)	(US\$ in millions)	
<b>Current Assets:</b>			
Cash and bank balances	6,087.9	4,648.7	706.5
Accounts receivable	465.0	470.4	71.5
Prepayments	274.2	196.4	29.9
Interest receivable	15.5	23.5	3.6
Other receivables	3,998.4	6,721.5	1,021.5
Inventories	642.8	719.9	109.4
<b>Total Current Assets</b>	<b>11,483.9</b>	<b>12,780.5</b>	<b>1,942.4</b>
<b>Non-current Assets:</b>			
Available-for-sale financial assets	95,746.8	101,667.9	15,451.5
Held-to-maturity investments	46.0	48.7	7.4
Long-term receivables	75.4	76.2	11.6
Long-term equity investments	12,144.8	13,404.9	2,037.3
Investment properties	—	311.6	47.4
Fixed assets	1,678.6	18,638.3	2,832.7
Construction in progress	24,882.0	6,297.3	957.1
Intangible assets	4,019.0	9,609.7	1,460.5
Goodwill	1,596.1	1,693.8	257.4
Deferred tax assets	191.1	92.6	14.1
Other non-current assets	48.3	51.2	7.8
<b>Total Non-current Assets</b>	<b>140,428.0</b>	<b>151,892.2</b>	<b>23,084.6</b>
<b>Total Assets</b>	<b>151,911.9</b>	<b>164,672.7</b>	<b>25,027.0</b>
<b>Current Liabilities:</b>			
Short-term borrowings	6,792.1	6,969.9	1,059.3
Held-for-trading financial liabilities	—	148.6	22.6
Accounts payable	2,402.4	1,478.9	224.8
Employee benefits payable	52.1	42.4	6.4
Taxes payable	(1,468.7)	(1,434.9)	(218.1)
Interest payable	245.6	305.3	46.4
Other payables	13,429.8	14,612.8	2,220.9
Non-current liabilities due within one year	1,364.4	1,307.4	198.7
Other current liabilities	—	53.0	8.1
<b>Total Current Liabilities</b>	<b>22,817.8</b>	<b>23,483.3</b>	<b>3,569.0</b>
<b>Non-current Liabilities:</b>			
Long-term borrowings	82,137.1	89,759.3	13,641.6
Bonds payable	2,809.3	3,025.8	459.9
Long-term payables	4,029.0	3,585.1	544.9
Provisions	819.1	755.2	114.8
Deferred tax liabilities	1,285.3	1,363.9	207.3
Other non-current liabilities	24.9	25.8	3.9
<b>Total Non-current Liabilities</b>	<b>91,104.7</b>	<b>98,515.2</b>	<b>14,972.4</b>
<b>Total Liabilities</b>	<b>113,922.5</b>	<b>121,998.5</b>	<b>18,541.4</b>
Owners' equity:			
Paid-in capital (share capital)	500.6	500.6	76.1
Capital reserves	2,032.4	2,032.4	308.9
Other comprehensive income	(6,816.6)	(4,479.7)	(680.8)
Including: Translation of foreign currency financial statements	(6,635.9)	(4,249.8)	(645.9)
Unappropriated profits	(5,577.7)	(3,671.0)	(557.9)
<b>Total Owners' Equity Attributable to the Company</b>	<b>(9,861.3)</b>	<b>(5,617.8)</b>	<b>(853.8)</b>
Minority interests	47,850.8	48,292.0	7,339.4
<b>Total Owners' Equity</b>	<b>37,989.4</b>	<b>42,674.2</b>	<b>6,485.6</b>
<b>Total Liabilities and Owners' Equity</b>	<b>151,911.9</b>	<b>164,672.7</b>	<b>25,027.0</b>

## RISK FACTORS

*An investment in the Bonds is subject to a number of risks. Investors should carefully consider all of the information in this Offering Circular and, in particular, the risks described below, before deciding to invest in the Bonds. The following describes some of the significant risks that could affect the Issuer, the Guarantor, the Company, the Group and the value of the Bonds. Some risks may be unknown to the Issuer, the Guarantor, the Company and the Group and other risks, currently believed to be immaterial, could in fact be material. Any of these could materially and adversely affect the business, financial condition, results of operations and prospects of the Issuer, the Guarantor, the Company and the Group. The market price of the Bonds could decline due to any of these risks, and investors may lose part or all of their investment. This Offering Circular also contains forward-looking statements that involve risks and uncertainties. The actual results of the Issuer, the Guarantor, the Company or the Group could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks described below and elsewhere in this Offering Circular. The Company and the Group may be affected materially by requirements and restrictions that arise under PRC laws, regulations and government policies in nearly all aspects of its business in the PRC.*

### RISKS RELATING TO THE GROUP'S PRINCIPAL BUSINESS LINES

**The Group's businesses are vulnerable to downturns in the general economy and industries in which the Group operates or which the Group serves. A reduction in demand or supply could materially and adversely affect the Group's business, financial condition and results of operations.**

Demand for the Group's primary products of alumina, primary aluminium and copper depends on the general economy and level of activity and growth in the industries which the Group serves, such as aviation, aerospace, shipbuilding, automobile manufacturing, electronics, machinery, construction and national defence. Development of the relevant industries is subject to various factors, including but not limited to market fluctuations of prices of commodities, macroeconomic policies, general political or economic conditions, technological development, government investment plans, fluctuations in global production capacity and consumer spending, many of which are beyond the Group's control. Unfavourable global financial or economic conditions could materially and adversely affect the Group's sales volumes.

In addition, concerns over inflation, increasing energy costs, overcapacity of the aluminium industry, geopolitical issues, the availability and cost of credit, unemployment, diminishing consumer confidence, declining asset values, capital market volatility and liquidity issues have created difficult operating conditions for the Group in the past few years and the impact may remain in the future. Any significant change in the foregoing elements could negatively impact the Group's business, financial condition and results of operations. Furthermore, the PRC government has, from time to time, adjusted its monetary, fiscal and other policies and measures for stable economic growth and to revolve the overcapacity in certain industries or markets. As a result, the global as well as China's economy and the particular industry in which the Group operates or which it serves may grow at a pace slower than expected or even experience a downturn. For example, the global crisis in financial services and credit markets in 2008 caused a slowdown in the growth of the global economy. Although the global and China's economies have largely recovered, there is no assurance that any such recovery is sustainable. In addition, macroeconomic events since 2011, such as the easing of monetary policy by various governments worldwide and the sovereign debt crisis in Europe, have had an adverse effect on the

global and the China economy. Uncertainties about future economic conditions make it challenging for the Group to forecast its results of operations, make business decisions and identify risks that may affect its business.

**Volatility in the prices of alumina, primary aluminium and copper could adversely affect the Group's business, financial condition and results of operations.**

The prices of the major products of the Group, primarily including alumina, primary aluminium and copper, have experienced fluctuations in response to the changing resource availability, government policies, costs of production, global and regional economic conditions, demand in end markets for products in which the commodities are used, technological developments, including commodity substitutions, fluctuations in global production capacities and the level of global inventories, many of which are beyond the Group's control.

The Group prices its aluminium and copper products by referencing international and market prices in China. For example, since 2011, as a result of the sovereign debt crisis in the Eurozone and slowing economic growth in China, the market prices of alumina and copper have decreased. At the end of 2011, the international futures price of alumina on the LME was US\$2,020 per tonne and the spot price of aluminium in China was RMB15,980 per tonne. By the end of 2015, the international futures price of alumina on the LME had decreased to US\$1,507 per tonne and the spot price of aluminium in China had decreased to RMB10,980 per tonne. At the end of 2011, the international futures price of copper on the LME was US\$7,600 per tonne and the spot price of copper in China was RMB55,250 per tonne. By the end of 2015, the international futures price of copper on the LME decreased to US\$4,705 per tonne and the spot price of copper in China decreased to RMB36,660 per tonne. There is no assurance that there will be no significant decrease in prices of the Group's key products in the future. Any significant decrease in prices of the Group's key products may materially and adversely affect the Group's businesses, financial condition and results of operations.

**The Group relies heavily on its raw material suppliers, which exposes the Group to fluctuations of the prices and supplies of raw materials.**

The major raw materials for the Group's business include, among other things, bauxite and copper ores. In order not to deplete its own mineral resources, the Group relies heavily on external raw material suppliers in China and overseas. For example, approximately 44.6 per cent. and 78.4 per cent. of the Group's bauxite and copper ore supplies respectively, in 2015 were sourced from third parties.

The prices of raw materials that the Group needs could be affected by a number of factors, including supply and demand in market, changes in the import taxes and duties of China, geopolitical conditions and economic conditions in China, global economic conditions and changes to environmental and regulatory requirements in China and/or in other parts of the world. Any significant increase in the costs of the Group's raw materials may increase its cost of goods and sales and hence negatively affect its profit margin and, more generally, its businesses, financial condition, results of operations and prospects. A reduction in, or lack of availability of, raw materials or interruptions in the supply chain could also affect the Group's profitability to the extent that it is required to pay higher prices for, or is unable to secure adequate supplies of, the necessary raw materials. If any supplier of raw material to the Group ceases or limits production, raises prices of its products or sells its products to other buyers, the Group's production may be adversely affected and the Group may incur significant extra costs, including capital costs, for finding reliable and affordable alternative raw material suppliers. The Group may also experience significant production delays while locating new supply sources. There is no assurance the

Group will be able to locate such alternative suppliers at favourable prices or at all. If the Group is unable to locate alternative suppliers or pass on all or a portion of the increased cost of raw materials to its customers, it could materially and adversely affect the Group's businesses, financial condition, results of operations and prospects.

**The Group's operations consume substantial amounts of electricity and the Group's profitability may decline if energy costs rise or if its energy supplies are interrupted.**

The Group's aluminium and copper operations consume substantial amounts of electricity. Although the Group generally expects to meet the power requirements from a combination of internal and external sources, its results of operations may be materially and adversely affected by the following:

- significant increases in electricity costs; or
- curtailment of the operation of one or more refineries or smelters due to the Group's inability to extend energy supply contracts upon their expiration.

Cost of electricity is the principal cost in the Group's production of primary aluminium and copper. The Group expects that China's economy will continue to grow and, as a result, the Group expects the demand for and prices of electricity to increase accordingly. Thus, the results of operations of the Group could be materially and adversely affected. In addition, China's regulatory authorities have in recent years announced increasing number of measures to reduce carbon emissions in China, including introducing pilot city carbon emissions trading schemes and other programmes aimed at carbon emissions reduction. As coal-fired power remains the principal power source in China, more stringent emission standards often lead to higher production cost of electricity which directly translates into higher electricity prices. There is no assurance that existing and new emission standards will not further drive up the electricity prices in China which could adversely affect the Group's aluminium and copper operations.

In addition, interruptions in power supply may result in costly production shutdowns, increased costs associated with restarting production and the suspension of production in progress. A sudden loss of power, if prolonged, can cause damage to or the destruction of production equipments and facilities. In such an event, the Group may need to expend significant capital and resources to repair or replace the affected production equipment to restore its production capacity. Various regions across China have experienced shortages and disruptions in electricity, especially during peak demand in the summer or during severe weather conditions. There is no assurance that its operations will not suffer from shortages or disruptions in electrical power, any occurrence of which could have a material and adverse impact on the Group's business, financial condition and results of operations.

**The industries in which the Group operates are heavily regulated and changes in China's regulations and policies on such industries may materially and adversely affect the Group's businesses, financial condition and results of operations.**

The Group is one of the key players in the non-ferrous industry in China. The PRC government may exert significant influence on the non-ferrous industry in China by implementing industry policies and other economic measures, such as those relating to credit and financing, land use, governmental approval of new projects, environmental protection, technological and capacity requirements of production facilities and foreign investment. These industry policies and economic measures may

significantly reduce the level of construction activities and capital investments in China's non-ferrous industry, which in turn could materially and adversely affect the Group's businesses, financial condition and results of operations.

The PRC government has implemented a series of policies and regulations designed to prevent or curb overcapacity in, and to enhance the production efficiency and global core competency of, China's non-ferrous metals industry, such as, in April 2011, the Urgent Circular Concerning Curbing Overcapacity and Repeated Construction of the Electrolytic Aluminium Industry and Guiding the Healthy Development of the Industry (《關於遏制電解鋁行業產能過剩和重複建設引導產業健康發展的緊急通知》) was issued and, in December 2011, the Ministry of Industry and Information Technology officially issued the Twelfth Five Year Plan of Non-ferrous Metal Industry which mainly focused on strictly controlling the expansion of production capacity, eliminating obsolete smelting capacity in a regular manner, developing aluminium products with refined and advanced processing technologies and encouraging industry consolidation. In July 2013, the Ministry of Industry and Information Technology issued the Regulatory Conditions for the Aluminium Industry (《鋁行業規範條件》), which introduced higher admission standard for the guidance and regulation of industry development. On 6 October 2013, the State Council issued Guiding Opinions on Resolving Serious Production Overcapacity Conflicts (《關於化解產能嚴重過剩矛盾的指導意見》), focusing on restraining the overexpansion of production capacity, banning projects of building new capacity, rectifying illegal production and encouraging technology improvements. On 13 December 2013, NDRC and the Ministry of Industry and Information Technology jointly issued the Notice of Implementing Tiered Tariff Policies for Electrolytic Aluminium Enterprises (《關於電解鋁企業用電實行階梯電價政策的通知》), which intended to leverage different electricity prices to retire obsolete production capacity, reduce the over-consumption of resources and promote the structural adjustment of China's aluminium industry. In addition, the NDRC also issues the Guiding Catalogue for Adjustment in the Structure of Industries (《產業結構調整指導目錄》) from time to time in order to formulate development plans for non-ferrous metal industries in China, including the copper industry. Any significant change in the government policies related to the copper industry could also adversely affect the Group's operations. On the other hand, the transformation of China's non-ferrous metals industry may result in limitations on the expansion of production scale, reductions in investments in additional production capacity and uncertainties associated with business reorganisations and consolidations, which could present significant challenges for the Group's business.

These laws, regulations and governmental policies relating to China's non-ferrous metals industry are subject to changes which may impose significant costs or limitations on the way the Group conducts or expands its business, such as those affecting the extent to which the Group can engage in, or charge fees for, specific businesses. The changes in the laws, regulations and other governmental policies may have significant impact on the Group's business, and the Group may not be able to adapt to such changes on a timely basis. Moreover, there may be uncertainties regarding the interpretation and application of new laws, regulations and other governmental policies. Failure to comply with the applicable laws, regulations and other governmental policies may result in fines, restrictions on the Group's activities or other adverse consequences, which could materially and adversely affect the Group's business, financial condition and results of operations.

**Failure to maintain optimal utilisation of the Group's alumina and primary aluminium production facilities will adversely affect the Group's gross and operating margins.**

For the years ended 31 December 2014 and 2015, the Group expanded the production capacity by upgrading or remoulding some of its alumina and primary aluminium production facilities. However, the Group's primary aluminium production may be adversely affected by the administrative policies and

orders implemented by the local governments to fulfil China's Energy-Saving and Emission Reduction Goals. Also see “— *Risks relating to the Group's principal business lines — The Group is subject to administrative policies and orders relating to China's Energy-Saving and Emission Reduction Goals that could adversely affect the Group's production of alumina and aluminium*”. The Group also increased its external purchases of alumina and primary aluminium for trading purposes to capitalise on fluctuating market prices in 2014 and 2015 and to enhance resource planning to achieve cost savings in the Group's production. The increase in the Group's external purchases has reduced the Group's utilisation of certain production facilities, but has not resulted in a proportionate decrease in fixed costs such as leases and depreciation of plant, property and equipment. Given the Group's high proportion of fixed costs, failure to maintain historical utilisation rates may adversely affect its gross and operating margins.

Furthermore, the Group expects its production capacity expansion in recent years to increase the Group's operating costs, in particular, depreciation and amortisation costs. If the Group is able to maintain a satisfactory facility utilisation level and increase its output, the Group's production capacity expansion will enable the Group to reduce its unit costs through economies of scale, as fixed costs will be spread over a higher volume of output units. Conversely, under-utilisation of the Group's existing and newly acquired or constructed production facilities may increase the Group's marginal production costs and prevent the Group from realising the intended economic benefits of the Group's expansion. In addition, considering the sustained weak primary aluminium pricing environment and deterioration in primary aluminium prices which could not be offset through decreases in the Group's costs, the Group implemented flexible production arrangements for certain alumina and primary aluminium production facilities since 2013. In addition, the Group abandoned certain primary aluminium and alumina production facilities with an aggregate annual designed production capacity of approximately 157,500 and 30,000 tonnes, respectively for the year of 2014. The Group has also increased its external purchases of alumina and primary aluminium for trading purposes to capitalise on fluctuating market prices and to enhance resource planning to achieve cost savings in production. The increase in the Group's external purchases has reduced the Group's utilisation of certain production facilities, but has not resulted in a proportionate decrease in fixed costs such as leases and depreciation of plant, property and equipment. Given the Group's high proportion of fixed costs, failure to maintain historical utilisation rates may adversely affect the Group's gross margin and operating margin.

**The production of alumina consumes substantial amounts of coal, and the Group's operations may be adversely affected if the Group is unable to procure sufficient coal or if coal prices rise significantly.**

The Group relies heavily on coal as its energy and fuel source for its production of alumina and copper. As the Group increases its alumina refining capacity, its consumption of coal will increase accordingly. If there are shortages of coal, constraints on coal transportation or for any other reasons, the Group may be forced to reduce its production output or suspend its alumina refining operations, which could materially and adversely affect the Group's financial condition and results of operations. Although the Group has acquired equity interest in a number of coal mines, the Group expects to continue to rely substantially on third-party coal suppliers for the supply of coal. In addition, the Group expects the price of coal to increase as China's economy continues to grow. If the Group is unable to pass on increases in coal prices to its customers or offset price increases through productivity improvements, its operating margin, financial condition and results of operations could be adversely affected.

**The Group's aluminium and copper businesses face intensifying competition.**

The Group's two principal business lines, the aluminium and copper businesses, face increasing competition from both domestic and international alumina, primary aluminium and copper producers. The Group's principal competitors are domestic smelters, some of which are consolidating and expanding their production capacities. These smelters compete with the Group's aluminium and copper operations on the basis of cost, quality and pricing. In addition, the Group faces increasing competition from international alumina and primary aluminium suppliers as a result of the elimination of tariffs on imports of primary aluminium and alumina into China.

Increasing competition in the Group's key product markets may reduce the Group's selling prices or sales volumes of aluminium and copper products, which will have a material adverse effect on the Group's financial condition and results of operations. If the Group is unable to price its aluminium and copper products competitively, maintain or increase its current market share in China's aluminium and copper markets or otherwise maintain its competitiveness, the Group's financial condition, results of operations and profitability could be materially and adversely affected.

**The Group's profitability and operations could be adversely affected if the Group is unable to obtain a steady supply of bauxite and copper ore at competitive prices.**

Historically, the price for bauxite, the Group's most important raw material for alumina production, has been volatile. The Group obtains bauxite for its operations from its own mines and external suppliers. The extent to which the Group procures bauxite from each of these sources affects the security of the Group's supply or cost of bauxite. The supply of bauxite could be affected by various factors, including geographic conditions of bauxite mines, government policies, market prices and competition, many of which are beyond the Group's control. The Group relies on overseas suppliers to obtain a portion of bauxite the Group uses for production. Indonesia used to be a major source of the Group's imported bauxite. As a result of the ban imposed by the Government of Indonesia on the exportation of unprocessed bauxite and nickel, since January 2014, the Group was not able to export the bauxite produced by its bauxite mines in Indonesia for the use of the Group's alumina refineries in China, and the Group's operation of bauxite mining in Indonesia has been suspended since September 2014. If the Group exhausts its stockpiles or the Group's procurement of bauxite from Australia is interrupted for any reason, and the Group is unable to find an alternative source of imported bauxite at competitive prices, the Group's financial condition, results of operations and profitability could be adversely affected.

In addition, the Group's results of operations may be affected by increases in the cost of other raw materials and other key inputs such as energy. If the Group is unable to obtain a steady supply of key raw materials at competitive prices, the Group's financial condition and results of operations could be materially and adversely affected.

**The Group is subject to the uncertainties surrounding its resources and reserves estimates of minerals and metals, and the volume and grade of ore it produces may not conform to current estimates.**

As at 31 December 2015, the Group owned and operated 20 bauxite mines and 27 copper mines in China. The Group is currently undertaking certain overseas projects, including the bauxite mining projects in Laos and a copper mining project in Peru.

The estimates of the Group's resources and reserves of minerals and metals are based on a number of assumptions in accordance with relevant industry standards. There can be no assurance that the Group's resources and reserves of minerals and metals will be recovered in the quantities, qualities or yields presented in this Offering Circular. Resources and reserves estimates of minerals and metals are inherently prone to variability. They involve expressions of judgement with regard to the presence and grade of ore bodies and the ability to extract and process the ores economically. These judgements are based on a variety of factors, such as knowledge, experience and industry practice. The accuracy of these estimates may be affected by many factors, including the quality of the drilling, sampling results of the ore bodies, analysis of the drilling samples, the procedures adopted and the experience of the persons making the estimates.

Ore mined may differ from the estimates of resources or reserves of minerals and metals in various aspects, such as quality, volume, overburden strip ratio, mining costs or processing costs. In addition, ores may not ultimately be extracted at a profit. The Group records its mineral resources located in China according to the Chinese National Standard. The Group may record its mineral resources located overseas according to other international resource reporting standards, such as the JORC Code and NI 43-101, in compliance with local laws and regulations. The amount of mineral resources located overseas has been converted to conform to the Chinese National Standard when calculating the consolidated amount of mineral resources at the Group level. However, there is no assurance that such conversion is accurate because different resource reporting standards may not be comparable.

If the Group encounters mineralisation or geological or mining conditions different from those estimated based on historical drillings, samplings and similar examinations, the Group may have to adjust its mining plans in a way that could materially and adversely affect its businesses, financial condition and results of operations and reduce the estimated amount of resources and reserves available for production and expansion plans. In addition, the development period estimated by the Group may differ from the actual development cycle due to various reasons such as unexpected difficulty in mineral resources development and development procrastination. The aforesaid differences in the resources development projects invested in by the Group will affect the operational results and future development of the Group's relevant operations.

The bauxite and copper ore reserve data on which the Group bases its production, revenue and expenditure plans are estimates that the Group has developed internally and may prove inaccurate. There are numerous uncertainties inherent in estimating reserves, including many factors beyond the Group's control. If these estimates are inaccurate or the indicated tonnages are not recovered, the Group's business, financial condition, and results of operations may be materially and adversely affected.

**The Group's mining operations have limited mine life cycles and eventual closure of these operations will entail costs and risks regarding ongoing monitoring, rehabilitation and compliance with environmental standards.**

The Group's existing mining operations in China and overseas have limited mine life cycles and will eventually be depleted. The Group needs to perform certain procedures to remedy and rehabilitate the environmental and social impact its mining operations have had on local communities and the environment. Remediation, rehabilitation, closure and removal of the Group's facilities will incur various costs and are subject to various risks. The key tasks for mine closures are, but are not limited to, (i) long-term management of permanent engineered structures and acid rock drainage; (ii) closure in accordance with local or international environmental standards; (iii) orderly retrenchment of employees and third-party contractors; and (iv) relinquishment of the site with associated permanent structures and community development infrastructure and programmes to new owners. There is no assurance that such closure of mines will be successful and without any delays or additional costs, in which case the Group may be subject to increased costs, penalties or other administrative actions, damage to reputation, even suspension and cancellation of mining permits, the occurrence of which would cause a material and adverse effect to the Group's businesses, financial condition and results of operations.

**Failure to discover new reserves or resources, maintain or enhance existing reserves or resources, develop new mining operations or expand the Group's current mining operations could negatively affect the Group's businesses, financial condition and results of operations.**

Mining exploration is unpredictable in nature. The success of any mining exploration programme depends on various factors, many of which are beyond the Group's control. Due to the unpredictable and speculative nature of the mining industry, there is no assurance that any exploration programme that the Group is currently undertaking or may undertake in the future will result in the discovery of valuable reserves or resources. There is no assurance that reported resources can be converted into reserves. Furthermore, actual results upon production may differ from those anticipated at the time of discovery. To access additional reserves in explored areas, the Group will need to successfully complete development projects, including but not limited to extending existing mines and developing new mines. There are a number of uncertainties inherent in the development and construction of any new mine or an extension of an existing mine, including but not limited to (i) the availability and timing of necessary governmental approvals; (ii) the timing and cost necessary to construct mining and processing facilities; (iii) the availability and cost of labour, utilities, auxiliary materials and other supplies and the accessibility of transportation and other infrastructure; (iv) the availability of funds to finance construction and production activities and (v) oppositions from local community and social groups as well as government authorities. There is no assurance that any future exploration activities or development projects will extend the life of the Group's existing mining operations or result in any new economic mining operations and such failure may have a material adverse effect on the Group's businesses, financial condition and results of operations.

**The Group may experience a shortage of reliable and adequate transport capacity for its products. Any disruption in transportation of its products or any material increase in transportation costs could have a material adverse effect on its businesses, financial condition and results of operations.**

The Group's operations require the reliable transportation of raw materials and supplies to the Group's refining and smelting sites and finished products to its customers. The Group's alumina, primary aluminium and copper products are delivered to the Group's customers primarily by railway or trucks. There is no assurance that the Group will always enjoy sufficient transportation capacity or the

transportation of the Group's products will not experience interruption in the future. Furthermore, natural disasters may cause interruption to the transportation system, which could in turn affect the transportation of its products. In addition, any changes in fuel prices or fuel supply may be unpredictable and beyond the Group's control. There is no assurance that a shortage of fuel will not occur in the future. Any surge in fuel prices or shortage of fuel supply may lead to increases in the Group's operating and transportation costs. If the Group is unable to make timely deliveries due to logistical and transportation disruptions, or transfer the increased costs to its customers, the Group's production, reputation and results of operations may be adversely affected.

**The Group is subject to administrative policies and orders relating to China's Energy-Saving and Emission Reduction Goals that could adversely affect the Group's production of alumina and aluminium.**

The Group is subject to administrative energy-saving and emission reduction policies and orders carried out by the central and provincial governments in accordance with China's Energy-Saving and Emission Reduction Goals. On 18 July 2013, the Ministry of Industry and Information Technology of the PRC issued the Standard Conditions for Aluminium Industry, which sets forth various standards for existing and new projects, including standards for environment protection, energy consumption, and utilisation of resources. In order to meet these standards, the Group may be required to update its equipment and improve its technology, which could delay its production or result in additional costs and expenses. The occurrence of any of the foregoing could have an adverse effect on the Group's business, results of operations and financial condition.

**If the Group fails to accurately estimate the overall risks or costs of contracts, or the time needed to complete the relevant projects under such contracts, the Group may experience cost overruns, schedule delays, lower profitability or even losses on projects under such contracts when it executes such contracts.**

The Group's estimates of the costs for completing a project are subject to a number of assumptions, including the future economic conditions, cost and availability of labour and raw materials, subcontractors' performance, facility utilisation rates, and construction and technical standards to be applied to the project. However, these assumptions may prove to be inaccurate. To a certain extent, the Group is exposed to raw material price fluctuation risks in some projects, depending on the terms agreed in specific contracts. In addition, delays caused by inclement weather, technical issues and an inability to obtain the requisite permits and approvals, as well as other variations and risks inherent in the performance of contracts, may cause the Group's actual overall risks and costs to differ substantially from its original estimates irrespective of the buffers the Group may build into its bids for increases in labour, raw materials and other costs. Cost overruns can result in a lower-than-expected profit or a loss on a project.

Similarly, the Group may be unable to complete a project in accordance with the schedule set forth in the relevant contract. A project can be delayed for a number of reasons, including those relating to market conditions, policies and regulations of China and other relevant jurisdictions, availability of funding, disputes with business partners, technology and equipment suppliers and other contractors, employees, local governments and communities, natural disasters, power and other energy supplies, and availability of technical or human resources. The Group's overseas engineering and construction contracting projects may also be affected by factors such as any adverse changes in the relations between China and relevant foreign governments, war or other significant adverse developments in international relations.

While most of the Group's contracts contain price adjustment clauses to cover increases in the costs of raw materials, changes in design or work scope, or other specific factors that would cause an interruption of construction and an increase in the cost, such as a lack of water or electricity supply, there is no guarantee that such measures are sufficient to protect the Group from risk of cost overruns. From time to time, the Group may need to perform extra work as a result of the project owner changing the design for non-technical reasons after the design plan is confirmed. This may result in disputes over whether the work performed is beyond the scope of work included in the original project specifications, or over what price the customer should pay for the extra work. Even when the customer agrees to pay for the extra work, the Group may be required to advance the cost of such work for a lengthy period of time until the change in design is approved and funded by the owner. In addition, any delay caused by the extra work may impact the progress of the Group's projects and its ability to meet specific contract milestone dates. The Group also may incur costs due to changes in design not approved by the project owner or contract disputes. There is no guarantee that the Group will be able to recover the cost of the extra work in full or at all, which may lead to business disputes, or may otherwise adversely affect the Group's business, financial condition, results of operations and prospects. Moreover, the performance of extra work may cause delays in the Group's other project commitments and may have a negative impact on the Group's ability to meet the specified deadlines of its other projects.

There is no guarantee that the Group will not encounter cost overruns or delays in its current and future projects. If such cost overruns or delays occur, the Group's costs could exceed its budget or the Group could be required to pay liquidated damages in accordance with the terms of its contracts with a consequent reduction in, or elimination of, profits on its contracts.

## **RISKS RELATING TO THE GROUP'S OPERATIONS AND FINANCIAL PERFORMANCE**

**The Group incurred net losses in the past and may not achieve or sustain profitability in the future.**

The Group had net losses of RMB21.1 billion and RMB5.3 billion in 2014 and 2015 respectively, primarily due to losses in its aluminium business as a result of the decrease in the selling price of alumina in China and the increase in raw material costs, primarily electricity. Due to the low price levels in the primary aluminium and alumina market, the Group's revenue and cash generated from operating activities may continue to decrease and its aluminium business may continue to experience net losses or have a negative impact on operating cash flows. The Group's profitability depends on how it increases operational efficiency, reduces marginal manufacturing costs, adjusts strategic focus, and optimises business processes, and there is no assurance that it will achieve or sustain profitability in the future.

The Group expects that it will continue relying on bank and other borrowings as well as debt financing to fund its business operations. The Group's borrowing costs and access to the debt capital markets depend significantly on the Group's credit standing. A history of net losses, further increase in net current liabilities and significant increase in capital expenditures may result in a deterioration of the Group's credit standing, which could increase the Group's borrowing costs and limit the Group's access to the capital markets, which in turn, could reduce the Group's earnings and adversely affect the Group's liquidity.

**The Group's businesses and operations require significant capital resources on an ongoing basis. Any failure to obtain sufficient funding may limit the Group's ability to engage in desired activities and grow its business, and may materially and adversely affect the Group's businesses, financial condition, results of operations, growth prospects and expansion plans.**

The Group incurred substantial capital expenditures to upgrade and expand its production capacity and will continue to do so in the foreseeable future. For the years ended 31 December 2014 and 2015, the Group's capital expenditures, for acquiring fixed assets, intangible assets and long-term assets amounted to RMB15.0 billion and RMB14.5 billion respectively. However, the Group cannot guarantee that it will not change its investment policies and reduce investment activities in the future. The Group also may need additional capital for debt servicing, working capital, other investments, potential acquisitions and joint ventures and other general corporate purposes. There is no assurance that cash generated from the Group's operations will be sufficient to fund its future development and expansion. The availability of external funding is subject to various factors, including governmental approvals, market conditions, credit availability, interest rates and the performance of each of the businesses the Group operates. To the extent that additional financing proves to be unavailable at acceptable terms or at all when needed, the Group may be compelled to either restructure the transaction or abandon the investment or acquisition plan or cut down the cash outflow from investment activities and, as a result, its businesses, financial condition, results of operations, growth prospects and expansion plans may be materially and adversely affected.

**The unqualified audit opinions included in the Group's financial statements contain emphasised matters.**

The Group's financial statements as at and for the years ended 2015 included unqualified audit opinions from Baker Tilly with emphasised matters. The matters emphasised were as follows: as at 31 December 2015, as Rio Tinto's single largest shareholder, the Group held 182.55 million shares in Rio Tinto, which were recorded on the Group's balance sheet with a book value of approximately RMB101.26 billion due to the long-term nature of the Group's investments in Rio Tinto, which was approximately RMB66.62 billion more than the market value of the Group's equity interest in Rio Tinto of approximately RMB34.64 billion, based on the closing price of Rio Tinto's stock at the same date.

The emphasised matters indicate significant uncertainties associated with the accounting treatment of the Group's equity investment in Rio Tinto which the auditor considers to be important enough to warrant a mention in its audit report but without qualifying its opinion. As at 31 December 2015, the Group's net assets amounted to RMB70.0 billion. There is no assurance that the Group's independent auditor will not change its view and consider that the Group's investment in Rio Tinto should be recorded as fair market value of the securities, or the Group's investment intention towards Rio Tinto will not change, in which case, the book value of the Group's investment in Rio Tinto could decrease significantly, which could materially adversely affect the Group's financial position, ability to comply with provisions of its financing documents, results of operations and profitability.

**The Company's audited consolidated financial information as at and for the year ended 31 December 2014 has been adjusted in respect of certain historical line items due to prior period accounting error.**

The Company's audited consolidated financial information as at and for the year ended 31 December 2014 included in its audited consolidated financial statements for the year ended 2015 have been adjusted in respect of certain historical line items as at and for the year ended 31 December 2014

due to prior period accounting error. For more details on these adjustments made by the Company, please refer to the Company's audited consolidated financial statements as at and for the year ended 31 December 2015 at "*Notes to the Financial Statements for the year ended 31 December, 2015 — III: Changes in Significant Accounting Policies and Accounting Estimates — 3. The significant corrections of prior period accounting error*". There can be no assurance that there would be no future adjustments of the Group's financial information in future accounting periods, or that such adjustments in the future would not have a material impact on the Group's financial condition or profitability.

**The Group and the Guarantor has a significant amount of indebtedness and may incur substantial additional indebtedness in the future, which could adversely affect the Group's and the Guarantor's financial position and plans for future expansion.**

The Group has relied, and expects to continue to rely, on both short-term and long-term borrowings to fund a significant portion of its capital requirements. As at 31 December 2014 and 2015, the Group had approximately RMB351.6 billion and RMB337.4 billion respectively, of total debt (including bank borrowings, bonds and other borrowings). As at the same dates, the Group had a debt-to-asset ratio of 88.60 per cent. and 85.62 per cent. respectively. Primarily due to the Group's significant level of indebtedness, especially short-term borrowings, the Group had net current liabilities of RMB77.9 billion and RMB 57.2 billion respectively, as at 31 December 2014 and 2015. The Guarantor also had consolidated net current liabilities of RMB11.3 billion and RMB10.7 billion respectively, as at 31 December 2014 and 2015. The level of both long-term and short-term borrowings may also continue to increase in the future as the Group continues to use external borrowings to fund its capital expenditures.

The Group's and the Guarantor's substantial indebtedness and high level of net current liabilities could cause serious consequences, including, but not limited to, limiting its ability to repay outstanding debt; making it more vulnerable to adverse economic and industry conditions; forcing the Group and the Guarantor to dedicate a substantial portion of cash flow from its operations to service and repay its debts, thereby reducing its cash flow available for working capital, capital expenditures and other general corporate purposes; limiting its flexibility in planning for or reacting to the changes in the Group's and the Guarantor's businesses and the industry; causing it to be less competitive as compared to its competitors that have less debt; and limiting its ability to borrow more funds in the future and/or increasing the Group's and the Guarantor's financing costs. The Group's and the Guarantor's ability to meet its respective payment and other obligations under its outstanding debt depends on the Group's and the Guarantor's ability to generate cash flows in the future or to refinance such debt. There is no assurance that its business will generate sufficient cash flows from operations to satisfy its obligations under the Group's or the Guarantor's outstanding debt and to fund other liquidity needs. If the Group or the Guarantor is not able to generate sufficient cash flows to meet such obligations, the Group or the Guarantor may need to refinance or restructure its debt, reduce or delay capital investments, or seek additional equity or debt financing. A shortage of financing, or a reduction in cash generated from financing activities, could in turn impose limitations on the Group's or the Guarantor's ability to plan for, or react effectively to, changing market conditions or to expand through organic and acquisitive growth, thereby reducing the Group's or the Guarantor's competitiveness. There is no assurance that future financing will be available in amounts or on terms acceptable to it, if at all.

Additionally, as the Group relies on borrowings to meet a substantial part of its capital expenditure requirements, it is exposed to interest rate risk. For the years ended 31 December 2014 and 2015, the Group's interest expenses amounted to RMB15.8 billion and RMB14.3 billion respectively. The interest rates on the Group's borrowings may be affected by various factors, including market factors and

changes in national economic policies. Any significant increase in interest rates will result in a substantial increase in its interest expenses, which may materially and adversely affect its business, financial condition, results of operations and expansion plans.

In addition, the Group's outstanding indebtedness contained a number of financial and other covenants. As a result, the Company or its subsidiaries' ability to raise additional funds in the future through issuing debt securities outside China or create or have any guarantee or indemnity in respect of any indebtedness which is issued outside China may be limited. This may have a material adverse impact on the Group's business expansion and prospects.

**The Group's failure to successfully manage its business expansion could have a material adverse effect on the Group's results of operations and prospects.**

The Group has invested in business expansions that are in line with its development strategy, through organic growth, acquisitions and joint ventures. Besides continuing to expand its existing business lines, the Group may, from time to time and when it deems appropriate, expand into new industries which it believes have synergies with its existing operations. For example, the Group entered into the rare earth metals industry in 2011 to diversify its business lines and product mix. The Group's expansion has used, and will continue to place substantial demand on, the Group's resources. In addition, managing the Group's growth and integration of new business lines will require the Group to, among other things:

- comply with the laws, regulations and policies governing the Group's expansion, including obtaining timely approval for the construction or expansion of production facilities as required under PRC law;
- maintain adequate control on the expansion or upgrade projects of its current business or the Group's expansion into new business lines to prevent, among other things, project delays or cost overruns;
- attract, train and motivate members of the Group's management and qualified employees to support successful business expansion;
- gain market acceptance for new products and services and establish relationships with new customers and suppliers;
- achieve sufficient utilisation of new production facilities to recover costs;
- manage relationships with employees, customers and business partners during the course of the Group's business expansion and integration of new businesses;
- access debt, equity or other capital resources to fund the Group's business expansion, which may divert financial resources otherwise available for other purposes;
- divert significant management attention and resources from the Group's other businesses; and
- strengthen the Group's operational, financial and management controls, particularly over those newly acquired subsidiaries of the Group, to maintain the reliability of the Group's reporting processes.

Any difficulty in meeting the foregoing or similar requirements could significantly delay or otherwise constrain the Group's ability to implement its expansion plans, or result in failure to achieve the expected benefits of the combination, acquisition or write-offs of acquired assets or investments, which in turn would limit the Group's ability to increase operational efficiency, reduce marginal manufacturing costs or otherwise strengthen the Group's market position. Failure to obtain the intended economic benefits from the business expansion could adversely affect the Group's business, financial condition and results of operations. The Group may also experience mixed results from its expansion plans in the short term.

In addition, there is no assurance that the Group will be able to identify attractive acquisition targets, negotiate acquisitions on favourable terms, obtain necessary governmental approvals or investments, if applicable, accurately estimate the mineral resources and reserves of these acquisition targets or obtain the necessary funding to complete such acquisitions on commercially acceptable terms or at all. Acquisitions may result in the incurrence and inheritance of debts and other liabilities, assumption of potential legal liabilities in respect of the acquired businesses and incurrence of impairment charges related to goodwill and other intangible assets, any of which could adversely affect the Group's businesses, financial condition and results of operations. In particular, if any of the acquired businesses fails to perform as the Group expects, the Group may be required to recognise a significant impairment charge, which may materially and adversely affect its businesses, financial condition and results of operations. As a result, there can be no assurance that the Group will be able to achieve the strategic purpose of any acquisition, the desired level of operational integration or the Group's investment return target.

**The Group's joint ventures and strategic investments may not be successful.**

The Group has non-controlling interests in a number of joint ventures. Although the Group has not been materially constrained by the nature of the Group's ownership interests, there is no assurance that the Group's joint venture partners will not exercise their veto power or their controlling influence over any of the Group's joint ventures in a way that will hinder the Group's corporate objectives and reduce any anticipated cost savings or revenue enhancement resulting from these joint ventures. In addition, whether or not the Group maintains operational control in such joint ventures, such arrangements necessarily involve special risks and the Group's joint venture partners may:

- have economic or business interests or goals that are inconsistent with or opposed to those of the Group;
- exercise veto rights so as to block actions that the Group believes to be in the Group's or the joint venture's best interests;
- take action contrary to the Group's policies or objectives with respect to the investments; or
- as a result of financial or other difficulties, be unable or unwilling to fulfil their obligations under the joint venture or other agreements, such as contributing capital to expansion or maintenance projects.

**The Group's hedging strategy may not always be effective.**

In order to mitigate the risks related to commodity price fluctuations and potential losses, certain members of the Group hedge their inventory not already contracted for sale through futures commodity derivative contracts, either on the Shanghai Futures Exchange or the London Metal Exchange. For

example, the Group hedges physical positions using future contracts for the estimated payable metal with the expectation that the relative value of these two commodities will change in a similar way. If, however, the relative value of the two commodities changes in a direction or manner that the Group does not anticipate, it may suffer a loss in those commodity positions. There is no assurance that the Group's hedging strategy and activities will be effective. Any significant loss in the Group's hedging positions may result in a margin call and a subsequent increase in the margin balance, exposing the Group to greater liquidity risk. In the event of disruptions in the commodity exchanges or markets in which the Group engages in these hedging transactions, the Group's ability to manage commodity price risk may be adversely affected. Any occurrence of the foregoing events could materially and adversely affect the Group's business, financial condition and results of operations.

**The Group is subject to inventory risks.**

As at 31 December 2015, the Group's inventory amounted to approximately RMB42.8 billion, primarily comprising raw materials of RMB12.3 billion, products in process of RMB12.3 billion and finished goods of RMB10.6 billion.

Having an appropriate level of finished goods inventory is crucial in meeting volatile market demand and an appropriate level of raw materials inventory is pivotal in minimising the effect of the volatility of raw materials prices. A significant amount of inventory primarily consists of bauxite, alumina and copper concentrates that are essential to the Group's operations. However, any sudden decrease in the market demand and the corresponding unanticipated drop in the sales of the relevant goods or any failure of the Group in successfully maintaining the flexibility in its raw materials supply arrangements could cause the Group's inventory to accumulate or depreciate in value, which may adversely affect the Group's businesses, financial condition and results of operations. The Group reviews its inventory from time to time and makes provisions when it deems necessary. As at 31 December 2015, the Group had RMB3.7 billion of provisions for inventory impairment. A significant depreciation of the Group's inventory value may exceed its provisions and could materially and adversely affect the Group's businesses, financial condition and results of operations.

**The Group may have difficulties in monitoring and deploying internal control measures with respect to its business operations in an effective and timely manner because of its large number of subsidiaries and their broad range of businesses.**

The development of the Group's management and internal control measures has largely coincided with the expansion of its businesses. Some of the Group's internal control and coordinating measures relating to its operations may not be implemented satisfactorily throughout the Group because of its large group structure, comprising over 430 subsidiaries, broad range of businesses and a large and widely dispersed mid-level management team. As a result, competition often arises among the Group's subsidiaries, and the Group may from time to time encounter difficulties in monitoring compliance with its internal control policies and procedures and the relevant laws and regulations by its subsidiaries and its managerial and other employees. In addition, the Group conducts its overseas operations in many countries and jurisdictions, and may be governed by different laws, regulations and business practices and conventions. The Group's unfamiliarity with these foreign laws and regulations or the Group's inability to effectively manage the activities of its overseas subsidiaries, joint ventures or third parties could expose the Group to legal risks and liabilities, including corrupt business practices. Accordingly, as the Group streamlines the operations of the Group's various subsidiaries and operations, the Group aims to continue to strengthen its management and internal control mechanisms to address such integration issues, through various measures such as the integrated management of the Group's financial

data, risk management, consolidation of internal resources and a uniform information system. However, the Group cannot guarantee that it will be able to implement internal control mechanisms that will promptly and adequately respond to its expanded scope of operations, nor can the Group guarantee that its employees will not, in their personal capacity, act in such a way that contravenes the Group's internal control procedures.

**The Group is subject to extensive environmental, safety and health laws and regulations.**

Mining and resources companies, such as the Group, are subject to extensive environmental, safety and health laws and regulations in the various jurisdictions in which they operate, as well as international standards. These regulations and standards establish limits and conditions on the Group's ability to conduct its operations and govern, among other things, extraction, mineral processing, use and conservation of water resources; air emissions; water treatment and discharge; regulatory and community reporting; clean-up of contamination; community health; and the generation, transportation, storage and disposal of solid and hazardous wastes. The implementation of the newly-amended Environmental Protection Law of the PRC (《中華人民共和國環境保護法》), Production Safety Law of the PRC (《中華人民共和國安全生產法》) and Atmospheric Pollution Prevention and Control Law of the PRC (《中華人民共和國大氣污染防治法》), imposes higher requirements on the environmental protection ability of an enterprise. As the Group's production and operations involve coal and non-coal mines, construction, dangerous chemicals and other high-risk activities, any safety or environmental accident may have a material adverse impact on the financial condition and the reputation of the Group.

The Group's business activities discharge waste water, generate gas emissions and produce hazardous substances at its mines, refineries and smelter plants, and therefore the Group incurs costs to comply with environmental safety and health laws and regulations. Given the magnitude, complexity and continuous amendments to these laws and regulations, the cost of compliance with environmental laws and regulations has been and is expected to continue to be substantial. The Group could face fines, penalties and other sanctions, clean-up costs, and third-party claims for personal injury or property damage, suffer reputational damage, or be required to install costly pollution control equipment or to modify or suspend operations, as a result of actual or alleged violations of environmental laws and regulations or the terms of the Group's operation permits. For example, in March 2014, the Group's subsidiary, CMC, received a notification from the Environmental Evaluation and Audit branch of the Peruvian Ministry of Environment for alleged non-compliance with Peruvian environmental laws relating to certain water discharges at the Toromocho Project and, as a result, CMC suspended its commissioning operations at the processing plant of the project. CMC held discussions with the local environmental authorities regarding the water discharges, which were determined to be caused by the monsoon season and inclement weather condition, and carried out a remedial project to optimise and improve its water discharge system on-site. Following the inspection by local environmental authorities in April 2014, the commissioning work at the mining operation of the Toromocho Project resumed.

In addition, failure to comply with local or international environmental laws and standards may also result in penalties or fines, suspension or revocation of the Group's relevant licences or permits, termination of government contracts or suspension of the Group's operations. For example, a subsidiary of the Guarantor, Chinalco Peru Copper Co., has provisioned for a contingent liability of approximately RMB23.77 million in 2011 for a fine in relation to a security incident which occurred in 2011. Please refer to the Guarantor's audited consolidated financial statements as at and for the year ended 31 December 2015 at "Note IX: Contingencies" for more information. The Group's ability to obtain and

maintain permits and to successfully operate in particular communities may be adversely impacted by real or perceived effects on the environment or human health and safety associated with the Group's mining and mineral processing activities.

Mining and mineral processing operations generate waste rock and tailings. The impact of dust generation, breach, leakage or failure of a waste rock or tailings storage facility can be significant. An incident at the Group's operations could lead to, among others, obligations to remediate environmental contamination and claims for property damage and personal injury from adjacent communities. Major incidents at other companies' operations could result in governments, tightening regulatory requirements and restricting mining and related activities.

Environmental laws and regulations are continually changing and are generally becoming more stringent. Changes to the Group's environmental compliance obligations or operating practices could adversely affect its rate of production and revenue. Variations in laws and regulations, assumptions made to estimate liabilities, standards or operating procedures, more stringent emission or pollution thresholds or controls, or the occurrence of unanticipated conditions, may require operations to be suspended or permanently closed and could increase the Group's expenses and provisions. For example, the PRC regulatory authorities have in recent years announced increasing number of measures to reduce carbon emissions in China, including introducing pilot city carbon emissions trading schemes and other programs aimed at carbon emissions reduction. There is no assurance that existing and new emission standards will not curtail the Group's metal production or further drive up the electricity prices in China, which could adversely affect the Group's results of operations and financial condition.

**Mining and mineral processing activities are increasingly required to operate in a sustainable manner and to provide benefits to affected communities. Opposition from local community, political or environmental groups as well as regulatory authorities with respect to development or construction of mining projects or refineries could increase development costs, hinder the Group's development plans and harm the Group's reputation.**

As a result of public concern over the perceived risks of mining and mineral processing activities, multinational mining and resources corporations, such as the Group, face increasing public scrutiny of their activities.

The Group's mining activities, in particular, are under pressure to demonstrate that, while they seek a satisfactory return on investment for shareholders, human rights are respected and other social partners, including host communities, local government authorities and more broadly the countries or cities in which they operate also benefit from their commercial activities. Such pressures tend to be particularly focused on companies whose activities are perceived to have, or have, a high impact on their social and physical environment. The potential consequences of these pressures and the adverse publicity in cases where companies are believed not to be creating sufficient social and economic benefit may result in additional operating costs, reputational damage, active community opposition, allegations of human rights abuses or even legal or regulatory actions.

Existing and proposed mining and mineral processing operations of the Group are often located at or near existing towns and villages, natural water courses and other infrastructure of the local community. Relocation and resettlement of local residents as well as the disputes over appropriate compensation often lead to community protest and adverse publicity. In addition, as the impacts of dust generation, waste storage and water pollution from mining and mineral processing activities may be directly adverse to those communities or adverse changes in the supply or quality of water can result,

there is a risk of community protest, regulatory sanctions or ultimately the withdrawal of community and government support. In China, protests from local residents over a number of industrial projects, such as in the chemical and nuclear industries that are perceived to have a detrimental impact on the local environment, have increased during recent years and resulted in delay or cancellation of several development plans.

There is no assurance that the Group or its affiliates or partners will not fail to manage community relationships appropriately, especially for the Group's overseas mining projects. Opposition from local community, political or environmental groups as well as regulatory authorities with respect to development or construction of mining projects or mineral refineries could increase development cost, cause delays, interruptions or even cancelations of the Group's development plans and harm the Group's reputation.

**The Group's overseas expansion exposes it to political and economic risks, commercial instability and events beyond the Group's control in the countries in which it operates and plans to operate.**

The Group is currently undertaking or has undertaken a number of overseas projects, including bauxite mining projects in Laos and Indonesia and the Toromocho mining project in Peru, which require significant capital expenditure. In addition, the Group also sells products to overseas customers, including those located in Southeast Asia, Europe, South America and Africa. As the Group is new to these overseas markets, there is no assurance that its overseas expansion or investments will be successful or that it will not suffer foreign exchange losses in connection with the Group's overseas investment. Foreign governments may also set quotas on the amount of mining resources from their countries. For instance, among other things, the quotas on the bauxite export imposed by the Indonesian government have caused a decrease in the Group's production of alumina in 2013. Furthermore, operations in the overseas markets also expose the Group to a number of risks, including expropriation and nationalisation of its assets in foreign countries, civil unrest, acts of terrorism, war, or other armed conflict; natural disasters; inflation, currency fluctuations, devaluations and conversion restrictions; confiscatory taxation or other adverse tax policies; governmental activities that limit or disrupt markets, restrict payments or limit the movement of funds; governmental activities that may result in the deprivation of contractual rights; lack of a well-developed legal system that makes it difficult to enforce the Group's contractual rights; and governmental activities that may result in the inability to obtain or retain licences required for operations. There is no assurance that the Group will not encounter similar restrictions which may adversely affect the supply of bauxite for its alumina production. In addition, the Group's overseas business is subject to the risk of political and economic instability associated with these countries.

**The Group is subject to risks associated with changes in preferential government incentives.**

The Group enjoys a number of government support and preferential treatments due to its close and enduring relationship with the PRC government as well as its leading position, such as preferential tax treatment, as well as financial and policy support in relation to discount government loans, state-owned capital operation, national infrastructure investment, industrial restructuring and upgrading, scientific research and development projects, foreign direct investments and overall utilisation of mineral resources. There can be no assurance that the current favourable policies or the various incentives available to us will not be withdrawn or revoked by the PRC government. If the favourable government policies and incentives are reduced or are no longer available in the future, the results of operations of the Group in the future may be materially and adversely affected.

**The Group's businesses involve inherent risks and occupational hazards, which could damage the Group's reputation, subject it to liability claims and cause substantial costs to the Group.**

The Group's businesses involve inherent risks and occupational hazards. For instance, under its mining operations for the aluminium, copper and rare earths metals businesses, the Group engages or may engage in certain inherently risky and hazardous activities, including, among others, operations at height or on dangerous terrains, underground excavation and construction, use of heavy machinery, mining, and handling of flammable and explosive materials and the Group is therefore subject to risks associated with these activities, including, among others, geological catastrophes, toxic gas and liquid leakages, equipment failures, industrial accidents, fire, explosions and underground water leakages. Additionally, the Group is exposed to operational risks associated with industrial or engineering activities, such as maintenance problems or equipment failures. These risks and hazards have in some cases resulted in personal injury and fatal casualties, damage to or destruction of properties or production facilities, and pollution and other environmental damage. For example, on 22 June 2016, as part of demolition work at one of the Group's alumina plants in Henan Province, the contractor commissioned by the Group suffered an accident resulting in the death of 11 workers and eight workers injured (of which two workers were seriously injured and six workers had light injuries). The Group has announced in a statement on 23 June 2016 that the cause of the incident is currently under investigation. Any of these consequences, to the extent they are significant, could result in business interruption, possible legal liability and damage to the Group's business reputation and corporate image. Although the group carries insurances in line with the customary practice in China, there is no assurance that the insurance taken on by the Group is sufficient, in which case, the Group's results of operations may be materially and adversely affected.

**Failure to protect the intellectual property rights of the Group may materially and adversely affect its businesses, financial condition and results of operations and the Group may be exposed to infringement or misappropriation claims by third parties.**

As at 31 December 2015, the Group had approximately 7,000 granted patents, 551 in application and 171 registered trademarks. There is no assurance that the steps the Group has taken to protect its intellectual property rights are adequate to prevent or deter infringement or other misappropriation of its intellectual property. Any significant infringement of the Group's brand name or other intellectual properties could weaken its competitive position and have an adverse effect on the Group's operations. To protect the Group's intellectual property rights, the Group may have to commence legal proceedings against any misappropriation or infringement. However, there is no assurance that the Group will prevail in such proceedings. The Group may be subject to litigation or other proceedings involving the allegations of violations of intellectual property rights of third parties. The defence of such litigation or other proceedings can be both costly and time-consuming. An adverse determination in any such litigation or proceedings to which the Group may become a party could materially and adversely affect the Group's businesses, financial condition and results of operations.

**The Group is exposed to foreign exchange fluctuations.**

The Group conducts part of its business overseas and it has made and will continue to make significant investments in overseas projects, repay offshore indebtedness and purchase raw materials and equipment from outside of China. In addition, aluminium and copper products are principally priced and sold in US dollars; therefore, a substantial portion of the Group revenue is denominated in US dollars while production costs are largely incurred in Renminbi. In addition, the Group's foreign exchange-

denominated assets and liabilities are expected to increase as the Group further expands its overseas businesses. The Group is therefore subject to risks associated with foreign currency exposures, primarily with respect to US dollars and Euros.

Changes in the value of foreign currencies against the Renminbi could increase the Group's Renminbi costs for, or reduce the Group's Renminbi revenues from, its foreign operations, or affect the prices of its exported products and the prices of its imported equipment and materials. Any increased costs or reduced revenues as a result of foreign currency fluctuations could adversely affect the Group's profits and margins. The fluctuation of foreign exchange rates also affects the value of the Group's monetary and other assets and liabilities denominated in foreign currencies.

The value of the Renminbi is subject to changes in the PRC governmental policies and to international economic and political developments. Pursuant to reforms of the exchange rate system announced by the PBOC on 21 July 2005, Renminbi-to-foreign currency exchange rates are allowed to fluctuate within a narrow and managed band against a basket of foreign currencies, rather than being effectively linked to the US dollar. The PBOC announced on 15 March 2014 that Renminbi was allowed to fluctuate daily against the US dollar by up to 1 per cent. above or below the central parity rate published by PBOC since 17 March 2014.

In August 2015, the PBOC lowered the daily mid-point trading price of the Renminbi significantly against the US dollar for three times. The currency devaluation of the Renminbi was intended to bring it more in line with the market by taking market signals into account. Renminbi depreciated significantly against the US dollar following this August 2015 announcement by the PBOC. In January and February 2016, Renminbi experienced further fluctuation in value against the US dollar. With an increased floating range of the Renminbi's value against foreign currencies and a more market-oriented mechanism for determining the midpoint exchange rates, the Renminbi may further appreciate or depreciate significantly in value against the US dollar or other foreign currencies in the long-term. Any significant appreciation of the Renminbi against the US dollar or other foreign currencies may result in the decrease in the value of the Group's foreign currency denominated assets. Conversely, any significant depreciation of the Renminbi may adversely affect the value of the Group's businesses. In addition, there are limited instruments available for the Group to reduce the Group's foreign currency risk exposure. All of these factors could materially and adversely affect the Group's business, financial condition and results of operations. The PRC government may adopt further reforms of its exchange rate system, including making the Renminbi freely convertible in the future. There can be no assurance that the Renminbi will not experience significant appreciation or depreciation against the US dollar or any foreign currencies in the future.

The Group is exposed to significant uncertainty with regard to its cash flows and earnings due to the volatile and unpredictable exchange rates movement.

**The Group is subject to risks normally associated with cross-border transactions and the Group's export products have been and may become subject to anti-dumping or countervailing duty proceedings.**

The Group generates its revenues from exports of certain non-ferrous metals and minerals products to foreign jurisdictions. Such foreign jurisdictions to which the Group makes export sales may take restrictive measures, including, among others, anti-dumping duties and other non-tariff barriers, to protect their own markets. The Group's sales in major overseas markets may be adversely affected by increases in or new impositions of anti-dumping duties, countervailing duties, quotas or tariffs imposed

on the Group's exports. Further increases in or new imposition of anti-dumping duties, countervailing duties, quotas or tariffs on the Group's sales in these markets could adversely affect the exports to these regions in the future. By virtue of its transactions with parties outside China, the Group will be subject to the risks normally associated with cross-border business transactions and activities. The Group also will be exposed to the risk of changes in social, legal, political and economic conditions in the foreign jurisdictions to which it exports. In particular, unexpected changes in regulatory requirements, tariffs and other trade barriers and price or exchange controls could limit the Group's operations and make the repatriation of profits difficult.

**The Group's investment and operations in certain countries that are subject to OFAC and other economic sanctions may harm the Group's reputation.**

Certain members of the Group have undertaken in the past, and may choose to undertake in the future, investments and operations outside of China, including in countries that are on the sanctions list published and administrated by the Office of Foreign Assets Control (the "OFAC") within the United States Department of the Treasury or subject to other international economic sanctions. There can be no assurance that the Company and its subsidiary or affiliates will not be subject to any sanctions due to their past and future investments and operations in these countries.

**The Group faces counterparty risks.**

While the Group generally sells its goods and provides services to reputable customers and evaluates the customers' credit in accordance with its internal risk management criteria, such as their credit history and likelihood of default, it has limited access to information about its customers and the Group may encounter difficulties in the collection of receivables in certain countries with which the Group has less experience. As at 31 December 2014 and 2015, the Group had accounts receivable of RMB14.2 billion and RMB14.7 billion respectively. The levels of the Group's accounts receivable may also continue to increase in the future if its customers experience credit difficulties. There is no assurance that all of the Group's customers will fully perform their obligations under their respective contracts with the Group, and the deterioration of any customers' credit or payment conditions may result in those customers defaulting on their contractual obligations, which could materially and adversely affect the Group's businesses, financial condition and results of operations.

In addition, disputes with governmental entities and other public organisations could potentially lead to contract termination if these remain unresolved or such disputes may take a considerably longer period of time to resolve than disputes with counterparties in the private sector, and payments from these entities and organisations may be delayed as a result.

**The Group may be exposed to claims in relation to the unsatisfactory performance of third-party service providers, and disputes with business partners may also adversely affect its businesses.**

The Group relies on third-party service providers for certain services, including but not limited to mining infrastructure construction, logistics services and warehouse management. Therefore, the Group is exposed to the risk that its third-party service providers may fail to perform their obligations, which may adversely affect the Group's business operations. In addition, from time to time, the Group cooperates with business partners to develop its businesses, including acquiring strategic mining resources or businesses that complement its own business line. Furthermore, the Group operates certain mining projects through joint venture arrangements and may enter into further joint ventures in the future along with the expansion of its operations. The Group may have disputes with these business

partners or joint venture partners over various aspects, such as performance of each party's obligations, scope of each party's responsibilities, product quality and logistics services. If such disputes cannot be settled in a timely manner, the Group's financial condition and businesses may be adversely affected.

**Failure to hire and retain management executives, technicians and other qualified personnel could adversely affect the Group's business and prospects.**

The growth of the Group's business operations is dependent upon the continued service of its senior management team. The industry experience, expertise and contributions of the Group's executives and other members of its senior management are essential to the Group's continued success. The Group will require an increasing number of experienced and competent executives in the future to implement the Group's growth plans. If the Group were to lose the services of any of its key management members and were unable to recruit and retain personnel with equivalent qualifications at any time, the management and growth of the Group's businesses could be adversely affected.

Competition for qualified personnel in general is intense in China and other markets where the Group operates its businesses. The Group cannot guarantee that it will be able to maintain an adequate skilled labour force necessary for it to execute its projects or to perform other corporate activities, nor can the Group guarantee that staff costs will not increase as a result of a shortage in the supply of skilled personnel. If the Group fails to attract and retain personnel with suitable managerial, technical or marketing expertise or to maintain an adequate labour force on a continuous basis, its business operations could be adversely affected and its future growth and expansions may be inhibited.

**The Group is subject to certain negative findings by the National Audit Office of the People's Republic of China.**

In accordance with the requirements of the National Audit Law of the PRC (《中華人民共和國審計法》), the National Audit Office of China (中華人民共和國審計署) (the "National Audit Office") carried out an audit into the Company's financial revenue and capital expenditure situation for the financial year ended 31 December 2014. The audit scope covered the Company and 4 subsidiaries of the Company, including Chalco and Yunnan Copper.

The findings of the National Audit Office were published on 29 June 2016, and the report published by the National Audit Office identified four main deficiency areas relating to the governance and management of the Group: (i) financial management and accounting issues; (ii) major decisions made by the Group and management of the Group; (iii) the difficulties in the potential development of the Company; and (iv) the probity of the business dealings of the Company. Among other issues highlighted in the report, it was alleged in the report by the National Audit Office that:

- between 2008 to the end of 2014, the Company had used loans to purchase shares in a company, accumulating total losses amounting to RMB701 million;
- in 2010, the Company approved two subsidiaries to invest in a coal mining company and provided guarantees for bank loans without assessment, proper due diligence or the approval of the competent authorities in the PRC, thereby incurring a joint liability risk of RMB448 million;

- between 2010 and 2012, the Company approved two investment projects in alumina plants in Inner Mongolia without adequate assessment of the investments. These investment projects were later halted due to, amongst others, factors relating to the poor health of the economy, resulting in the risk of loss of RMB1,146 million; and
- in 2006, the Company's Chongqing branch had invested in an 800,000 tonnes alumina project, however due to low ore grades, the high sulphur content of the mine, market performance and management issues, the investment project has resulted in losses of RMB4,939 million as of July 2014.

Chalco has since released an announcement on 29 June 2016 stating that remedial actions have been undertaken or are being undertaken to rectify the problems identified by the National Audit Office, and the Group believes that the findings by the National Audit Office will not have a material adverse impact on the business or operations of the Company. The Company will continue to improve business decision-making risk awareness and continue to strengthen internal control and governance systems to ensure that the Company is in compliance with all applicable laws and regulations.

**The Group may not be able to detect and prevent fraud or other misconduct committed by its employees, representatives, agents, customers or other third parties.**

The Group may be exposed to fraud or other misconduct committed by its employees, representatives, agents, customers or other third parties that could subject it to litigation, financial losses and sanctions imposed by governmental authorities, as well as affect its reputation. This misconduct could include:

- hiding unauthorised or unsuccessful activities, resulting in unknown and unmanaged risks or losses;
- intentionally concealing material facts, or failure to perform necessary due diligence to identify potential risks which are material to the Group in deciding whether to make investments or dispose of assets;
- improperly using or disclosing confidential information;
- engaging in improper activities such as accepting or offering bribes;
- misappropriation of funds;
- conducting transactions that exceed authorised limits;
- engaging in misrepresentation or fraudulent, deceptive or otherwise improper activities;
- engaging in unauthorised or excessive transactions to the detriment of the Group's customers; or
- otherwise not complying with applicable laws or the Group's internal policies and procedures.

The Group's internal control procedures are designed to monitor its operations and ensure overall compliance. However, such internal control procedures may be unable to identify all incidents of non-compliance or suspicious transactions in a timely manner, if at all. Furthermore, it is not always possible to detect and prevent fraud and other misconduct, and the precautions the Group takes to prevent and detect such activities may not be effective. There is no assurance that fraud or other misconduct will not occur in the future. If such fraud or other misconduct does occur, it may cause negative publicity as a result, and could have a material and adverse effect on the Group's reputation, businesses, financial condition and results of operations.

As at the date of this Offering Circular, certain former officials of the Group have been subject to investigations by PRC authorities. An investigation by the Communist Party's Central Commission for Discipline Inspection in late 2014 led to the arrest and dismissal of the Group's then general manager on charges of bribery. There can be no assurance that there will be no investigations in the future by the relevant PRC authorities on the Group's officers and employees, or that if they are investigated, they will not be found to be non-compliant with laws and regulations, which may subject the Group to disciplinary or other actions imposed by government or regulatory authorities, and the Group's reputation, business and financial condition may be materially and adversely affected. The Group also cannot predict the outcome, or the impact, of such investigation or whether any investigation will be extended to or targeted at the Group, the Company or any of their respective officers and employees or whether there will be any press speculation or adverse publicity on any such investigation or the possibilities of such investigation.

**Failure to comply with the restrictions and covenants in the Group's debt agreements could adversely affect the Group's businesses, financial condition and results of operations.**

If the Company or any of its subsidiaries is unable to comply with the restrictions and covenants in its current or future debt obligations and other agreements, there could be a default under the terms of such obligations or agreements. In the event of a default under these agreements, the holders of the debt could terminate their commitments to lend to the Company or its subsidiaries, accelerate repayment of the debt and declare all outstanding amounts due and payable or terminate the agreements. Furthermore, some of the debt agreements which the Company or its subsidiaries have entered into may contain cross-acceleration or cross-default provisions. As a result, default by the Company or its subsidiaries under any of such agreements may cause the acceleration of repayment of not only such debt but also other debt, including the Bonds, or result in a default under other debt agreements. If any of these events occurs, there is no assurance that the assets and cash flows of the Group would be sufficient to repay in full all of the debts as they become due, or that the Group would be able to find alternative financing on terms that are favourable or acceptable to the Group. In addition, in the course of securing bank loans, the Group may pledge the shares of certain Group entities to third party lenders. In the event of a default under such agreements, the relevant third party lenders may enforce such share pledges and this may result in a change in ownership of certain subsidiaries of the Group to the relevant third party lenders, which may have a material and adverse effect on the Group's business, financial condition and results of operations.

**The Group is exposed to inclement weather and climatic conditions, severe contagious disease, acts of terrorism or war, and adverse work environments in China and overseas.**

A significant amount of the Group's business activities is conducted outdoors and could be materially and adversely affected by weather and climatic conditions. The Group also operates in areas that are under the threat of ice storms, floods, earthquakes, landslides, mudslides, sandstorms,

contagious disease or drought. Acts of war and terrorist attacks, including those in foreign jurisdictions in which the Group has operations, may cause damage or disruption to the Group and its employees, subcontractors, operations, equipment, facilities and markets, any of which could impact the Group's public image, revenues and cost of sales. The outbreak of any severe contagious disease such as SARS in 2003, the H1N1 Influenza in 2009 or Ebola in 2014 could also result in interruption of the Group's business. During periods of curtailed activity, the Group may continue to incur operating expenses, but the Group's revenue from operations may be delayed or reduced. Such events could also have severe effects on the overall business sentiments and environment in China and the world, and may in turn lead to a slower economic growth in China's economy or the global economy, which may have a material and adverse effect on the Group's businesses, operating results and financial condition.

In addition, the Group conducts some of its operations under a variety of geographical and other conditions, including on difficult terrain, under harsh site conditions, in busy urban centres where delivery of materials and availability of labour may be affected, and on sites which may previously have been exposed to environmental hazards. Such conditions may result in personal injuries or fatalities or have a negative effect on the Group's work performance and efficiency.

**Public information on the Group may be limited and corporate disclosure and accounting standards in China differ from IFRS.**

While certain members of the Group, such as Chalco, Chalieco and MCC are listed on the Shanghai Stock Exchange, Hong Kong Stock Exchange and/or New York Stock Exchange, the Company is a private company incorporated in the PRC and is not listed on any stock exchange. There may be less publicly available information about the Company than is regularly made available by public companies in certain other jurisdictions. In addition, the consolidated financial statements of the Company are prepared and presented in accordance with PRC GAAP. Each investor should consult its own professional advisors for an understanding of the differences between PRC GAAP and IFRS and/or between PRC GAAP and other generally accepted accounting principles, and how those differences might affect the financial information contained herein.

**RISKS RELATING TO THE PRC**

**Changes in the PRC's economic, political and social conditions as well as governmental policies could affect the Group's businesses, financial condition and results of operations.**

China's economy differs from the economies of most developed countries in many respects, including the economic structure, level of government involvement, control of capital investment, control of foreign exchange and allocation of resources. China's economy has been transitioning from a planned economy to a more market-oriented economy. For the past three decades, the PRC government has implemented economic reform measures to emphasise the utilisation of market forces in economic development. Economic reform measures, however, may be adjusted, modified or applied inconsistently from industry to industry or across different regions of the country. As a result, the Group may not continue to benefit from all, or any, of these measures. In addition, the Group cannot predict whether changes in the PRC's political, economic and social conditions, laws, regulations and policies will have any adverse effect on the Group's current or future businesses, financial condition and results of operations.

China has been one of the world's fastest emerging economies in terms of GDP growth in recent years. However, China may not be able to sustain such a high growth rate. In order to maintain the sustainable growth of the economy, the PRC government from time to time implements various macroeconomic and other policies and measures, including but not limited to contractionary or expansionary policies and measures to promote stable economic conditions. In an effort to stimulate the growth of the Chinese economy, the PRC government has implemented and may continue to implement various monetary, fiscal or other economic measures to expand investments in infrastructure projects, increase liquidity in the credit markets and encourage employment. However, there is no assurance of the effectiveness of such monetary, fiscal or other economic measures. If the Chinese economy experiences a slowdown or even a downturn, the Group may experience a reduction in production output or cancellation of new projects and demand for alumina, primary aluminium, copper and rare earth metals as well as engineering and technical services may grow at a lower than expected rate or otherwise decrease. Furthermore, the Group cannot guarantee that it is able to make timely adjustments to its business and operational strategies so as to capture and benefit from the potential business opportunities presented to the Group as a result of the changes in the economic and other policies of the PRC government. Also see "*Risks relating to the Group's principal business lines — The Group's businesses are vulnerable to downturns in the general economy and industries in which the Group operates or which the Group serves. A reduction in demand or supply could materially and adversely affect the Group's business, financial condition and results of operations.*" Moreover, unfavourable financing and other economic conditions for the industries that the Group serves could negatively impact the Group's customers and their ability or willingness to fund capital expenditures in the future or pay for past services.

**The PRC government's pilot plan to replace business tax with value-added tax ("VAT") may subject the Group to more taxes, which could adversely affect the Group's business, results of operations and prospects.**

Pursuant to the PRC Provisional Regulations on Business Tax (中華人民共和國營業稅暫行條例), taxpayers providing taxable services falling under the category of service industry in China are required to pay a business tax at a normal tax rate of 5 per cent. of their revenues. In November 2011, the MOF and the State Administration of Taxation (the "SAT") promulgated the Pilot Plan for Imposition of Value-Added Tax to Replace Business Tax (營業稅改徵增值稅試點方案). Pursuant to this pilot plan and relevant subsequent notices, from 1 January 2012, VAT gradually replaced business tax in the transport and post industry, telecom industry and some of the modern service industries in China. Under the pilot plan, a VAT rate of 6 per cent. applies to certain modern service industries. On 23 March 2016, the Ministry of Finance and SAT promulgated the Circular on Comprehensively Promoting the Pilot Programme of the Collection of Value-Added Tax to Replace Business Tax (關於全面推開營業稅改徵增值稅試點的通知) ("Circular 36"). Pursuant to Circular 36, starting from 1 May 2016, the VAT pilot programme will cover construction industry, real estate industry, finance industry and life service industry on a nation-wide basis. Although the VAT pilot programme is mainly intended to reduce double taxation under the business tax system, the Group may be subject to more taxes under the VAT pilot programme in connection with the Group's operations and activities in China, which could adversely affect the Group's business, results of operations and prospects.

**The Group's labour costs may increase for reasons such as the implementation of the PRC Labour Contract Law or inflation in the PRC.**

The PRC Labour Contract Law (中華人民共和國勞動合同法) became effective on 1 January 2008 in the PRC and was amended on 28 December 2012. It imposes more stringent requirements on employers in relation to entry into fixed-term employment contracts and dismissal of employees. Pursuant to the PRC Labour Contract Law, the employer is required to make compensation payment to a fixed-term contract employee when the term of their employment contract expires, unless the employee does not agree to renew the contract even though the conditions offered by the employer for renewal are the same as or are better than those stipulated in the current employment contract. In general, the amount of compensation payment is equal to the monthly wage of the employee multiplied by the number of full years that the employee has worked for the employer. A minimum wage requirement has also been incorporated into the PRC Labour Contract Law. In addition, unless otherwise prohibited by the PRC Labour Contract Law or objected to by the employees themselves, the employer is also required to enter into non fixed-term employment contracts with employees who have previously entered into fixed-term employment contracts for two consecutive terms.

In addition, under the Regulations on Paid Annual Leave for Employees (職工帶薪年休假條例), which became effective on 1 January 2008, employees who have worked continuously for more than one year are entitled to paid annual leave ranging from 5 to 15 days, depending on the length of the employees' work time. Employees who consent to waive such vacation at the request of employers shall be compensated an amount equal to three times their normal daily salaries for each vacation day being waived. Under the National Leisure and Tourism Outline 2013–2020 (國民旅遊休閒綱要2013–2020) which became effective on 2 February 2013, all workers must receive paid annual leave by 2020. As a result of the PRC Labour Contract Law, the Regulations on Paid Annual Leave for Employees and the National Leisure and Tourism Outline 2013–2020, the Group's labour costs (inclusive of those incurred by contractors) may increase. Further, under the PRC Labour Contract Law, when an employer terminates its PRC employees' employment, the employer may be required to compensate them for such amount which is determined based on their length of service with the employer, and the employer may not be able to efficiently terminate non fixed-term employment contracts under the PRC Labour Contract Law without cause. In the event the Group decides to significantly change or decrease its workforce, the PRC Labour Contract Law could adversely affect its ability to effect these changes in a cost effective manner or in the manner that the Group desires, which could result in an adverse impact on the Group's businesses, financial condition and results of operations.

Further, if there is a shortage of labour or for any reason the labour cost in China rises significantly, the costs of production of the Group's products is likely to increase. This may in turn affect the selling prices of the products, which may then affect the demand of such products and thereby adversely affect the Group's sales and financial condition. Increase in costs of other components required for production of the products may cause similar adverse effects, particularly if the Group is unable to identify and employ other appropriate means to reduce the costs of production. In such circumstances, the profit margin may decrease and the financial results may be adversely affected.

According to the National Bureau of Statistics of the PRC, consumer price inflation in China was 2.6 per cent. in both 2012 and 2013. Inflation in China increases the costs of labour and the costs of raw materials the Group must purchase for production. Rising labour costs may increase the Group's operating costs and partially erode the cost advantage of the Group's China-based operations and therefore negatively impact its profitability.

**The PRC legal system has inherent uncertainties that could limit the legal protection available to investors.**

PRC laws and regulations govern the Group's operations in China. The Group and most of its operating subsidiaries are organised under PRC laws. China's legal system is based on written statutes. Prior court decisions may be cited for reference but have limited precedential value unless otherwise provided by the Supreme Court. Since the late 1970s, China has promulgated laws and regulations dealing with economic matters, such as the issuance and trading of securities, shareholder rights, foreign investment, corporate organisation and governance, commerce, taxation and trade.

However, many of these laws and regulations, particularly with respect to the financial services industry, are relatively new and evolving, are subject to different interpretations and may be inconsistently implemented and enforced. In addition, only limited volumes of published court decisions may be cited for reference, and such cases have limited precedential value as they are not binding on subsequent cases. These uncertainties relating to the interpretation, implementation and enforcement of China's laws and regulations and a system of jurisprudence that gives only limited precedential value to prior court decisions can affect the legal remedies and protections available to investors, and can adversely affect the value of your investment.

For example, the NDRC issued the Circular on Promoting the Reform of the Administrative System on the Issuance by Enterprises of Foreign Debt Filings and Registrations (Fa Gai Wai Zi [2015] No. 2044) (國家發展改革委關於推進企業發行外債備案證記制管理改革的通知(發改外資[2015] 2044 號), the “**Circular 2044**”) on 14 September 2015, which came into effect on the same day. The Circular 2044 is a recent regulation and its interpretation may involve significant uncertainty, which may adversely affect the enforceability and/or effective performance of the Bonds. The Circular 2044 is silent on the legal consequences of non-compliance with the post-issue registration requirements. There is also no assurance that the post-issue registration of the issuance of the Bonds with the NDRC can be completed by the Company or that the registration with the NDRC will not be revoked or amended in the future or that future changes in PRC laws and regulations will not have a negative impact on the performance or validity and enforceability of the Bonds in the PRC. Potential investors of the Bonds are advised to exercise due caution when making their investment decisions.

In particular, the industries in which the Group operates are highly regulated. Many aspects of the Group's business depend upon the receipt of the relevant government authority's approvals and permits. As China's legal system and China's financial services industry develop, changes in such laws and regulations, or in their interpretation or enforcement, could materially adversely affect the Group's business, financial condition or results of operations.

**Additional procedures may be required to be taken to bring English law governed matters or disputes to the Hong Kong courts. There is also no assurance that the PRC courts will recognise and enforce judgments of the Hong Kong courts in respect of English law governed matters or disputes.**

The Terms and Conditions of the Bonds and the transaction documents are governed by English law, whereas parties to these documents have submitted to the exclusive jurisdiction of the Hong Kong courts. In order to hear English law governed matters or disputes, Hong Kong courts may require certain additional procedures to be taken. Under the “*Arrangement on Reciprocal Recognition and Enforcement of Judgments in Civil and Commercial Matters by the Courts of the Mainland and of the Hong Kong Special Administrative Region Pursuant to Choice of Court Agreements between Parties Concerned*”,

judgments of Hong Kong courts are likely to be recognised and enforced by the PRC courts where the contracting parties to the transactions pertaining to such judgments have agreed to submit to the exclusive jurisdiction of Hong Kong courts.

However, recognition and enforcement of a Hong Kong court judgment could be refused if the PRC courts consider that the enforcement of such judgment is contrary to the social and public interest of the PRC. While it is expected that the PRC courts will recognise and enforce a judgment given by Hong Kong courts governed by English law, there can be no assurance that the PRC courts will do so for all such judgments as there is no established practice in this area. Compared to other similar debt securities issuances in the international capital markets where the relevant holders of the debt securities would not typically be required to submit to an exclusive jurisdiction, the Bondholders will be deemed to have submitted to the exclusive jurisdiction of the Hong Kong courts, and thus the Bondholders' ability to initiate to claim outside of Hong Kong will be limited.

**Investors may experience difficulties in effecting service of legal process and enforcing judgments against the Company and its management.**

The Company is an enterprise incorporated under the laws of the PRC and a substantial portion of its assets and its subsidiaries is located in the PRC. In addition, most of the Company's directors, supervisors and executive officers reside within the PRC and the assets of the Company's directors and officers may be located within the PRC. As a result, it may not be possible to effect service of process within the United States or elsewhere outside the PRC upon most of the Company's directors, supervisors and executive officers, including with respect to matters arising under the U.S. federal securities laws or applicable state securities laws. Moreover, the PRC does not have treaties providing for the reciprocal enforcement of judgments of courts with the United States, the United Kingdom, Japan or most other western countries. In addition, Hong Kong has no arrangement for the reciprocal enforcement of judgments with the United States. As a result, recognition and enforcement in the PRC or Hong Kong of judgments of a court in the United States, the United Kingdom and any of the other jurisdictions mentioned above may be difficult or impossible.

**Government control of currency conversion may adversely affect the value of Bondholder's investments.**

Most of the Group's revenue is denominated in Renminbi, which is also its reporting currency. Renminbi is not a freely convertible currency. A portion of the Group's cash may be required to be converted into other currencies, particularly US dollars, in order to meet its foreign currency needs, including cash payments on declared dividends, if any, on its Bonds.

However, the PRC government may restrict future access to foreign currencies for current account transactions at its discretion. If this were to occur, the Group might not be able to pay interest to the holders of its Bonds in foreign currencies. On the other hand, foreign exchange transactions under capital account in the PRC continue to be not freely convertible and require the approval of the NDRC, MOFCOM, SAFE and other competent authorities. These limitations could affect the Group's ability to obtain foreign currencies through equity financing, or to obtain foreign currencies for capital expenditures.

**Future fluctuations in the value of the Renminbi could have a material adverse effect on the Group's financial condition and results of operations.**

While the Group generates most of its revenue in China, it also sells metal products in the international markets and provides engineering and technical services to overseas customers. A portion of the Group's revenue, expenses and bank borrowings is denominated in Hong Kong dollars, US dollars, Euro and other foreign currencies, although its functional currency is the Renminbi. As a result, fluctuations in exchange rates, particularly between the Renminbi, Hong Kong dollar and US dollar, could affect the Group's profitability and may result in foreign currency exchange losses of its foreign currency-denominated assets and liabilities.

The exchange rate of the Renminbi against the US dollar and other currencies fluctuates and is affected by, among other things, changes in China's and international political and economic conditions and the PRC government's fiscal and currency policies. Since 1994, the conversion of the Renminbi into foreign currencies, including the Hong Kong dollar and US dollar, has been based on rates set daily by the PBOC based on the previous business day's inter-bank foreign exchange market rates and exchange rates in global financial markets. From 1994 to 20 July 2005, the official exchange rate for the conversion of the Renminbi to US dollars was generally stable. On 21 July 2005, the PRC government adopted a more flexible managed floating exchange rate system to allow the value of the Renminbi to fluctuate within a regulated band that is based on market supply and demand with reference to a basket of currencies. On 19 June 2010, the PBOC announced that the PRC government would reform the Renminbi exchange rate regime and increase the flexibility of the exchange rate.

There remains significant international pressure on the PRC government to adopt a more flexible currency policy, which could result in further appreciation or depreciation of the Renminbi against the US dollar. There can be no assurance that the Renminbi will not experience significant appreciation or depreciation against the US dollar in the future. As to risk of devaluation of Renminbi against the US dollar, see "*Risk Factors — The Group is exposed to foreign exchange fluctuations*" for more information.

Currently, the Group has entered into several hedging transactions to mitigate its exposure to foreign exchange risk. However, it cannot be assumed that any significant increase in the value of the Renminbi against foreign currencies would not reduce the value of its foreign currency-denominated revenue and assets.

**RISKS RELATING TO THE BONDS, THE GUARANTEE, THE KEEPWELL DEED AND THE DEED OF EQUITY INTEREST PURCHASE UNDERTAKING**

**The Bonds and the Guarantee are unsecured obligations**

The Bonds and the Guarantee are unsecured obligations of the Issuer and the Guarantor, respectively. The repayment of the Bonds and payment under the Guarantee may be adversely affected if:

- the Issuer or the Guarantor enters into bankruptcy, liquidation, reorganisation or other winding-up proceedings;
- there is a default in payment under the Issuer's or the Guarantor's future secured indebtedness or other unsecured indebtedness; or

- there is an acceleration of any of the Issuer's or the Guarantor's indebtedness.

If any of these events were to occur, the Issuer's or the Guarantor's assets may not be sufficient to pay amounts due on the Bonds.

**The obligations of the Guarantor under the Guarantee are structurally subordinated to the liabilities and obligations of its subsidiaries**

The Guarantor is a holding company that generates its revenue primarily through its subsidiaries, and the Guarantor's ability to perform its obligations under the Guarantee is effectively dependent on the cash flow of its subsidiaries. Any claim by the Trustee against the Guarantor in relation to the Guarantee will be effectively subordinated to all existing and future obligations of the Guarantor's subsidiaries, and all claims by creditors of such subsidiaries will have priority to the assets of such entities over the claims of the Trustee under the Guarantee.

**The Keepwell Deed is not a guarantee of the payment obligations under the Bonds and the Guarantee**

The Company will enter into the Keepwell Deed in relation to the Bonds. See "Description of the Keepwell Deed". Upon the occurrence of an event of default as set out in Condition 9 in the Terms and Conditions of the Bonds, the Trustee may take action against the Company to enforce the provisions of the Keepwell Deed. However, neither the Keepwell Deed nor any actions taken by the Company thereunder can be deemed as a guarantee by the Company for the payment obligation of the Issuer under the Bonds or the Guarantor under the Guarantee. Accordingly, the Company will only be obliged to cause the Issuer or the Guarantor to obtain, before the due date of the relevant payment obligations, funds sufficient by means as permitted by applicable laws and regulations so as to enable the Issuer or the Guarantor to pay such payment obligations in full as they fall due, rather than assume the payment obligation as in the case of a guarantee.

Furthermore, the performance by the Company of its obligations under the Keepwell Deed may be subject to Regulatory Approvals (as defined in the Keepwell Deed). For example, even if the Company intends to perform its obligations under the Keepwell Deed in causing the Issuer or the Guarantor to obtain, before the due date of the relevant payment obligations, funds sufficient meet its obligations under the Bonds or the Guarantee, depending on the manner in which the Company performs such obligations, such performance may be subject to obtaining prior consent, approvals, registration and/or filings from relevant PRC governmental authorities, including the NDRC, MOFCOM and SAFE.

Any claim by the Issuer, the Guarantor and/or the Trustee against the Company in relation to the Keepwell Deed will be effectively subordinated to all existing and future obligations of the Company's subsidiaries (other than the Issuer and the Guarantor), particularly the onshore operating subsidiaries of the Company, and all claims by creditors of such subsidiaries (other than the Issuer and the Guarantor) will have priority to the assets of such subsidiaries over the claims of the Issuer, the Guarantor and the Trustee under the Keepwell Deed.

**Performance by the Company of its undertaking under the Deed of Equity Interest Purchase Undertaking is subject to approvals of the PRC governmental authorities**

The Company intends to assist the Issuer and the Guarantor to meet their respective obligations under the Bonds and the Guarantee by entering into the Deed of Equity Interest Purchase Undertaking on the Issue Date. Under the Deed of Equity Interest Purchase Undertaking, the Company will agree to

purchase from the Guarantor and/or any other subsidiary of the Company incorporated outside the PRC (each, a “**Relevant Transferor**”) their equity interest in certain onshore or offshore subsidiaries at a purchase price, subject to the terms in the Deed of Equity Interest Purchase Undertaking and the applicable PRC laws and regulations, not lower than the amount sufficient to enable the Issuer and the Guarantor to discharge in full their respective obligations under the Bonds, the Guarantee and the Trust Deed and other amounts as described in the Deed of Equity Interest Purchase Undertaking.

Performance by the Company of the Deed of Equity Interest Purchase Undertaking may be subject to the approvals of or registrations/filings with:

- the NDRC in respect of the transfer of the equity interest in the offshore subsidiaries from the Relevant Transferor to the Company;
- MOFCOM in respect of the transfer of the equity interest in the onshore or offshore subsidiaries from the Relevant Transferor to the Company;
- the PRC State Administration for Industry and Commerce or its local counterpart in respect of the transfer of the equity interest in the onshore subsidiaries from the Relevant Transferor to the Company;
- the relevant PRC tax authorities in respect of withholding tax for the Relevant Transferor;
- SASAC (if applicable) in respect of the transfer of the equity interest in the onshore or offshore subsidiaries from the Relevant Transferor to the Company and the filing of the asset appraisal report and all application documents required;
- SAFE (if applicable) in respect of (i) changing the SAFE registration of, or in connection with, the onshore or offshore companies being sold, and (ii) the remittance of the purchase price, denominated in US dollars, from the Company in the PRC to the Guarantor in Hong Kong (where applicable); and
- other approvals, registrations and/or filings required under the applicable PRC laws, regulations or policies.

As the approval process is beyond the control of the Company, there can be no assurance that the Company will successfully obtain either the requisite approvals or registrations in time, or at all, or that the PRC Government’s relevant policies or regulations will not change in the future. In the event that the Company fails to obtain the requisite approvals, registrations or filings, the Issuer and the Guarantor may have insufficient funds to discharge their outstanding payment obligations to the holders of the Bonds.

Further, in the event of an insolvency of a Relevant Transferor, any sale proceeds received by that Relevant Transferor may be subject to the insolvency claims of third parties. The Trustee’s claim against the sale proceeds will be an unsecured claim and may rank lower in priority to any claims by secured third party creditors of such Relevant Transferor where it is the Guarantor. Where a Relevant Transferor is not the Guarantor, the Trustee will not have a direct claim against the sale proceeds received by such Relevant Transferor.

**Performance by the Company of its undertaking under the Deed of Equity Interest Purchase Undertaking may be subject to consent from third party creditors and shareholders, and may also be restricted if any of the equity interests is secured in favour of third party creditors**

Under the terms of the Deed of Equity Interest Purchase Undertaking, the Company will agree to purchase or procure a subsidiary of the Company to purchase from one or more Relevant Transferor the equity interest held by it upon the occurrence of an event of default under the Bonds. The ability of the Company to perform this undertaking may be affected by any present or future financing agreements of the Company and its subsidiaries:

- in the event that such financial agreements contain non-disposal or other restrictive covenants that would prevent the sale of an equity interest by a Relevant Transferor, the Company and its subsidiaries would need to obtain the consent from the third party creditor before the Relevant Transferor is able to proceed with the sale of such equity interest; and
- in the event that certain equity interests have been secured in favour of third party creditors, the Company and its subsidiaries would need to arrange for these security interests to be released before the Relevant Transferor is able to proceed with the sale of such equity interests.

Under the Terms and Conditions of the Bonds and the Keepwell Deed, there are no restrictions on the Guarantor or other subsidiaries of the Company entering into financing agreements with such non-disposal or other restrictive covenants or securing the equity interests of the Guarantor and other subsidiaries of the Company in favour of its creditors. In the event the obligation to purchase under the Deed of Equity Interest Purchase Undertaking becomes effective, there is no assurance that the Guarantor or any other subsidiaries of the Company will be able to obtain any required consents from its creditors or that it will be able to arrange for any existing security arrangement to be released in order for the sale of the equity interest to proceed. If such consents or releases cannot be obtained, the Guarantor and/or any other subsidiaries of the Company, as the case may be, may need to repay the indebtedness owed to its third party creditors in order to be able to sell the relevant equity interests to the Company, failing which, the Issuer and the Guarantor may have insufficient funds to discharge their payment obligations to the holders of the Bonds.

In addition, third party shareholders' consent may also be required if the Company chooses to acquire the equity interests of certain non-wholly-owned companies of a Relevant Transferor. In such an event, the prospective acquisition may be subject to pre-emptive rights or other restrictions in such company's articles of association, shareholders' agreement or otherwise that would require the selling shareholder to obtain consent or waiver from other third party shareholders before any equity interest can be sold to the Company or its subsidiaries or affiliate.

In the event the obligation to purchase under the Deed of Equity Interest Purchase Undertaking becomes effective, there is no assurance that any required approvals or waivers can be obtained from third party shareholders in a timely manner or at all.

**The Issuer has limited assets, which affects its ability to make payments under the Bonds and to enable the Company to purchase adequate equity interest from it pursuant to the Deed of Equity Interest Purchase Undertaking**

The Issuer is a special purpose vehicle incorporated for the sole purpose of issuing the Bonds. Since its incorporation, the Issuer has no substantive assets or any business operations. After the Bonds are issued, it will on-lend the proceeds from the issuance to the Group and with a right to repayment of the amount advanced. Until the relevant Group entity makes a payment of principal or interest to the Issuer pursuant to the on-lending arrangement, or until the Guarantor, the Company or the other members of the Group injects capital into the Issuer via other means, the Issuer will have no substantive assets to finance the payment any amount under the Bonds.

**The Issuer may not be able to redeem the Bonds upon the due date for redemption thereof**

The Issuer may, at its option, and at maturity or at any time following the occurrence of a Change of Control (as defined in the Terms and Conditions of the Bonds) will, be required to redeem all of the Bonds. If such an event were to occur, the Issuer may not have sufficient cash in hand and may not be able to arrange financing to redeem the Bonds in time, or on acceptable terms, or at all. The ability to redeem the Bonds in such event may also be limited by the terms of other debt instruments. The Issuer's failure to repay, repurchase or redeem tendered Bonds could constitute an event of default under the Bonds, which may also constitute a default under the terms of the Issuer's or the Group's other indebtedness.

**The Bonds are subject to optional redemption by the Issuer and may have a lower market value than bonds that cannot be redeemed**

In the event that the Issuer would be obliged to increase the amounts payable in respect of any Bonds due to any withholding or deduction for or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or on behalf of the British Virgin Islands or any political subdivision thereof or any authority therein or thereof having power to tax, the Issuer may redeem all outstanding Bonds in accordance with the Terms and Conditions of the Bonds.

The Issuer also has the option to redeem all of the Bonds at the Make Whole Price (as defined in the Terms and Conditions of the Bonds) at any time. Such an optional redemption feature is likely to limit the market value of the Bonds. During any period when the Issuer may elect to redeem the Bonds, the market value of those Bonds generally will not rise substantially above the price at which they can be redeemed. This also may be true prior to any redemption period.

The Issuer may be expected to redeem the Bonds when its cost of borrowing is lower than the coupon rate on the Bonds. At those times, an investor generally would not be able to reinvest the redemption proceeds at an effective interest rate as high as the interest rate on the Bonds being redeemed and may only be able to do so at a significantly lower rate. Potential investors should consider reinvestment risk in light of other investments available at that time.

**The Bonds may not be a suitable investment for all investors**

The Bonds are complex financial instruments and may be purchased as a way to reduce risk or enhance yield with an understood, measured, appropriate addition of risk to their overall portfolios. A potential investor should not invest in the Bonds unless it has the expertise (either alone or with the help

of a financial adviser) to evaluate how the Bonds will perform under changing conditions, the resulting effects on the value of such Bonds and the impact this investment will have on the potential investor's overall investment portfolio.

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

- (i) have sufficient knowledge and experience to make a meaningful evaluation of the Bonds, the merits and risks of investing in the Bonds and the information contained or incorporated by reference in this Offering Circular or any applicable supplement;
- (ii) have access to, and knowledge of, appropriate analytical tools to evaluate, in the context of its particular financial situation, an investment in the Bonds and the impact such investment will have on its overall investment portfolio;
- (iii) have sufficient financial resources and liquidity to bear all of the risks of an investment in the Bonds;
- (iv) understand thoroughly the terms of the Bonds and be familiar with the behaviour of any relevant indices and financial markets; and
- (v) be able to evaluate (either alone or with the help of a financial adviser) possible scenarios for economic, interest rate and other factors that may affect its investment and its ability to bear the applicable risks.

#### **The liquidity and price of the Bonds following this offering may be volatile**

The price and trading volume of the Bonds may be highly volatile. Factors such as variations in the revenues, earnings and cash flows of the Group and proposals of new investments, strategic alliances and/or acquisitions, interest rates and fluctuations in prices for comparable companies could cause the price of the Bonds to change. Any such developments may result in large and sudden changes in the volume and price at which the Bonds will trade. There can be no assurance that these developments will not occur in the future.

#### **Changes in market interest rates may adversely affect the value of the Bonds**

The Bonds will carry a fixed interest rate. Consequently, the trading price of the Bonds will vary with the fluctuations in the US dollar interest rates. If a holder of the Bonds tries to sell such Bonds before their maturity, he may receive an offer that is less than his investment.

#### **Developments in other markets may adversely affect the market price of the Bonds**

The market price of the Bonds may be adversely affected by declines in the international financial markets and world economic conditions. The market for the Bonds is, to varying degrees, influenced by economic and market conditions in other markets, especially those in Asia. Although economic conditions are different in each country, investors' reactions to developments in one country can affect the securities markets and the securities of issuers in other countries, including China. Since the global financial crisis of 2008 and 2009, the international financial markets have experienced significant volatility. If similar developments occur in the international financial markets in the future, the market price of the Bonds could be adversely affected.

### **A trading market for the Bonds may not develop**

The Bonds are a new issue of securities for which there is currently no trading market. There can be no assurance as to the liquidity of the Bonds or that an active trading market will develop. If such a market were to develop, the Bonds could trade at prices that may be higher or lower than the initial issue price depending on many factors, including prevailing interest rates, the Group's operations and the market for similar securities. The Joint Lead Managers are not obligated to make a market in the Bonds and any such market making, if commenced, may be discontinued at any time at the sole discretion of the Joint Lead Managers.

### **The Issuer may be treated as a PRC resident enterprise for PRC tax purpose, which may subject the Issuer to PRC income taxes on its world wide income and interest payable by the Issuer to foreign investors and gains on the transfer of the Bonds may be subject to income tax under PRC tax laws**

The Issuer is incorporated under the laws of the British Virgin Islands. Pursuant to the Enterprise Income Tax Law of the PRC (the “**EIT Law**”) and its implementation regulations, enterprises that are established under the laws of foreign countries and regions but whose “de facto management bodies” are within the PRC are treated as PRC tax resident enterprises for the purposes of the EIT Law. If the relevant PRC tax authorities decide, in accordance with applicable tax rules and regulations, that the “de facto management body” of the Issuer is within the PRC, the Issuer may be held to be a PRC tax resident enterprise for the purposes of the EIT Law and income or gains paid with respect to the Bonds may be considered to be derived from sources within the PRC.

Under the EIT Law and its implementation rules, any income or gains realised by non-resident enterprises may be subject to PRC enterprise income tax if such income or gains are regarded as derived from sources within the PRC. Under the EIT Law, a “non-resident enterprise” means an enterprise established under the laws of a jurisdiction other than the PRC and whose actual administrative organisation is not in the PRC, which has established offices or premises in the PRC, or which has not established any offices or premises in the PRC but has obtained income derived from sources within the PRC. In the event the Issuer or Guarantor is deemed to be a PRC tax resident enterprise by the PRC tax authorities in the future, the Issuer or the Guarantor would be subject to PRC enterprise income tax at the rate of 25 per cent. on their global income in the future, interest paid on the Bonds or Guarantee may be considered to be PRC source, in which case the Issuer or Guarantor, as the case may be, would be required to withhold income tax at the applicable rate of 20 per cent. from payments of interest in respect of the Bonds to any non-resident enterprise holders.

Any capital gain realised by a non-resident enterprise from the transfer of the Bonds may be regarded as being derived from sources within the PRC and accordingly may be subject to a PRC tax of up to 10 per cent. if the Issuer is treated as a PRC tax resident. Pursuant to the Individual Income Tax Law of the PRC and its implementation regulations, if the Issuer or Guarantor is considered to be a PRC tax resident enterprise, the Issuer or Guarantor, as the case may be, may be obliged to withhold such individual income tax on payments of interests to non-resident individual holders of the Bonds. Any capital gain realised by a non-resident individual holder from transfer of the Bonds may also be regarded as being derived from sources within the PRC and be subject to PRC tax of up to 20 per cent. if the Issuer is treated as a PRC tax resident enterprise.

According to the Arrangement between the Mainland of China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income (the “**Arrangement**”) which was promulgated on 21 August 2006, Bondholders who are Hong Kong residents, including both enterprise holders and individual holders, will be exempted from PRC income tax on capital gains derived from a sale or exchange of the Bonds.

On 23 March 2016, the Ministry of Finance and the State Administration of Taxation (the “**SAT**”) issued Circular 36, which introduced a new VAT from 1 May 2016. VAT is applicable where the entities or individuals provide services within the PRC. The possibility of VAT being applied to any transfer of Bonds between entities or individuals located outside of the PRC is relatively small and therefore the VAT is not likely to apply to gains realised upon such transfers, but there is uncertainty as to the applicability of VAT if either the seller or buyer of Bonds is located inside the PRC. Circular 36 and laws and regulations pertaining to VAT are relatively new, and the interpretation and enforcement of such laws and regulations involve uncertainties.

If a Bondholder, being a non-resident enterprise or non-resident individual, is required to pay any PRC income tax or VAT on the interest or capital gains on the transfer of the Bonds, the value of the relevant Bondholder’s investment in the Bonds may be materially and adversely affected.

**The Issuer may be able to redeem the Bonds in whole at a redemption price equal to 100 per cent. of the principal amount plus accrued and unpaid interest in the event the Issuer is required to pay additional amounts because it is treated as a PRC “resident enterprise”.**

In the event that the Issuer is treated as a PRC “resident enterprise” under the EIT Law, it may be required to withhold PRC income tax on interest payable to certain of its non-resident investors. In such case, the Issuer will, subject to certain exceptions, be required to pay such additional amounts as will result in receipt by a holder of a Bond of such amounts as have been received by the holder had no such withholding been required. As set out in Condition 6(b) (Redemption for Taxation Reasons) of the Terms and Conditions of the Bonds, in the event that as a result of a change in PRC tax law such that such PRC deduction or withholding is in excess of the applicable rate, and the Issuer is required to pay additional amounts as a result of certain changes in, or interpretations of, tax law, including any change or interpretation that results in the Issuer being required to withhold tax on interest payments as a result of its being treated as a PRC “resident enterprise”, the Issuer may redeem the Bonds in whole at a redemption price equal to 100 per cent. of the principal amount plus accrued and unpaid interest.

**The insolvency laws of British Virgin Islands and Hong Kong and other local insolvency laws may differ from those of another jurisdiction with which the holders of the Bonds are familiar**

As the Issuer and the Guarantor are incorporated under the laws of the British Virgin Islands and Hong Kong, any insolvency proceeding relating to the Issuer or the Guarantor would likely involve British Virgin Islands or Hong Kong insolvency laws, the procedural and substantive provisions of which may differ from comparable provisions of the local insolvency laws of jurisdictions with which the holders of the Bonds are familiar.

**Exchange rate risks and exchange controls may result in a Bondholder receiving less interest or principal than expected**

The Issuer will pay principal and interest on the Bonds in US dollars. This presents certain risks relating to currency conversions if a Bondholder’s financial activities are denominated principally in a currency or currency unit (the “**Investor’s Currency**”) other than US dollars. These include the risk

that exchange rates may significantly change (including changes due to devaluation of the US dollar or revaluation of the Investor's Currency) and the risk that authorities with jurisdiction over the Investor's Currency may impose or modify exchange controls. An appreciation in the value of the Investor's Currency relative to the US dollar would decrease (i) the Investor's Currency equivalent yield on the Bonds; (ii) the Investor's Currency equivalent value of the principal payable on the Bonds; and (iii) the Investor's Currency equivalent market value of the Bonds.

Governments and monetary authorities may impose (as some have done in the past) exchange controls that could adversely affect an applicable exchange rate. As a result, a Bondholder may receive less interest or principal than expected, or no interest or principal.

**The Trustee may request holders of the Bonds to provide an indemnity and/or security and/or prefunding to its satisfaction**

In certain circumstances, including without limitation giving of notice to the Issuer and the Guarantor pursuant to Condition 9 of the Terms and Conditions of the Bonds and taking enforcement steps pursuant to Condition 14 of the Terms and Conditions of the Bonds, the Trustee may, at its sole discretion, request holders of the Bonds to provide an indemnity and/or security and/or prefunding to its satisfaction before it takes actions on behalf of holders of the Bonds. The Trustee shall not be obliged to take any such actions if not indemnified and/or secured and/or prefunded to its satisfaction. Negotiating and agreeing to an indemnity and/or security and/or prefunding can be a lengthy process and may impact on when such actions can be taken. The Trustee may not be able to take actions, notwithstanding the provision of an indemnity or security or prefunding to it, in breach of the terms of the Trust Deed or the Terms and Conditions of the Bonds and in such circumstances, or where there is uncertainty or dispute as to the applicable laws or regulations, to the extent permitted by the agreements and the applicable law, it will be for the holders of the Bonds to take such actions directly.

**Decisions that may be made on behalf of all holders of the Bonds may be adverse to the interests of individual holders of the Bonds**

The Terms and Conditions of the Bonds contain provisions for calling meetings of holders of the Bonds to consider matters affecting their interests generally. These provisions permit defined majorities to bind all holders of the Bonds including holders who did not attend and vote at the relevant meeting and holders who voted in a manner contrary to the majority. Furthermore, there is a risk that the decision of the majority of holders of the Bonds may be adverse to the interests of individual Bondholders.

**Modifications and waivers may be made in respect of the Terms and Conditions of the Bonds and the Trust Deed by the Trustee or less than all of the holders of the Bonds**

The Terms and Conditions of the Bonds provide that the Trustee may, without the consent of the holders of the Bonds, agree to any modification of the Trust Deed, the Terms and Conditions of the Bonds and/or the Agency Agreement (other than in respect of a reserved matter) which in the opinion of the Trustee will not be materially prejudicial to the interests of the holders of the Bonds and to any modification of the Bonds, the Trust Deed or the Agency Agreement which in the opinion of the Trustee is of a formal, minor or technical nature or is to correct a manifest error or to comply with any mandatory provision of law.

In addition, the Trustee may, without the consent of the holders of the Bonds, authorise or waive any proposed breach or breach of the Bonds, the Trust Deed or the Agency Agreement (other than a proposed breach, or a breach relating to the subject of certain reserved matters) if, in the opinion of the Trustee, the interests of the holders of the Bonds will not be materially prejudiced thereby.

**The Bonds initially will be represented by a Global Certificate and holders of a beneficial interest in the Global Certificate must rely on the procedures of the relevant Clearing System**

The Bonds will initially be represented by a Global Certificate. Such Global Certificate will be deposited with a common depositary for Euroclear and Clearstream (each of Euroclear and Clearstream, a “**Clearing System**”). Except in the circumstances described in the Global Certificate, investors will not be entitled to receive definitive Bonds. The relevant Clearing System will maintain records of the beneficial interests in the Global Certificate. While the Bonds are represented by the Global Certificate, investors will be able to trade their beneficial interests only through the Clearing Systems. While the Bonds are represented by the Global Certificate, the Issuer will discharge its payment obligations under the Bonds by making payments to the common depositary for Euroclear and Clearstream, for distribution to their account holders. A holder of a beneficial interest in the Global Certificate must rely on the procedures of the relevant Clearing System to receive payments under the Bonds. The Issuer has no responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in the Global Certificate. Holders of beneficial interests in the Global Certificate will not have a direct right to vote in respect of the Bonds. Instead, such holders will be permitted to act only to the extent that they are enabled by the relevant Clearing System to appoint appropriate proxies.

## TERMS AND CONDITIONS OF THE BONDS

*The following, save for the paragraphs in italics, is the text of the Terms and Conditions of the Bonds.*

The issue of the US\$[●] in aggregate principal amount of [●] per cent. Guaranteed Bonds due [●] (the “**Bonds**” which term shall include, unless the context requires otherwise, any further bonds issued in accordance with Condition 13 and consolidated and forming a single series therewith) was authorised by a resolution of the board of Directors of Chinalco Capital Holdings Limited (the “**Issuer**”) passed on 14 July 2016. The Bonds are guaranteed by Aluminum Corporation of China Overseas Holdings Limited (the “**Guarantor**”). The giving of the Guarantee (as defined in Condition 3(b)) was authorised by a resolution of the board of Directors of the Guarantor on 14 July 2016. The Bonds are constituted by a trust deed (the “**Trust Deed**”) dated [●] between the Issuer, the Guarantor, Aluminum Corporation of China (the “**Company**”) and Bank of Communications Trustee Limited (the “**Trustee**”, which expression shall include all persons for the time being the trustee or trustees under the Trust Deed) as trustee for itself and the holders of the Bonds. The Bonds are the subject of an agency agreement (the “**Agency Agreement**”) dated [●] between the Issuer, the Trustee, Bank of Communications Co., Ltd. Hong Kong Branch as registrar (the “**Registrar**”), as transfer agent (the “**Transfer Agent**”) and as principal paying agent (the “**Principal Paying Agent**”) and any other agents named therein. References herein to “**Agents**” means the Principal Paying Agent, the Registrar, the Transfer Agent and any other agent or agents appointed from time to time with respect to the Bonds. The Bonds have the benefit of (i) a keepwell deed (the “**Keepwell Deed**”) dated [●] entered into by the Company, the Issuer, the Guarantor and the Trustee and (ii) a deed of equity interest purchase undertaking (the “**Deed of Equity Interest Purchase Undertaking**”) dated [●] entered into by the Company, the Guarantor and the Trustee, both deeds being executed in favour of the Trustee. The entering into the Keepwell Deed was authorised by resolutions of the board of Directors of the Issuer on 14 July 2016, by resolutions of the board of Directors of the Guarantor on 14 July 2016 and by resolutions of the board of Directors of the Company on 16 January 2016 and resolutions of the general manager meeting of the Company on 26 June 2016. The entering into the Deed of Equity Interest Purchase Undertaking was authorised by resolutions of the board of Directors of the Guarantor on 14 July 2016 and resolutions of the board of Directors of the Guarantor on 14 July 2016 and resolutions of the board of Directors of the Company on 16 January 2016 and resolutions of the general manager meeting of the Company on 26 June 2016. The Bondholders are entitled to the benefit of, are bound by, and are deemed to have notice of, all the provisions of the Trust Deed and of those provisions of the Keepwell Deed, the Deed of Equity Interest Purchase Undertaking and the Agency Agreement applicable to them. Copies of the Trust Deed, the Keepwell Deed, the Deed of Equity Interest Purchase Undertaking and the Agency Agreement are available for inspection by Bondholders at all reasonable times during usual business hours upon prior written request and proof of holding at the principal place of business of the Trustee (being at the date of issue of the Bonds at 1/F, Far East Consortium Building, 121 Des Voeux Road Central, Hong Kong) and at the specified office for the time being of the Principal Paying Agent.

All capitalised terms that are not defined in these terms and conditions (the “**Conditions**”) will have the meanings given to them in the Trust Deed.

### 1 FORM, SPECIFIED DENOMINATION AND TITLE

The Bonds are issued in the specified denomination of US\$200,000 and integral multiples of US\$1,000 in excess thereof.

The Bonds are represented by registered certificates (“**Certificates**”) and each Certificate shall represent the entire holding of Bonds by the same holder. Title to the Bonds shall pass by transfer and registration in the Register as described in Condition 2. The holder of any Bond will (except as ordered by a court of competent jurisdiction or as otherwise required by law) be treated as its absolute owner for all purposes whether or not it is overdue and regardless of any notice of ownership, trust or an interest in it, any writing on the Certificate representing it or the theft or loss of such Certificate and no person shall be liable for so treating the holder.

In these Conditions, “**Bondholder**” or “**holder**” in relation to a Bond means the person in whose name a Bond is registered.

*Upon issue, the Bonds will be represented by a global certificate (the “**Global Certificate**”) registered in the name of a nominee of, and deposited with a common depositary for Euroclear and Clearstream. These Conditions are modified by certain provisions contained in the Global Certificate. See “Summary of Provisions relating to the Bonds while in Global Form”.*

## 2 TRANSFERS OF BONDS

### (a) Register

The Issuer will cause the register (the “**Register**”) to be kept at the specified office of the Registrar outside the United Kingdom and in accordance with the terms of the Agency Agreement, on which shall be entered the names and addresses of the holders and the particulars of the Bonds held by them and of all transfers of the Bonds. Each holder shall be entitled to receive only one Certificate in respect of its entire holding of Bonds.

### (b) Transfer

Subject to the Agency Agreement and Conditions 2(e) and 2(f) herein, a Bond may be transferred by delivery of the Certificate issued in respect of that Bond, with the form of transfer on the back of the Certificate duly completed and signed by the holder or his attorney duly authorised in writing, to the specified office of the Registrar or any Transfer Agent. No transfer of title to a Bond will be valid unless and until entered on the Register.

### (c) Delivery of New Certificates

Each new Certificate to be issued pursuant to Condition 2(b) shall be available for delivery within seven business days of receipt of a duly completed form of transfer and surrender of the existing Certificate(s). Delivery of the new Certificate(s) shall be made at the specified office of any Transfer Agent or of the Registrar (as the case may be) to whom delivery or surrender of such form of transfer and Certificate shall have been made or, at the option of the holder making such delivery or surrender as aforesaid and as specified in the relevant form of transfer or otherwise in writing, be mailed by uninsured post at the risk of the holder entitled to the new Certificate to such address as may be so specified, unless such holder requests otherwise and pays in advance to the relevant Transfer Agent or the Registrar (as the case may be) the costs of such other method of delivery and/or such insurance as it may specify. In this Condition 2(c) and in Condition 2(e), “**business day**” means a day, other than a Saturday, Sunday or public holiday, on which banks are open for business in the place of the specified office of the relevant Transfer Agent or the Registrar (as the case may be).

**(d) Formalities Free of Charge**

Certificates, on transfer, shall be issued and registered without charge by or on behalf of the Issuer, the Registrar or any Transfer Agent, but (i) upon payment by the relevant holder of any tax or other governmental charges that may be imposed in relation to it (or the giving of such indemnity and/or security as the Registrar or the relevant Transfer Agent may require); and (ii) subject to Condition 2(f).

**(e) Closed Periods**

No holder may require the transfer of a Bond to be registered (i) during the period of seven business days ending on (but excluding) the due date for any payment of principal (or premium) in respect of that Bond, (ii) during the period of seven business days ending on (and including) any Record Date (as defined in Condition 7(a)), (iii) during the period of 15 days prior to (and including) any date on which Bonds may be called for redemption by the Issuer pursuant to Conditions 6(b) and 6(d) or (iv) after any such Bond has been put for redemption pursuant to Condition 6(c).

**(f) Regulations**

All transfers of Bonds and entries on the register of holders will be made subject to the detailed regulations concerning transfer of Bonds scheduled to the Agency Agreement. The regulations may be changed by the Issuer with the prior written approval of the Registrar and the Trustee or by the Registrar with the prior written approval of the Trustee. A copy of the current regulations will be mailed (free of charge to the holders) by the Registrar to any holder who requests one in writing.

**3 STATUS AND GUARANTEE**

**(a) Status**

The Bonds constitute direct, unsubordinated, unconditional and (subject to Condition 4(a)) unsecured obligations of the Issuer and shall at all times rank *pari passu* and without any preference or priority among themselves. The payment obligations of the Issuer under the Bonds shall, save for such exceptions as may be provided by mandatory provisions of applicable law, at all times rank at least equally with all its other present and future unsecured and unsubordinated obligations.

**(b) Guaranteee**

The Guarantor has unconditionally and irrevocably guaranteed the due payment of all sums expressed to be payable by the Issuer under the Bonds and the Trust Deed. The Guarantor's obligations in respect of the Bonds and the Trust Deed (the "**Guaranteee**") are contained in the Trust Deed (and any supplement thereto). The obligations of the Guarantor under the Guarantee shall, save for such exceptions as may be provided by mandatory provisions of applicable law and subject to Condition 4(a), at all times rank at least equally with all its other present and future unsecured and unsubordinated obligations.

## 4 COVENANTS

### (a) Negative Pledge and Relevant Indebtedness

- (i) So long as any Bond remains outstanding, neither the Issuer nor the Guarantor will, and each of the Issuer and the Guarantor will ensure that none of their respective Principal Subsidiaries (other than the Listed Subsidiaries and the Subsidiaries of a Listed Subsidiary) will, create or permit to subsist any mortgage, charge, lien, pledge or other security interest upon the whole or any part of its present or future undertaking, assets or revenues (including any uncalled capital) to secure any Relevant Indebtedness which is issued outside the PRC, or any guarantee or indemnity in respect of any Relevant Indebtedness which is issued outside the PRC, without at the same time or prior thereto according to the Bonds (A) the same security as is created or subsisting to secure any such Relevant Indebtedness, guarantee or indemnity or (B) such other security as either (1) the Trustee may in its absolute discretion deem not materially less beneficial to the interest of the Bondholders or (2) as shall be approved by an Extraordinary Resolution (as defined in the Trust Deed) of the Bondholders.
- (ii) So long as any Bond remains outstanding, the Company has undertaken in the Keepwell Deed that the Company and its Principal Subsidiaries (other than the Listed Subsidiaries and the Subsidiaries of a Listed Subsidiary) will not create or permit to subsist any mortgage, charge, lien, pledge or other security interest upon the whole or any part of its present or future undertaking, assets or revenues (including any uncalled capital) to secure any Relevant Indebtedness which is issued outside the PRC, or any guarantee or indemnity in respect of any Relevant Indebtedness which is issued outside the PRC, without at the same time or prior thereto according to the Bonds (A) the same security as is created or subsisting to secure any such Relevant Indebtedness, guarantee or indemnity or (B) such other security as either (1) the Trustee may in its absolute discretion deem not materially less beneficial to the interest of the Bondholders or (2) as shall be approved by an Extraordinary Resolution of the Bondholders.

### (b) Undertaking in relation to the NDRC

The Company undertakes to file or cause to be filed the relevant information in connection with the Bonds with the National Development and Reform Commission (the “NDRC”), within the prescribed timeframe after the issue date of the Bonds and in accordance with the Notice on Promoting the Reform of the Filing and Registration System for Issuance of Foreign Debt by Enterprises (國家發展改革委關於推進企業發行外債備案登記制管理改革的通知) promulgated by the NDRC on 14 September 2015 which came into effect immediately and any implementation rules, regulations, certificates, circulars or notices in connection therewith issued by the NDRC from time to time (the “**Post-Issuance Filing**”). The Company shall submit the Post-Issuance Filing and comply with all applicable PRC laws and regulations in relation to the Post-Issuance Filing.

**(c) Issuer Activities**

For so long as any Bond remains outstanding, save with the approval of an Extraordinary Resolution of the Bondholders, the Issuer will not conduct any business or any activities other than (i) the issue of the Bonds and the lending of the proceeds thereof to any of the Company's Subsidiaries and affiliates and any other activities reasonably incidental thereto and (ii) the incurrence of other Relevant Indebtedness, the lending of the proceeds thereof to any of the Company's Subsidiaries and affiliates and any other activities reasonably incidental thereto.

**(d) Financial Information**

The Issuer and the Company will furnish the Trustee (A) within 120 days of the end of each Relevant Period, with a Compliance Certificate of each of the Issuer and the Company (on which the Trustee may rely as to such compliance) and a copy of the relevant Company Audited Financial Reports in the Chinese language prepared in accordance with the Accounting Standards for Business Enterprises in China ("PRC GAAP") (audited by a nationally recognised firm of independent accountants) of the Company and its subsidiaries, together with the Translated Company Audited Financial Reports translated by (aa) a nationally recognised firm of independent accountants or (bb) a professional translation service provider and checked by a nationally recognised firm of independent accountants, together in either case with a certificate signed by any one Director who is an Authorised Signatory or by any other Authorised Signatory of the Company certifying that such translation is complete and accurate; and (B) within 90 days of the end of each Relevant Period, with a copy of the Company Management Accounts in the Chinese language prepared on a basis consistent with the audited consolidated financial statements of the Company and its subsidiaries, together with an English translation of the same translated by (aa) a nationally recognised firm of independent accountants or (bb) a professional translation service provider and checked by a nationally recognised firm of independent accountants, together in either case with a certificate signed by any one Director who is an Authorised Signatory or any other Authorised Signatory of the Company certifying that such translation is complete and accurate; provided that, if at any time the capital stock of the Company is listed for trading on a recognised stock exchange, the Company may furnish to the Trustee, as soon as they are available but in any event not more than 14 calendar days after any financial or other reports of the Company are filed with the exchange on which the Company's capital stock is at such time listed for trading, copies of any financial or other report filed with such exchange (and if the same are not in the English language, no translation to English shall be provided by the Company) in lieu of the reports identified in Conditions 4(d)(A) and 4(d)(B) above.

The Guarantor will furnish the Trustee within 120 days of end of each Relevant Period with a Compliance Certificate of the Guarantor (on which the Trustee may rely as to such compliance) and a copy of the relevant Guarantor Audited Financial Reports in the Chinese language prepared in accordance with PRC GAAP (audited by a nationally recognised firm of independent accountants) of the Guarantor and its subsidiaries, together with the Translated Guarantor Audited Financial Reports translated by (aa) a nationally recognised firm of independent accountants or (bb) a professional translation service provider and checked by a nationally recognised firm of independent accountants, together in either case with a certificate signed by any one Director of the Guarantor who is an Authorised Signatory or by any other Authorised Signatory of the Guarantor certifying that such translation is complete and accurate.

**(e) Deed of Equity Interest Purchase Undertaking**

Promptly following receipt of written notice of the occurrence of an Event of Default (as defined under Condition 9), the Trustee shall give to the Company a notice in writing in accordance with the Trust Deed notifying the Company of its obligations to purchase under the Deed of Equity Interest Purchase Undertaking. Upon the completion of any equity purchase made in accordance with the Deed of Equity Interest Purchase Undertaking, the Company undertakes that (x) in the event that a Relevant Transferor (as defined in the Deed of Equity Interest Purchase Undertaking) is neither the Issuer nor the Guarantor, the Company shall procure such Relevant Transferor to promptly on-lend or distribute in full the relevant portion of the purchase price (being an amount no less than the amount sufficient to enable the Issuer and the Guarantor to discharge in full their respective obligations under the Bonds and the Trust Deed and those other payment obligations described under the Deed of Equity Interest Purchase Undertaking) received by such Relevant Transferor to the Issuer or the Guarantor prior to any other use, disposal or transfer of the proceeds received and (y) promptly do all such things (including entering into and executing any agreements or arrangements required) and take all actions necessary for the purchase price received by the Issuer or the Guarantor from the Company or pursuant to any on-loan or distribution to be applied solely towards the payment in accordance with the Trust Deed of any outstanding amounts under the Trust Deed and the Bonds (including any interest accrued but unpaid on the Bonds) prior to any other use, disposal or transfer of the proceeds received.

**(f) Certain Definitions**

In these Conditions:

**“Company Audited Financial Reports”** means annual audited consolidated balance sheet, income statement, statement of cash flows and statements of changes in owners’ equity of the Company together with (if applicable) any statements, reports (including any auditors’ reports) and notes attached to or intended to be read with any of them;

**“Company Management Accounts”** means quarterly (or any other interim reporting period required by applicable law or regulations) unaudited and unreviewed consolidated balance sheet, income statement and statement of cash flows of the Company;

**“Compliance Certificate”** means a certificate of the Issuer, the Guarantor or the Company (as the case may be) signed by any of their respective Directors who is also an Authorised Signatory or by any other Authorised Signatory that, having made all reasonable enquiries, to the best of the knowledge, information and belief of the Issuer, the Guarantor or the Company (as the case may be) as at a date (the **“Certification Date”**) not more than five days before the date of the certificate that no Event of Default or Potential Event of Default or other breach of the Trust Deed, the Keepwell Deed, the Deed of Equity Interest Purchase Undertaking or the Bonds had occurred since the Certification Date of the last such certificate or (if none) the date of the Trust Deed or, if such an event had occurred, giving details of it;

**“Guarantor Audited Financial Reports”** means annual audited consolidated balance sheet, income statement, statement of cash flows and statements of changes in owners’ equity of the Guarantor together with (if applicable) any statements, reports (including any auditors’ reports) and notes attached to or intended to be read with any of them;

“**Listed Subsidiary**” means, at any time, any Subsidiary of the Issuer, the Guarantor, or, as the case may be, the Company, the ordinary voting shares of which are at such time listed on a recognised stock exchange, and “**Listed Subsidiaries**” shall be construed accordingly;

“**PRC**” means the People’s Republic of China, which shall for the purposes of these Conditions, exclude Hong Kong, Macau and Taiwan;

“**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, or are intended to be or capable of being, quoted, listed or dealt in or traded on any stock exchange or over-the-counter or other securities market;

“**Relevant Period**” means (i) in relation to each of the Company Audited Financial Reports and the Guarantor Audited Financial Reports, each period of twelve months ending on the last day of their respective financial year (being 31 December of that financial year); and (ii) in relation to the Company Management Accounts, each period of three months ending on the last day of the first quarter in its financial year (being 31 March of that financial year), each period of six months ending on the last day of its first half financial year (being 30 June of that financial year) and each period of nine months ending on the last day of the third quarter of the financial year (being 30 September of that financial year);

a “**Subsidiary**” of any person means (a) any company or other business entity of which that person owns or controls (either directly or through one or more other Subsidiaries) more than 50 per cent. of the issued share capital or other ownership interest having ordinary voting power to elect directors, managers or trustees of such company or other business entity, or (b) any company or other business entity which at any time has its accounts consolidated with those of that person or which, under the law, regulations or generally accepted accounting principles of the jurisdiction of incorporation of such person from time to time, should have its accounts consolidated with those of that person;

“**Translated Company Audited Financial Reports**” means the English translation of the annual audited consolidated balance sheet, income statement, statement of cash flows and statements of changes in owners’ equity of the Company together with selected key notes attached to or intended to be read with any of them; and

“**Translated Guarantor Audited Financial Reports**” means the English translation of the annual audited consolidated balance sheet, income statement, statement of cash flows and statements of changes in owners’ equity of the Guarantor together with selected key notes attached to or intended to be read with any of them.

## 5 INTEREST

The Bonds bear interest on their outstanding principal amount from and including [●] at the rate of [●] per cent. per annum, payable semi-annually in arrear in equal instalments of US\$[●] per Calculation Amount (as defined below) on [●] and [●] in each year (each, an “**Interest Payment Date**”) commencing on [●]. Each Bond will cease to bear interest from the due date for redemption unless, upon surrender of the Certificate representing such Bond, payment of principal is improperly withheld or refused. In such event it shall continue to bear interest at such rate (both before and after judgment) until whichever is the earlier of (a) the day on which all sums due in respect of such Bond up to that day are received by or on behalf of the relevant holder, and (b) the day falling seven days after the

Trustee or the Principal Paying Agent has notified Bondholders of receipt of all sums due in respect of all the Bonds up to that seventh day (except to the extent that there is failure in the subsequent payment to the relevant holders under these Conditions).

In these Conditions, the period beginning on and including [●] and ending on but excluding the first Interest Payment Date and each successive period beginning on and including an Interest Payment Date and ending on but excluding the next succeeding Interest Payment Date is called an “**Interest Period**”.

Interest in respect of any Bond shall be calculated per US\$1,000 in principal amount of the Bonds (the “**Calculation Amount**”). The amount of interest payable per Calculation Amount for any period shall be calculated by applying the rate of interest specified above to the Calculation Amount and multiplying by half and rounding the resulting figure to the nearest cent (half a cent being rounded upwards). If interest is required to be calculated for a period of less than a complete interest period, the relevant day-count fraction will be determined on the basis of a 360-day year consisting of 12 months of 30 days each and in the case of an incomplete month, the number of days elapsed.

## **6 REDEMPTION AND PURCHASE**

### **(a) Final Redemption**

Unless previously redeemed, or purchased and cancelled, the Bonds will be redeemed at their principal amount on [●] (the “**Maturity Date**”). The Bonds may not be redeemed at the option of the Issuer other than in accordance with this Condition 6.

### **(b) Redemption for Taxation Reasons**

The Bonds may be redeemed at the option of the Issuer in whole, but not in part, at any time, on giving not less than 30 nor more than 60 days’ notice (a “**Tax Redemption Notice**”) to the Bondholders in accordance with Condition 16 (which such notice shall be irrevocable) and in writing to the Trustee and the Principal Paying Agent, at their principal amount together with interest accrued up to but excluding the date fixed for redemption, if the Issuer (or, if the Guarantee was called, the Guarantor) satisfies the Trustee immediately prior to the giving of such notice (i) that it (or, if the Guarantee was called, the Guarantor) has or will become obliged to pay Additional Tax Amounts as provided or referred to in Condition 8 as a result of any change in, or amendment to, the laws or regulations of the British Virgin Islands, Hong Kong or the PRC or any political subdivision or any authority thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations (including but not limited to any decision by a court of competent jurisdiction), which change or amendment becomes effective on or after [●], and (ii) such obligation cannot be avoided by the Issuer (or, the Guarantor, as the case may be) taking reasonable measures available to it, provided that no Tax Redemption Notice shall be given earlier than 90 days prior to the earliest date on which the Issuer (or, the Guarantor, as the case may be) would be obliged to pay such Additional Tax Amounts were a payment in respect of the Bonds (or, the Guarantee, as the case may be) then due. Prior to the giving of any Tax Redemption Notice pursuant to this Condition 6(b), the Issuer (or, the Guarantor, as the case may be) shall deliver to the Trustee a certificate signed by any one Director who is an Authorised Signatory or any other Authorised Signatory of the Issuer (or, the Guarantor, as the case may be) stating that the obligation referred to in (i) of this Condition 6(b) cannot be avoided by the Issuer (or, the Guarantor, as the case may be) taking reasonable measures available to it. The Trustee

shall be entitled (but shall not be obliged) to accept and rely upon such certificate as sufficient evidence of the satisfaction of the conditions precedent set out in (i) and (ii) of this Condition 6(b), in which event it shall be conclusive and binding on the Bondholders.

**(c) Redemption for Change of Control**

At any time following the occurrence of a Change of Control, the holder of any Bond will have the right, at such holder's option, to require the Issuer to redeem all, but not some only, of that holder's Bonds on the Change of Control Put Date at a redemption price equal to 101 per cent. of their principal amount, together with accrued interest to but excluding the Change of Control Put Date. To exercise such right, the holder of the relevant Bond must deposit at the specified office of any Paying Agent a duly completed and signed notice of redemption, in the form for the time being current, obtainable from the specified office of any Paying Agent (a "**Change of Control Put Exercise Notice**"), together with the Certificate evidencing the Bonds to be redeemed, by not later than 30 days following a Change of Control, or, if later, 30 days following the date upon which notice thereof is given to Bondholders by the Issuer in accordance with Condition 16. The "**Change of Control Put Date**" shall be the fourteenth day after the expiry of such period of 30 days as referred to above in this Condition 6(c).

A Change of Control Put Exercise Notice, once delivered, shall be irrevocable and the Issuer shall redeem the Bonds the subject of Change of Control Put Exercise Notices delivered as aforesaid on the Change of Control Put Date.

The Issuer shall give notice to Bondholders (in accordance with Condition 16) and to the Trustee and the Principal Paying Agent in writing by not later than 14 days following the first day on which it becomes aware of the occurrence of a Change of Control, which notice shall specify the procedure for exercise by holders of their rights to require redemption of the Bonds pursuant to this Condition 6(c).

Neither the Trustee nor the Agents shall be required to monitor whether a Change of Control or any event which could lead to the occurrence of a Change of Control has occurred and shall not be liable to any person for not doing so.

For the purposes of these Conditions:

a "**Change of Control**" occurs when:

- (i) the Company ceases to directly or indirectly own and control 100 per cent. of the issued share capital of the Issuer; or
- (ii) the Company ceases to directly or indirectly own and control 100 per cent. of the issued share capital of the Guarantor; or
- (iii) SASAC, directly or indirectly, ceases to own and control at least 75 per cent. of the Company's issued and outstanding share capital; and

"**SASAC**" means the State-owned Assets Supervision and Administration Commission of the PRC or its successor.

**(d) Redemption at the Option of the Issuer**

On giving not less than 30 nor more than 60 days' notice (an "**Option Redemption Notice**") to the Trustee in writing and to the Bondholders in accordance with Condition 16, the Issuer may at any time and from time to time redeem the Bonds, in whole but not in part, at a Make Whole Price as of, and accrued and unpaid interest, if any, to (but excluding), the redemption date (the "**Option Redemption Date**") specified in the Option Redemption Notice.

Neither the Trustee nor the Agents shall be responsible for calculating or verifying any calculations of any amounts payable under these Conditions.

In this Condition 6(d):

**"Adjusted Treasury Rate"** means, with respect to any Option Redemption Date, the rate per annum equal to the semi-annual equivalent yield in maturity of the Comparable Treasury Issue, assuming a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for such redemption date;

**"Comparable Treasury Issue"** means the U.S. Treasury security having a maturity comparable to the then remaining term of the Bonds that would be utilised, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to most nearly equal to the Maturity Date;

**"Comparable Treasury Price"** means, with respect to any Option Redemption Date:

- (i) the average of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) on the third business day preceding such Option Redemption Date, as set forth in the daily statistical release (of any successor release) published by the Federal Reserve Bank of New York and designated "**Composite 3:30 p.m. Quotations for U.S. Government Securities**"; or
- (ii) if such release (or any successor release) is not published or does not contain such prices on such business day, (i) the average of the Reference Treasury Dealer Quotations for such Option Redemption Date, after excluding the highest and lowest of such Reference Treasury Dealer Quotations, or (ii) if fewer than three such Reference Treasury Dealer Quotations are available, the average of all such quotations;

**"Make Whole Price"** means, with respect to a Bond at any Option Redemption Date, the amount calculated by the Quotation Agent that is the greater of (i) the present value of the principal amount of the Bonds, assuming a scheduled repayment thereof on the Maturity Date plus all required remaining scheduled interest payments due on such Bond through the Maturity Date (but excluding accrued and unpaid interest to the Option Redemption Date), computed using a discount rate equal to the Adjusted Treasury Rate plus 50 basis points, and (ii) the principal amount of such Bonds;

**"Quotation Agent"** means the Reference Treasury Dealer selected by the Issuer (at the expense of the Issuer) and notified in writing to the Trustee;

**“Reference Treasury Dealer”** means each of any three investment banks of recognised standing that is a primary U.S. Government securities dealer in New York City, selected by the Issuer in good faith; and

**“Reference Treasury Dealer Quotations”** means, with respect to each Reference Treasury Dealer and any Option Redemption Date, the average as determined by the Quotation Agent, of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) quoted in writing to such Quotation Agent by such Reference Treasury Dealer at 5:00 p.m. (New York time) on the third business day preceding such Option Redemption Date.

**(e) Notice of Redemption**

All Bonds in respect of which any notice of redemption is given under this Condition 6 shall be redeemed on the date specified in such notice in accordance with this Condition 6. If there is more than one notice of redemption given in respect of any Bond (which shall include any notice given by the Issuer pursuant to Condition 6(b) and Condition 6(d) and any Change of Control Put Exercise Notice given by a Bondholder pursuant to Condition 6(c)), the notice given first in time shall prevail and in the event of two notices being given on the same date, the first to be given shall prevail.

**(f) Purchase**

The Company, the Issuer, the Guarantor and their respective Subsidiaries may at any time purchase Bonds in the open market or otherwise at any price. The Bonds so purchased, while held by or on behalf of the Company, the Issuer, the Guarantor or any such Subsidiary, shall not entitle the holder to vote at any meetings of the Bondholders and shall not be deemed to be outstanding for the purposes of, among other things, calculating quorums at meetings of the Bondholders or for the purposes of Conditions 9, 12(a) and 14.

**(g) Cancellation**

All Certificates representing Bonds purchased by or on behalf of the Issuer, the Guarantor, the Company and their respective Subsidiaries shall be surrendered for cancellation to the Registrar and, upon surrender thereof, all such Bonds shall be cancelled forthwith. Any Certificates so surrendered for cancellation may not be reissued or resold and the obligations of the Issuer and the Guarantor in respect of any such Bonds shall be discharged.

**7 PAYMENTS**

**(a) Method of Payment**

- (i) Payments of principal and premium (if any) shall be made (subject to surrender of the relevant Certificates at the specified office of any Paying Agent or of the Registrar if no further payment falls to be made in respect of the Bonds represented by such Certificates) in the manner provided in Condition 7(a)(ii).
- (ii) Interest on each Bond shall be paid to the person shown on the Register at the close of business on the fifth Payment Business Day before the due date for payment thereof (the “**Record Date**”). Payments of interest on each Bond shall be made in US dollars

by cheque drawn on a bank and mailed (at the expense of the Issuer) to the holder (or to the first named of joint holders) of such Bond at its address appearing in the Register. Upon application by the holder to the specified office of the Registrar or any Transfer Agent before the Record Date, such payment of interest may be made by transfer to an account in US dollars maintained by the payee with a bank.

- (iii) If the amount of principal being paid upon surrender of the relevant Certificate is less than the outstanding principal amount of such Certificate, the Registrar will annotate the Register with the amount of principal so paid and will (if so requested in writing by the Issuer or a Bondholder) issue a new Certificate with a principal amount equal to the remaining unpaid outstanding principal amount. If the amount of interest being paid is less than the amount then due, the Registrar will annotate the Register with the amount of interest so paid.

**(b) Payments subject to Fiscal Laws**

All payments are subject in all cases to (i) any applicable fiscal or other laws, regulations and directives in the place of payment, but without prejudice to the provisions of Condition 8; and (ii) if applicable, any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the U.S. Internal Revenue Code of 1986 (the “**Code**”) or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, any official interpretations thereof, or (without prejudice to the provisions of Condition 8) any law implementing an intergovernmental approach thereto. No commission or expenses shall be charged to the Bondholders in respect of such payments.

**(c) Payment Initiation**

Where payment is to be made by transfer to an account in US dollars, payment instructions (for value the due date or, if that is not a Payment Business Day, for value the first following day which is a Payment Business Day) will be initiated, and, where payment is to be made by cheque, the cheque will be mailed (at the expense of the Issuer), on the due date or, if that is not a Payment Business Day, on the first following day which is a Payment Business Day or, in the case of payments of principal where the relevant Certificate has not been surrendered at the specified office of any Paying Agent or of the Registrar, on a day on which the Principal Paying Agent is open for business and on which the relevant Certificate is surrendered.

**(d) Agents**

The Principal Paying Agent, the Registrar and the Transfer Agent initially appointed by the Issuer and the Guarantor and their respective specified offices are listed below. The Principal Paying Agent, the Registrar and the Transfer Agent act solely as agents of the Issuer and the Guarantor and do not assume any obligation or relationship of agency or trust for or with any Bondholder. The Issuer and the Guarantor reserve the right at any time with the prior written approval of the Trustee to vary or terminate the appointment of the Principal Paying Agent, the Registrar, any Transfer Agent or any of the other Agents and to appoint additional or other Agents, provided that the Issuer and the Guarantor shall at all times maintain (i) a Principal Paying Agent, (ii) a Registrar which will maintain a Register outside the United Kingdom and (iii) a Transfer

Agent, in each case as approved in writing by the Trustee. Notice of any such termination or appointment or any change of any Agent's specified office shall promptly be given by the Issuer to the Bondholders.

**(e) Delay in Payment**

Bondholders will not be entitled to any interest or other payment for any delay after the due date in receiving the amount due on a Bond if the due date is not a Payment Business Day, if the Bondholder is late in surrendering or cannot surrender its Certificate (if required to do so) or if a cheque mailed in accordance with Condition 7(a)(ii) arrives after the due date for payment.

**(f) Non-Payment Business Days**

If any date for payment in respect of any Bond is not a Payment Business Day, the holder shall not be entitled to payment until the next following Payment Business Day nor to any interest or other sum in respect of such postponed payment.

In this Condition 7, "**Payment Business Day**" means a day (other than a Saturday, a Sunday or a public holiday) on which banks and foreign exchange markets are open for business in New York, Hong Kong and the place in which the specified office of the Principal Paying Agent is located.

**8 TAXATION**

All payments of principal, premium and interest by or on behalf of the Issuer or the Guarantor in respect of the Bonds or under the Guarantee shall be made free and clear of, and without withholding or deduction for, any taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or within the British Virgin Islands, Hong Kong or the PRC or any political subdivision or authority therein or thereof having power to tax, unless such withholding or deduction is required by law.

Where such withholding or deduction is made by the Issuer or, as the case may be, the Guarantor by or within the PRC at the rate applicable on [●] (the "**Applicable Rate**"), the Issuer or, as the case may be, the Guarantor will increase the amounts paid by it to the extent required, so that the net amount received by Bondholders equals the amounts which would otherwise have been receivable by them had no such withholding or deduction been required.

In the event that any such PRC deduction or withholding in excess of the Applicable Rate or any British Virgin Islands or Hong Kong deduction or withholding is required, the Issuer or, as the case may be, the Guarantor shall pay such additional amounts ("**Additional Tax Amounts**") as will result in receipt by the Bondholders of such amounts as would have been received by them had no such withholding or deduction been required, except that no Additional Tax Amounts shall be payable in respect of any Bond:

- (a) *Other Connection:* held by or on behalf of a holder who is liable to such taxes, duties, assessments or governmental charges in respect of such Bond by reason of his having some connection with the British Virgin Islands, Hong Kong or the PRC other than the mere holding of the Bond; or

- (b) *Surrender More Than 30 Days after the Relevant Date*: in respect of which the Certificate representing it is presented (where presentation is required) for payment more than 30 days after the Relevant Date except to the extent that the holder of it would have been entitled to such Additional Tax Amounts on surrendering the Certificate representing such Bond for payment on the last day of such period of 30 days.

References in these Conditions to principal, premium and interest shall be deemed also to refer to any Additional Tax Amounts which may be payable under this Condition 8 or any undertaking or covenant given in addition thereto or in substitution therefor pursuant to the Trust Deed.

**“Relevant Date”** in respect of any Bond means the date on which payment in respect of it first becomes due or (if any amount of the money payable is improperly withheld or refused) the date on which payment in full of the amount outstanding is made or (if earlier) the date seven days after that on which notice is duly given to the Bondholders that, upon further surrender of the Certificate representing such Bond being made in accordance with the Conditions, such payment will be made, provided that payment is in fact made upon such surrender.

## 9 EVENTS OF DEFAULT

If an Event of Default (as defined below) occurs, the Trustee at its discretion may, and if so requested in writing by holders of at least 25 per cent. of the aggregate principal amount of the Bonds then outstanding or if so directed by an Extraordinary Resolution, shall (provided in any such case that the Trustee shall have been indemnified and/or secured and/or pre-funded to its satisfaction), give notice to the Issuer and the Guarantor that the Bonds are, and they shall immediately become, due and payable at their principal amount together (if applicable) with accrued interest.

An “Event of Default” occurs if:

- (a) *Non-Payment*: there has been a failure to pay (i) the principal of or any premium on any of the Bonds when due; or (ii) any interest on any of the Bonds within 10 days after the due date for such payment; or
- (b) *Breach of Other Obligations*: the Issuer, the Guarantor or the Company does not perform or comply with any one or more of its other obligations under the Bonds or the Trust Deed or the Keepwell Deed (other than where it gives rise to a redemption pursuant to Condition 6(c)) and such default (i) is, in the opinion of the Trustee, incapable of remedy or, (ii) being a default which is, in the opinion of the Trustee, capable of remedy, remains unremedied for 30 days after the Trustee has given written notice thereof to the Issuer, the Guarantor or the Company, as the case may be; or
- (c) *Cross-Acceleration*: (i) any other present or future indebtedness of the Issuer, the Guarantor, the Company or any of their respective Subsidiaries for or in respect of moneys borrowed or raised becomes due and payable prior to its stated maturity by reason of any actual default, event of default or the like (howsoever described), or (ii) the Issuer, the Guarantor, the Company or any of their respective Subsidiaries fails to pay when due any amount payable by it under any present or future guarantee for, or indemnity in respect of, any moneys borrowed or raised provided that the aggregate amount of the relevant indebtedness, guarantees and indemnities in respect of which one or more of the events mentioned above in this Condition 9(c) have occurred equals or exceeds US\$100 million (or its equivalent in any currency or currencies); or

- (d) *Enforcement Proceedings*: a distress, attachment, execution or other legal process is levied, enforced or sued out on or against the whole or any material part of the property, assets or revenues of the Issuer, the Guarantor, the Company or any of their respective Principal Subsidiaries and is not discharged or stayed within 45 days; or
- (e) *Security Enforced*: any mortgage, charge, pledge, lien or other encumbrance, present or future, created or assumed by the Issuer, the Guarantor, the Company or any of their respective Principal Subsidiaries in respect of all or a material part of its assets becomes enforceable and any step is taken to enforce it (including the taking of possession or the appointment of a receiver, manager or other similar person) and is not discharged within 45 days; or
- (f) *Insolvency*: the Issuer, the Guarantor or the Company or any of their respective Principal Subsidiaries is (or is, or could be, deemed by law or a court to be) insolvent or bankrupt or unable to pay its debts as and when such debts fall due, stops, suspends or threatens to stop or suspend payment of all or a substantial part of its debts, proposes or makes a general assignment or an arrangement or composition with or for the benefit of the relevant creditors in respect of any of such debts or a moratorium is agreed or declared in respect of or affecting all or any substantial part of the debts of the Issuer, the Guarantor or the Company or any of the Company's Principal Subsidiaries; or
- (g) *Winding-up*: an order of any court of competent jurisdiction is made or an effective resolution passed for the winding-up or dissolution of the Issuer, the Guarantor or the Company or any of their respective Principal Subsidiaries, or the Issuer, the Guarantor or the Company or any of the Company's Principal Subsidiaries ceases or threatens to cease to carry on all or substantially all of its business or operations, except for (i) the purpose of and followed by a reconstruction, amalgamation, reorganisation, merger or consolidation on terms approved by an Extraordinary Resolution of the Bondholders, (ii) in the case of a Principal Subsidiary of the Issuer, the Guarantor or the Company, whereby the undertaking and assets of such Principal Subsidiary are transferred to or otherwise vested in the Issuer, the Guarantor, the Company (as the case may be) and/or any of their respective Subsidiaries, (iii) a solvent winding-up of any Principal Subsidiary of the Company (other than the Issuer and the Guarantor) or (iv) a disposal on an arm's length basis where the assets resulting from such disposal are vested in the Company and/or any of its Subsidiaries; or
- (h) *Nationalisation*: any step is taken by any person with a view to the seizure, compulsory acquisition or expropriation of all or a substantial part of the assets of the Issuer, the Guarantor, the Company or any of their respective Principal Subsidiaries; or
- (i) *Authorisation and Consents*: any action, condition or thing (including the obtaining or effecting of any necessary consent, approval, authorisation, exemption, filing, licence, order, recording or registration) at any time required to be taken, fulfilled or done in order (i) to enable each of the Issuer, the Guarantor and the Company lawfully to enter into, exercise their respective rights and perform and comply with their respective obligations under the Bonds, the Trust Deed, the Keepwell Deed (other than with regard to the performance of and compliance with the obligations thereunder) and the Deed of Equity Interest Purchase Undertaking (other than with regard to the performance of and compliance with the obligations thereunder), (ii) to ensure that those obligations are legally binding and

enforceable and (iii) to make the Bonds, the Trust Deed, the Keepwell Deed and the Deed of Equity Interest Purchase Undertaking admissible in evidence in the courts of Hong Kong is not taken, fulfilled or done; or

- (j) *Illegality*: it is or will become unlawful for the Issuer, the Guarantor or the Company to perform or comply with any one or more of their respective obligations under any of the Bonds or the Trust Deed, the Keepwell Deed or the Deed of Equity Interest Purchase Undertaking; or
- (k) *Unenforceability of Guarantee*: except as permitted under the Trust Deed, any part of the Guarantee is unenforceable or invalid or shall for any reason cease to be in full force and effect or is claimed to be unenforceable, invalid or not in full force and effect by the Issuer or the Guarantor; or
- (l) *Keepwell Deed and the Deed of Equity Interest Purchase Undertaking*: the Keepwell Deed or the Deed of Equity Interest Purchase Undertaking is unenforceable or invalid or shall for any reason cease to be in full force and effect or is claimed to be unenforceable, invalid or not in full force and effect by the Company, or the Keepwell Deed or the Deed of Equity Interest Purchase Undertaking is modified, amended or terminated other than strictly in accordance with its terms or these Conditions; or
- (m) *Analogous Events*: any event occurs which under the laws of any relevant jurisdiction has an analogous effect to any of the events referred to in Conditions 9(d) to 9(g) (both inclusive).

**“Principal Subsidiary”** means any Subsidiary of the Issuer, the Guarantor or the Company:

- (a) whose revenue or (in the case of a Subsidiary which itself has Subsidiaries) consolidated revenue, as shown by its latest audited income statement are at least 5 per cent. of the consolidated revenue as shown by the latest audited consolidated income statement of the Company and its Subsidiaries; or
- (b) whose gross assets or (in the case of a Subsidiary which itself has Subsidiaries) consolidated gross assets, as shown by its latest audited balance sheet are at least 5 per cent. of the amount which equals the amount included in the consolidated gross assets of the Company and its Subsidiaries as shown by the latest audited consolidated balance sheet of the Company and its Subsidiaries including, for the avoidance of doubt, the investment of the Company in each Subsidiary whose accounts are not consolidated with the consolidated audited accounts of the Company and after adjustment for minority interests; or
- (c) to which is transferred the whole or substantially the whole of the assets of a Subsidiary which immediately prior to such transfer was a Principal Subsidiary, provided that the Principal Subsidiary which so transfers its assets shall forthwith upon such transfer cease to be a Principal Subsidiary and the Subsidiary to which the assets are so transferred shall cease to be a Principal Subsidiary at the date on which the first audited accounts (consolidated, if appropriate) of the Company prepared as of a date later than such transfer are issued unless such Subsidiary would continue to be a Principal Subsidiary on the basis of such accounts by virtue of the provisions of paragraphs (a) or (b) above of this definition;

provided that, in relation to paragraphs (a) and (b) above of this definition:

- (i) in the case of a corporation or other business entity becoming a Subsidiary after the end of the financial period to which the latest consolidated audited accounts of the Company relate, the reference to the then latest consolidated audited accounts of the Company for the purposes of the calculation above shall, until consolidated audited accounts of the Company for the financial period in which the relevant corporation or other business entity becomes a Subsidiary are published be deemed to be a reference to the then latest consolidated audited accounts of the Company adjusted to consolidate the latest audited accounts (consolidated in the case of a Subsidiary which itself has Subsidiaries) of such Subsidiary in such accounts;
- (ii) if at any relevant time in relation to the Company or any Subsidiary which itself has Subsidiaries no consolidated accounts are prepared and audited, revenue or gross assets of the Company and/or any such Subsidiary shall be determined on the basis of pro forma consolidated accounts prepared for this purpose by the Company;
- (iii) if at any relevant time in relation to any Subsidiary, no accounts are audited, its revenue or gross assets (consolidated, if appropriate) shall be determined on the basis of pro forma accounts (consolidated, if appropriate) of the relevant Subsidiary prepared for this purpose by the Company; and
- (iv) if the accounts of any subsidiary (not being a Subsidiary referred to in proviso (i) above) are not consolidated with those of the Company, then the determination of whether or not such subsidiary is a Principal Subsidiary shall be based on a pro forma consolidation of its accounts (consolidated, if appropriate) with the consolidated accounts (determined on the basis of the foregoing) of the Company.

A certificate signed by any one Director who is an Authorised Signatory or by any other Authorised Signatory of the Company stating that, in his/her opinion, a Subsidiary is or is not, or was or was not, a Principal Subsidiary shall, in the absence of manifest error, be conclusive and binding on all parties;

## **10 PRESCRIPTION**

Claims against the Issuer and the Guarantor for payment in respect of the Bonds shall be prescribed and become void unless made within 10 years (in the case of principal or premium) or five years (in the case of interest) from the appropriate Relevant Date in respect of them.

## **11 REPLACEMENT OF CERTIFICATES**

If any Certificate is lost, stolen, mutilated, defaced or destroyed, it may be replaced, subject to applicable laws, regulations or other relevant regulatory authority regulations, at the specified office of the Registrar or any Transfer Agent, in each case on payment by the claimant of the fees and costs incurred in connection therewith and on such terms as to evidence, security, indemnity and otherwise as the Issuer, the Registrar or the relevant Transfer Agent may require. Mutilated or defaced Certificates must be surrendered before replacements will be issued.

## **12 MEETINGS OF BONDHOLDERS, MODIFICATION AND WAIVER**

### **(a) Meetings of Bondholders**

The Trust Deed contains provisions for convening meetings of Bondholders to consider matters affecting their interests, including the sanctioning by Extraordinary Resolution of a modification of any of these Conditions or any provisions of the Trust Deed, the Agency Agreement, the Keepwell Deed or the Deed of Equity Interest Purchase Undertaking. Such a meeting may be convened by the Issuer, the Guarantor, the Company or the Trustee, and shall be convened by the Trustee if requested in writing by Bondholders holding not less than 10 per cent. in aggregate principal amount of the Bonds for the time being outstanding and subject to it being indemnified and/or secured and/or pre-funded to its satisfaction against all costs and expenses. The quorum for any meeting convened to consider an Extraordinary Resolution will be two or more persons holding or representing more than 50 per cent. in aggregate principal amount of the Bonds for the time being outstanding, or at any adjourned meeting two or more persons being or representing Bondholders whatever the principal amount of the Bonds held or represented, unless the business of such meeting includes consideration of proposals, *inter alia*, (i) to modify the maturity of the Bonds or the dates on which interest is payable in respect of the Bonds, (ii) to reduce or cancel the principal amount of, or interest on, the Bonds, (iii) to change the currency of payment of the Bonds, (iv) to modify the provisions concerning the quorum required at any meeting of Bondholders or the majority required to pass an Extraordinary Resolution, or (v) to modify or terminate the Keepwell Deed, the Deed of Equity Interest Purchase Undertaking or the Guarantee other than in accordance with Condition 12(b), in which case the necessary quorum will be two or more persons holding or representing not less than 75 per cent., or at any adjourned meeting not less than 25 per cent., in aggregate principal amount of the Bonds for the time being outstanding. Any Extraordinary Resolution duly passed shall be binding on Bondholders (whether or not they were present at the meeting at which such resolution was passed).

The Trust Deed provides that a resolution in writing signed by the holders of not less than 90 per cent. in aggregate principal amount of the Bonds for the time being outstanding shall for all purposes be as valid and effective as an Extraordinary Resolution passed at a meeting of Bondholders duly convened and held. Such a resolution in writing may be contained in one document or several documents in the same form, each signed by one or more Bondholders.

### **(b) Modification of the Conditions, Trust Deed, Agency Agreement, Keepwell Deed and the Deed of Equity Interest Purchase Undertaking**

The Trustee may (but shall not be obliged to) agree, without the consent of the Bondholders, to (i) any modification of any of these Conditions or any of the provisions of the Trust Deed, the Agency Agreement, the Keepwell Deed or the Deed of Equity Interest Purchase Undertaking that is, in its opinion, of a formal, minor or technical nature or to correct a manifest error or to comply with any mandatory provision of law, and (ii) any other modification (except as mentioned in the Trust Deed), and any waiver or authorisation of any breach or proposed breach of any of these Conditions or any of the provisions of the Trust Deed, the Agency Agreement, the Keepwell Deed or the Deed of Equity Interest Purchase Undertaking that is in the opinion of the Trustee not materially prejudicial to the interests of the Bondholders. Any such modification, authorisation or waiver shall be binding on the Bondholders and, unless the Trustee otherwise agrees, such modification, authorisation or waiver shall be notified by the Issuer, failing whom, the Guarantor, failing whom, the Company, to the Bondholders as soon as practicable.

**(c) Entitlement of the Trustee**

In connection with the exercise of its functions, rights, powers and/or discretions (including but not limited to those referred to in this Condition 12) the Trustee shall have regard to the interests of the Bondholders as a class and shall not have regard to the consequences of such exercise for individual Bondholders, and the Trustee shall not be entitled to require on behalf of any Bondholder, nor shall any Bondholder be entitled to claim, from the Issuer or the Trustee, any indemnification or payment in respect of any tax consequence of any such exercise upon individual Bondholders.

**(d) Certificates and Reports**

The Trustee may rely without liability to Bondholders on any report, confirmation, certificate or information from or any advice or opinion of any lawyers, accountants, financial advisers, financial institution or any other expert, whether or not addressed to it and whether their liability in relation thereto is limited (by its terms or by any engagement letter relating thereto or in any other manner) by reference to a monetary cap, methodology or otherwise. The Trustee may accept and shall be entitled to rely on any such report, confirmation, certificate, information, advice or opinion, and, in such event, such report, confirmation, certificate, information, advice or opinion shall be binding on the Issuer, the Guarantor, the Company and the Bondholders.

**13 FURTHER ISSUES**

The Issuer may from time to time without the consent of the Bondholders create and issue further securities having the same terms and conditions as the Bonds in all respects (or in all respects except for the first payment of interest on them and the timing for filing with the NDRC) and so that such further issue shall be consolidated and form a single series with the outstanding Bonds. References in these Conditions to the Bonds include (unless the context requires otherwise) any other securities issued pursuant to this Condition 13.

**14 ENFORCEMENT**

At any time after the Bonds become due and payable, the Trustee may, at its discretion and without further notice, institute such proceedings against the Issuer, the Guarantor or the Company as it may think fit to enforce the terms of the Trust Deed, the Keepwell Deed, the Deed of Equity Interest Purchase Undertaking and the Bonds, but it need not take any such proceedings unless (a) it shall have been so directed by an Extraordinary Resolution or so requested in writing by Bondholders holding at least 25 per cent. in principal amount of the Bonds outstanding, and (b) it shall have been indemnified and/or secured and/or pre-funded to its satisfaction. No Bondholder may proceed directly against the Issuer, the Guarantor or the Company unless the Trustee, having become bound so to proceed, fails to do so within a reasonable time and such failure is continuing.

**15 INDEMNIFICATION OF THE TRUSTEE**

Under the Trust Deed, the Trustee is entitled to be indemnified and/or secured and/or pre-funded to its satisfaction and to be relieved from responsibility in certain circumstances and to be paid its fees, costs, expenses, indemnity payments and all other amounts in priority to the claims of the holders. In addition, the Trustee is entitled to enter into business transactions with the Issuer, the Guarantor, the Company and any entity related to the Issuer, the Guarantor or the Company without accounting for any profit.

Whenever the Trustee is required or entitled by the terms of the Trust Deed, the Keepwell Deed, the Deed of Equity Interest Purchase Undertaking, the Agency Agreement or these Conditions to exercise any discretion or power, take any action, make any decision or give any direction, the Trustee is entitled, prior to exercising any such discretion or power, taking any such action, making any such decision or giving any such direction, to seek directions from the Bondholders by way of Extraordinary Resolution, and the Trustee shall not be responsible for any loss or liability incurred by the Issuer, the Guarantor, the Company, the Bondholders or any other person as a result of any delay in it exercising such discretion or power, taking such action, making such decision or giving such direction as a result of seeking such direction from the Bondholders or in the event that no direction is given to the Trustee by the Bondholders.

None of the Trustee or any of the Agents shall be responsible for the performance by the Issuer, the Guarantor, the Company and any other person appointed by the Issuer and/or the Guarantor and/or the Company under the Trust Deed, the Keepwell Deed, the Deed of Equity Interest Purchase Undertaking, the Agency Agreement or these Conditions or in relation to the Bonds of the duties and obligations on their part expressed in respect of the same and, unless it has written notice from the Issuer or the Guarantor or the Company to the contrary, the Trustee and each Agent shall be entitled to assume that the same are being duly performed. None of the Trustee or any Agent shall be liable to any Bondholder, the Issuer, the Guarantor, the Company or any other person for any action taken by the Trustee or such Agent in accordance with the instructions of the Bondholders. The Trustee shall be entitled to rely on any direction, request or resolution of Bondholders given by Bondholders holding the requisite principal amount of Bonds outstanding or passed at a meeting of Bondholders convened and held in accordance with the Trust Deed.

The Trustee shall have no obligation to monitor or take any steps to ascertain whether an Event of Default or a Potential Event of Default has occurred, and shall not be liable to the holders or any other person for not doing so.

## **16 NOTICES**

Notices to the holders of Bonds shall be mailed to them at their respective addresses in the Register and deemed to have been given on the fourth weekday (being a day other than a Saturday or a Sunday) after the date of mailing. Notices to the holders of the Bonds shall also be published in a daily newspaper of general circulation in Asia (which is expected to be the Asian Wall Street Journal). Any such notice shall be deemed to have been given on the date of such publication or, if published more than once or on different dates, on the first date on which such publication is made.

## **17 CONTRACTS (RIGHTS OF THIRD PARTIES) ACT 1999**

No person shall have any right to enforce any term or condition of the Bonds under the Contracts (Rights of Third Parties) Act 1999 but this shall not affect any right or remedy which exists or is available apart from such Act.

## **18 GOVERNING LAW**

### **(a) Governing Law**

The Bonds, the Trust Deed, the Keepwell Deed and the Deed of Equity Interest Purchase Undertaking and any non-contractual obligations arising out of or in connection with them, are all governed by and shall be construed in accordance with English law.

**(b) Jurisdiction**

The courts of Hong Kong are to have exclusive jurisdiction to settle any disputes which may arise out of or in connection with the Bonds, the Trust Deed, the Keepwell Deed and the Deed of Equity Interest Purchase Undertaking and accordingly any legal action or proceedings arising out of or in connection with the Bonds, the Trust Deed, the Keepwell Deed and the Deed of Equity Interest Purchase Undertaking (“**Proceedings**”) may be brought in such courts. Each of the Issuer, the Guarantor and the Company has irrevocably submitted to the jurisdiction of such courts.

**(c) Service of Process**

Pursuant to the Trust Deed, the Keepwell Deed and the Deed of Equity Interest Purchase Undertaking each of the Issuer and the Company has irrevocably appointed the Guarantor, to receive service of process in any Proceedings in Hong Kong based on the Bonds, the Trust Deed, the Keepwell Deed and the Deed of Equity Interest Purchase Undertaking. Such service shall be deemed completed on delivery to such agent (whether or not it is forwarded to and received by the Issuer or the Company, as the case may be). If for any reason such agent ceases to be able to act as such or no longer has an address in Hong Kong, the Issuer and the Company each irrevocably agrees to forthwith appoint a substitute process agent in Hong Kong and deliver to the Trustee a copy of the agent’s acceptance of that appointment within 30 days of such cessation. Nothing shall affect the right to serve process in any manner permitted by law.

**(d) Waiver of Immunity**

Each of the Issuer, the Guarantor and the Company has waived any right to claim sovereign or other immunity from jurisdiction or execution and any similar defence, and has irrevocably consented to the giving of any relief or the issue of any process, including, without limitation, the making, enforcement or execution against any property whatsoever (irrespective of its use or intended use) or any order or judgment made or given in connection with any Proceedings.

## DESCRIPTION OF THE KEEPWELL DEED

*The following contains summaries of certain key provisions of the Keepwell Deed. Such statements do not purport to be complete and are qualified in their entirety by reference to the Keepwell Deed. Defined terms used in this section shall have the meanings given to them in the Keepwell Deed.*

### Ownership of the Issuer and the Guarantor

Under the Keepwell Deed, the Company will undertake to the Issuer, the Guarantor and the Trustee that, at all times during the term of the Keepwell Deed:

- (i) it or any of its Subsidiaries shall directly or indirectly own and hold all the outstanding shares of each of the Issuer and the Guarantor having the right to vote for election of members of the board of directors of the Issuer or, as the case may be, the Guarantor, and will not directly or indirectly pledge or in any way encumber or otherwise dispose of any shares of the Issuer and the Guarantor, unless required to dispose of any or all such shares pursuant to law or regulation or a court decree or order of any governmental authority which, in the opinion of a legal adviser to the Company, may not be successfully challenged; and
- (ii) it shall procure the Guarantor to directly or indirectly own and hold all the outstanding shares of the Issuer.

### Maintenance of Consolidated Net Worth; Liquidity

The Company will also undertake with the Issuer, the Guarantor and the Trustee that it shall cause (i) each of the Issuer and the Guarantor to have a Consolidated Net Worth of at least US\$1.00 (or its equivalent in any other currency) at all times and (ii) each of the Issuer and the Guarantor to have sufficient liquidity to ensure timely payment by it of any amounts payable in respect of the Bonds and the Guarantee in accordance with the Trust Deed and the Conditions and all payments due under the Trust Deed and the Agency Agreement.

### Relevant Indebtedness

The Company will undertake to the Trustee, the Issuer and the Guarantor that at all times during the term of the Keepwell Deed, the Company and its Principal Subsidiaries (other than the Listed Subsidiaries) will not create or permit to subsist any mortgage, charge, lien, pledge or other security interest upon the whole or any part of its present or future undertaking, assets or revenues (including any uncalled capital) to secure any Relevant Indebtedness which is issued outside the PRC, or any guarantee or indemnity in respect of any Relevant Indebtedness which is issued outside the PRC, without at the same time or prior thereto according to the Bonds (A) the same security as is created or subsisting to secure any such Relevant Indebtedness, guarantee or indemnity or (B) such other security as either (a) the Trustee may in its absolute discretion deem not materially less beneficial to the interest of the Bondholders or (b) as shall be approved by an Extraordinary Resolution of the Bondholders.

## Other Undertakings

The Company will further undertake in the Keepwell Deed that for so long as the Bonds are outstanding:

- (i) not to amend the memorandum or articles of association of the Issuer and the Guarantor in a manner that is adverse to Bondholders;
- (ii) to cause each of the Issuer and the Guarantor to remain in full compliance with the Conditions of the Bonds, the Guarantee, the Trust Deed and all applicable rules and regulations in the British Virgin Islands, Hong Kong and, in relation to the performance of each of the Issuer's and the Guarantor's obligations under the Bonds, the Guarantee and the Trust Deed, all applicable rules and regulations in England;
- (iii) to cause the Issuer either to use the proceeds from the offering of the Bonds itself or to lend such proceeds only to the Company's subsidiaries or affiliates (each a "**Relevant Affiliate**"), and to cause each such Relevant Affiliate to pay the interest and principal in respect of such intercompany loan on time;
- (iv) promptly to do all such things and take any and all such actions necessary to comply with its obligations under the Keepwell Deed; and
- (v) to cause each of the Issuer and the Guarantor to do all such things and take any and all such actions necessary in a timely manner to comply with its obligations under the Keepwell Deed.

The Keepwell Deed is not, and nothing contained in the Keepwell Deed and nothing done pursuant thereto by the Company shall be deemed to constitute, or shall be construed as, or shall be deemed an evidence of, a guarantee by or any similar legally binding obligation of the Company of the payment of any obligation, indebtedness or liability, of any kind or character whatsoever, of the Issuer or the Guarantor under the laws of any jurisdiction, including the PRC.

The parties to the Keepwell Deed will acknowledge that in order for the Company to comply with its obligations under the Keepwell Deed, the Company may require Regulatory Approvals pursuant to applicable laws. The Company will undertake to use all reasonable endeavours to obtain such Regulatory Approvals.

The parties to the Keepwell Deed will further acknowledge and agree that the Trustee has agreed to become a party to the Keepwell Deed solely for the purpose of taking the benefit of, and for agreeing amendments to, the Keepwell Deed and shall not assume any obligations or liabilities whatsoever to the other parties to the Keepwell Deed by virtue of the provisions of the Keepwell Deed.

The Keepwell Deed and any non-contractual obligations arising out of or in connection with it will be governed by and construed in accordance with English law.

## DESCRIPTION OF THE DEED OF EQUITY INTEREST PURCHASE UNDERTAKING

*The following contains summaries of certain key provisions of the Deed of Equity Interest Purchase Undertaking. Such statements do not purport to be complete and are qualified in their entirety by reference to the Deed of Equity Interest Purchase Undertaking. Defined terms used in this section shall have the meanings given to them in the Deed of Equity Interest Purchase Undertaking.*

### **Obligation to Acquire Equity Interest**

Under the Deed of Equity Interest Purchase Undertaking, upon the receipt of a written purchase notice (“**Purchase Notice**”) provided by the Trustee in accordance with the Trust Deed following receipt by the Trustee of written notice of the occurrence of an Event of Default under the Bonds, the Company will agree that it shall, subject to obtaining all Regulatory Approvals, purchase (either by itself or through a Subsidiary of the Company as designated by it (the “**Designated Purchaser**”)) (the “**Purchase**”):

- (i) the Equity Interest held by the Guarantor and/or any other Subsidiaries of the Company incorporated outside the PRC, as designated by the Company and notified in writing to the Trustee within five Business Days after the date of the Purchase Notice; or
- (ii) in the absence of a designation and notification within five Business Days after the date of the Purchase Notice as provided in (i) above, the Equity Interest held by all the Subsidiaries of the Company incorporated outside the PRC,

(each such designated entity in the case referred to in (i) or, as the case may be, each such Subsidiary in the case referred to in (ii), a “**Relevant Transferor**”) in either such case at the Purchase Price on the relevant Purchase Closing Date in accordance with the Deed of Equity Interest Purchase Undertaking.

“**Capital Stock**” means any and all shares, interests, participations or other equivalents (however designated) of capital stock of a corporation, any and all classes of partnership interests in a partnership, any and all membership interests in a limited liability company, any and all other equivalent ownership interests and any and all warrants, rights or options to purchase any of the foregoing;

“**Equity Interest**” means the Capital Stock held by a Relevant Transferor and which is subject to the Purchase pursuant to an Equity Interest Transfer Agreement.

The Purchase obligation shall be suspended if, prior to the relevant Purchase Closing Date, each of the Company, the Issuer and the Guarantor receives a notice in writing from the Trustee stating that all of the respective payment obligations of the Issuer and the Guarantor under the Bonds, the Guarantee and the Trust Deed have been satisfied as at the date of that notice, or that the Event of Default leading to the service of the Purchase Notice has been waived in accordance with the terms of the Trust Deed (the “**Suspension Notice**”). The Suspension Notice shall be provided by the Trustee to the Company (with copies to the Issuer and the Guarantor) within three Business Days after the date on which the Trustee is notified in writing by the Principal Paying Agent (with copies to the Issuer and the Guarantor) that the respective payment obligations of the Issuer and the Guarantor under the Bonds, the Guarantee and the Trust Deed have been satisfied in full, or that the Event of Default leading to the service of the Purchase Notice has been waived in writing by the Trustee in accordance with the terms of the Trust Deed.

## **Determination of Purchase Price**

Within 60 Business Days after the date of the Purchase Notice, the Company shall determine (a) the purchase price of the Equity Interest(s) subject to the Purchase (the “**Purchase Price**”) in accordance with any applicable PRC laws and regulations effective at the time of determination; and (b) the other applicable terms relating to the Purchase, provided that the Purchase Price shall be no less than the aggregate of the following amounts (the “**Shortfall Amount**”):

- (i) the amount sufficient to enable the Issuer and the Guarantor to discharge in full their respective obligations under the Bonds, the Guarantee and the Trust Deed (including without limitation the principal amount of the Bonds then outstanding as at the date of such Purchase Notice and any interest due and unpaid and/or accrued but unpaid on the Bonds up to but excluding the date of such Purchase Notice), plus
- (ii) an amount equal to US\$[●], being the interest payable in respect of one interest period on the Bonds, plus
- (iii) that amount in US dollars sufficient to pay in full all fees, costs, expenses (including without limitation, legal expenses) and other amounts payable to the Trustee and/or the Agents under or in connection with the Bonds, the Trust Deed, the Agency Agreement, the Keepwell Deed and/or the Deed of Equity Interest Purchase Undertaking as at the date of such Purchase Notice plus provisions for fees, costs, expenses and all other amounts which may be incurred after the date of the Purchase Notice, as notified by the Trustee in the Purchase Notice.

## **Closing**

- (i) In relation to the Purchase of any Equity Interest relating to a Subsidiary of the Company that is held by a Relevant Transferor and which is subject to the Purchase (a “**Target Subsidiary**”) incorporated in the PRC held by any Relevant Transferor, the Company will agree that:
  - (a) as soon as practicable and in any event within 60 Business Days after the date of the Purchase Notice, the Company shall, and shall procure each Relevant Transferor to use best efforts to, obtain all necessary approvals or consent for such Purchase from (x) the requisite number of shareholders (as applicable); (y) any joint venture partners and/or (z) any relevant creditors (as applicable) and the Company shall and shall procure each Relevant Transferor to execute, and the Company shall procure the board of directors of each of such Target Subsidiaries to execute (where applicable), an Equity Interest Transfer Agreement and all other application documents (including any equity interest transfer agreement in Chinese language and in such form as required by applicable laws and regulations) required by applicable laws and regulations of the PRC and shall file such agreements and/or documents as required by applicable laws and regulations with MOFCOM, SASAC (if applicable) and NDRC (if applicable), for approval of the transfer of the Equity Interests as being the subject of the Purchase;
  - (b) within 60 Business Days after the date of the Purchase Notice, the Company shall procure each of such Target Subsidiaries to complete assets appraisal, file the assets appraisal report and all application documents required by applicable laws and regulations of the PRC to the Company or SASAC for record (if applicable);

- (c) within five Business Days after the receipt of approval and record confirmation from MOFCOM, NDRC and SASAC, the Company shall submit all application documents required by applicable laws and regulations of the PRC to the competent AIC for AIC registration of the transfer of the Equity Interest of each Relevant Transferor;
- (d) as soon as reasonably practicable after receipt of AIC registration from the competent AIC, the Company shall complete the procedures in respect of withholding tax for the Relevant Transferor required by applicable laws and regulations of the PRC with the competent tax authority to obtain the tax clearance certificate from such tax authority;
- (e) within five Business Days after completion of the change of AIC registration and the receipt of the tax clearance certificate, the Company shall submit all application documents required by applicable laws and regulations of the PRC to SAFE (x) to change the SAFE registration of the Target Subsidiaries and (y) for the outbound remittance of the Purchase Price; and
- (f) closing of such purchase shall take place on the fifth Business Day after the date of receipt of the approvals from SAFE and all other Regulatory Approvals (the “**Onshore Purchase Closing Date**”), and on the Onshore Purchase Closing Date the Company shall pay to, or to the order of, each Relevant Transferor the Purchase Price payable in immediately available funds in US dollars to such account in Hong Kong as may be designated by such Relevant Transferor,

provided that the requirements and deadlines set out in sub-paragaphs (a) to (f) (both inclusive) above may be modified if the Trustee receives an opinion of a PRC counsel of recognised national standing stating (A) that under applicable PRC laws as at the date of the opinion, any requirement and/or the time allowed for the Company to complete any of the requirements in sub-paragaphs (a) to (f) (both inclusive) above is not reasonably achievable and (B) the new requirement which shall be fulfilled and/or the commercially reasonable period of time that is required to complete such requirement. Such opinion shall be addressed and delivered to the Trustee by the Company within 14 Business Days after the receipt of the Purchase Notice or at any time during the performance of sub-paragaphs (a) to (f) (both inclusive) by the Company.

- (ii) In relation to the Purchase of any Equity Interest relating to a Target Subsidiary incorporated outside the PRC held by any Relevant Transferor, the Company will agree that:
  - (a) as soon as practicable and in any event within 60 Business Days after the date of the Purchase Notice, (x) the Company shall submit a project information report and other required documents to NDRC (where applicable), (y) the Company shall submit the preliminary report and other required documents for overseas mergers and acquisitions, to MOFCOM, SASAC and SAFE (if applicable) and (z) the Company shall, and shall procure each Relevant Transferor to use best efforts to, obtain all necessary approvals or consent for such Purchase from (x) the requisite number of shareholders (as applicable); (y) any joint venture partners and/or (z) any relevant creditors (as applicable);

- (b) within 15 Business Days after obtaining the confirmation of NDRC, SASAC, MOFCOM and SAFE for the report referred to in the immediately preceding sub-paragraph (a) above, the Company shall, and shall procure each Relevant Transferor to, execute, and the Company shall use best efforts to procure the board of directors of each of the Target Subsidiaries to execute (where applicable), an Equity Interest Transfer Agreement and all other application documents (including any equity interest transfer agreement in the Chinese language and in such form as required by applicable laws and regulations) required by applicable laws and regulations, and shall file such agreements and/or documents as required by applicable laws and regulations with NDRC, MOFCOM, SAFE (if applicable) and any other Approval Authorities in any other jurisdiction in charge of the Purchase (where applicable), for approval, filing or registration of the transfer of the Equity Interests as being the subject of the Purchase;
- (c) within five Business Days after the receipt of the Certificate of Enterprise's Overseas Investment issued by MOFCOM, NDRC, SAFE and other relevant Approval Authorities, the Company shall submit all application documents required by applicable laws and regulations of the PRC to SAFE or the relevant qualified bank for registration of overseas investment;
- (d) within 60 Business Days after the date of the Purchase Notice, the Company shall procure each Target Subsidiary to complete an asset appraisal (if applicable) and to file the asset appraisal report and all applicable documents required by applicable laws and regulations of the PRC to the Company or SASAC for the record (if applicable); and
- (e) closing of such purchase shall take place on the fifth Business Day after the date of receipt of the approvals or registrations from NDRC, MOFCOM, SASAC, SAFE (or the relevant qualified bank) and any other Approval Authority in any other jurisdiction in charge of the Purchase and filing of the asset appraisal (if applicable) (the "**Offshore Purchase Closing Date**"), and on the Offshore Purchase Closing Date, the Company shall pay to or to the order of each Relevant Transferor the Purchase Price payable in immediately available funds in US dollars to such account in Hong Kong as may be designated by such Relevant Transferor.

provided that the requirements and deadlines set out in the immediately preceding sub-paragraphs (a) to (e) (both inclusive) above may be modified if the Trustee receives an opinion of a PRC counsel of recognised national standing stating (A) that under applicable PRC laws as at the date of the opinion, any requirement and/or the time allowed for the Company to complete any of the requirements in the immediately preceding sub-paragraphs (a) to (e) (both inclusive) above is not reasonably achievable and (B) the new requirement which shall be fulfilled and/or the commercially reasonable period of time that is required to complete such requirement. Such opinion shall be addressed and delivered to the Trustee by the Company within 14 Business Days after the receipt of the Purchase Notice or at any time during the performance of the immediately preceding sub-paragraphs (a) to (e) (both inclusive) above by the Company.

Upon the completion of the Purchase above, the Company will undertake to (a) in the event that a Relevant Transferor is neither the Issuer nor the Guarantor, procure such Relevant Transferor to promptly on-lend or distribute in full the relevant portion of the Purchase Price received by such Relevant Transferor to the Issuer or the Guarantor prior to any other use, disposal or transfer of the

proceeds received and (b) promptly do all such things (including entering into and executing any agreements or arrangements required) and take all actions necessary for the Purchase Price received by the Issuer or the Guarantor from the Company or pursuant to any on-loan or distribution to be applied solely towards the payment in accordance with the Trust Deed of any outstanding amounts under the Trust Deed and the Bonds (including any interest accrued but unpaid on the Bonds) prior to any other use, disposal or transfer of the proceeds received.

#### **All Reasonable Efforts**

The Company shall, and shall procure each Designated Purchaser and Relevant Transferor to, use all reasonable efforts to do all such things and take all such actions (including any relevant internal and/or external approval, consent, authorisation, filing or registration) as may be necessary or desirable to (i) procure the completion of the Purchase on the relevant Purchase Closing Date (including providing information and applying with a view to obtaining for Regulatory Approvals as soon as reasonably practicable within six months from the date of the Purchase Notice; and (ii) procure the remittance of the sum of the Purchase Price to, or to the order of, the Relevant Transferor(s) in accordance with the Deed of Equity Interest Purchase Undertaking.

#### **Other Provisions**

The Deed of Equity Interest Purchase Undertaking is not, and nothing contained in the Deed of Equity Interest Purchase Undertaking and nothing done pursuant to the Deed of Equity Interest Purchase Undertaking by the Company shall be deemed to constitute, or shall be construed as, or shall be deemed an evidence of, a guarantee by or any similar legally binding obligation of the Company of the payment of any obligation, indebtedness or liability, of any kind or character whatsoever, of the Guarantor under the laws of any jurisdiction, including the PRC.

The Deed of Equity Interest Purchase Undertaking and any non-contractual obligations arising out of or in connection with it shall be governed by and construed in accordance with English law.

## SUMMARY OF PROVISIONS RELATING TO THE BONDS WHILE IN GLOBAL FORM

*The Global Certificate contains provisions which apply to the Bonds while they are in global form, some of which modify the effect of the Terms and Conditions of the Bonds set out in this Offering Circular. The following is a summary of certain of those provisions. Defined terms used in this section shall have the meanings given to them in the Terms and Conditions of the Bonds (the “Conditions” or “Terms and Conditions of the Bonds”).*

The Bonds will be represented by the Global Certificate which will be registered in the name of a nominee of, and deposited with, a common depositary on behalf of Euroclear and Clearstream.

Under the Global Certificate, the Issuer, for value received, will promise to pay such principal, interest and premium (if any) on the Bonds to the holder of the Bonds on such date or dates as the same may become payable in accordance with the Terms and Conditions of the Bonds.

Owners of interests in the Bonds in respect of which the Global Certificate is issued will be entitled to have title to the Bonds registered in their names and to receive individual definitive Certificates if either Euroclear or Clearstream or any other clearing system (an “**Alternative Clearing System**”) is closed for business for a continuous period of 14 days (other than by reason of holidays, statutory or otherwise) or announces an intention permanently to cease business or does in fact do so. In such circumstances, the Issuer will cause sufficient individual definitive Certificates to be executed and delivered to the Registrar for completion, authentication and dispatch to the relevant holders of the Bonds. A person with an interest in the Bonds in respect of which the Global Certificate is issued must provide the Registrar not less than 30 days’ notice at its specified office of such holder’s intention to effect such exchange and a written order containing instructions and such other information as the Issuer and the Registrar may require to complete, execute and deliver such individual definitive Certificates.

In addition, the Global Certificate will contain provisions which modify the Terms and Conditions of the Bonds as they apply to the Bonds evidenced by the Global Certificate. The following is a summary of certain of those provisions:

**Notices:** So long as the Bonds are represented by the Global Certificate and the Global Certificate is held on behalf of Euroclear or Clearstream or any Alternative Clearing System, notices to holders of the Bonds shall be given by delivery of the relevant notice to Euroclear or Clearstream or such Alternative Clearing System, for communication by it to accountholders entitled to an interest in the Bonds in substitution for notification as required by the Terms and Conditions of the Bonds.

**Meetings:** For the purposes of any meeting of Bondholders, the holder of the Bonds represented by the Global Certificate shall (unless the Global Certificate represents only one Bond) be treated as two persons for the purposes of any quorum requirements of a meeting of Bondholders and as being entitled to one vote in respect of each US\$1,000 in principal amount of Bonds for which the Global Certificate issued.

**Bondholder’s Redemption:** The Bondholder’s redemption option in Condition 6(c) may be exercised by the holder of the Global Certificate giving notice to the Principal Paying Agent of the principal amount of Bonds in respect of which the option is exercised within the time limits specified in the Conditions.

**Issuer's Redemption:** The option of the Issuer provided for in Conditions 6(b) and 6(d) shall be exercised by the Issuer giving notice to the Bondholders within the time limits set out in and containing the information required by the Conditions.

**Transfers:** Transfers of interests in the Bonds will be effected through the records of Euroclear and Clearstream (or any Alternative Clearing System) and their respective participants in accordance with the rules and procedures of Euroclear and Clearstream (or any Alternative Clearing System) and their respective direct and indirect participants.

**Cancellation:** Cancellation of any Bond represented by the Global Certificate which is required by the Conditions will be effected by a reduction in the principal amount of the Bonds in the register of Bondholders and the Global Certificate on its presentation to or to the order of the Registrar for annotation (for information only) in the Global Certificate.

**Trustee's Powers:** In considering the interests of Bondholders while the Global Certificate is registered in the name of a nominee for a clearing system, the Trustee may, to the extent it considers it appropriate to do so in the circumstances, but without being obligated to do so, (a) have regard to any information as may have been made available to it by or on behalf of the relevant clearing system or its operator as to the identity of its accountholders (either individually or by way of category) with entitlements in respect of the Bonds and (b) consider such interests on the basis that such accountholders were the holders of the Bonds in respect of which the Global Certificate is issued.

The Global Certificate is evidence of entitlement only. Title to the Bonds passes only on due registration in the register of Bondholders and only the duly registered holder is entitled to payments on Bonds in respect of which the Global Certificate is issued.

The Global Certificate shall not become valid for any purpose until authenticated by or on behalf of the Registrar.

## **USE OF PROCEEDS**

The gross proceeds from this offering will be approximately US\$[●]. The Issuer intends to on-lend the proceeds from this Offering to the Company and any of its subsidiaries for refinancing and general working capital purposes of the Group.

## CAPITALISATION AND INDEBTEDNESS

### Capitalisation and Indebtedness of the Company

The following table sets forth the consolidated current and non-current borrowings, total long-term indebtedness, total equity and total capitalisation of the Group as at 31 December 2015 and adjusted to give effect to the issue of the Bonds before deducting the underwriting fees and commissions and other estimated expenses payable in connection with this offering:

	As at 31 December 2015			
	Actual	Actual	As adjusted	As adjusted
	(RMB in millions)	(US\$ in millions) <sup>(1)</sup>	(RMB in millions)	(US\$ in millions) <sup>(1)</sup>
<b>Current borrowings</b>				
Short-term borrowings <sup>(2)</sup>	79,785.2	12,125.8	79,785.2	12,125.8
Long-term borrowings due within one year	7,103.5	1,079.6	7,103.5	1,079.6
<b>Non-current borrowings</b>				
Long-term borrowings	161,628.8	24,564.4	161,628.8	24,564.4
Bonds payable	42,945.5	6,526.9	42,945.5	6,526.9
Bonds to be issued	—	—	[•]	[•]
<b>Total long-term indebtedness</b>	<b>204,574.3</b>	31,091.3	[•]	[•]
<b>Total equity<sup>(3)</sup></b>	<b>70,008.7</b>	10,639.9	70,008.7	10,639.9
<b>Total capitalisation<sup>(4)</sup></b>	<b>274,583.0</b>	<b>41,731.2</b>	[•]	[•]

(1) The translation of Renminbi amounts into US dollar amounts has been made at the rate of RMB6.5798 to US\$1.00.

(2) The Company issued (i) ultra short-term financing bonds in the aggregate nominal amount of RMB3 billion on 6 January 2016 for a period of 265 days, with an annual interest rate of 3.20 per cent.; (ii) ultra short-term financing bonds in the aggregate nominal amount of RMB3 billion on 20 January 2016 for a period of 270 days, with an annual interest rate of 3.60 per cent.; and (iii) short-term financing bonds in the aggregate nominal amount of RMB2 billion on 2 March 2016 for a period of 1 year, with an annual interest rate of 3.27 per cent.

(3) The Company issued perpetual securities in the aggregate nominal amount of RMB1.5 billion on 18 January 2016, with an annual interest rate of 5.70 per cent.

(4) Total capitalisation represents the sum of total long-term indebtedness and total equity.

Except as disclosed above, there has been no material change in the consolidated capitalisation and indebtedness of the Group since 31 December 2015.

## Capitalisation and Indebtedness of the Guarantor

The following table sets forth the consolidated current and non-current borrowings total long-term indebtedness, total equity and total capitalisation of the Guarantor and its subsidiaries (the “**Guarantor Group**”) as at 31 December 2015 and adjusted to give effect to the issue of the Bonds before deducting the underwriting fees and commissions and other estimated expenses payable in connection with this offering:

	As at 31 December 2015			
	Actual	Actual	As adjusted	As adjusted
	(RMB in millions)	(US\$ in millions) <sup>(1)</sup>	(RMB in millions)	(US\$ in millions) <sup>(1)</sup>
<b>Current borrowings</b>				
Short-term borrowings	6,969.9	1,059.3	6,969.9	1,059.3
Long-term borrowings due within one year	1,307.4	198.7	1,307.4	198.7
<b>Non-current borrowings</b>				
Long-term borrowings	89,759.3	13,641.6	89,759.3	13,641.6
Bonds payable	3,025.8	459.9	3,025.8	459.9
Bonds to be issued	—	—	[•]	[•]
<b>Total long-term indebtedness</b>	<b>92,785.1</b>	<b>14,101.5</b>	<b>[•]</b>	<b>[•]</b>
<b>Total equity<sup>(2)</sup></b>	<b>42,674.2</b>	<b>6,485.6</b>	<b>42,674.2</b>	<b>6,485.6</b>
<b>Total capitalisation<sup>(3)</sup></b>	<b>135,459.3</b>	<b>20,587.1</b>	<b>[•]</b>	<b>[•]</b>

(1) The translation of Renminbi amounts into US dollar amounts has been made at the rate of RMB6.5798 to US\$1.00.

(2) As at 31 March 2016, the Guarantor Group has incurred additional short-term borrowings and the amount of short-term borrowings has increased to RMB8,423.7 million.

(3) Total capitalisation represents the sum of total long-term indebtedness and total equity.

Except as otherwise disclosed above, there has been no material change in the consolidated capitalisation and indebtedness of the Guarantor Group since 31 December 2015.

## Capitalisation and indebtedness of the Issuer

As at the date of this Offering Circular, one share with a par value of US\$1.00, which is held indirectly by the Company, had been issued and credited as fully paid, representing the entire issued shares of the Issuer. Other than the Bonds, the Issuer has no indebtedness as at the date of this Offering Circular.

## **DESCRIPTION OF THE ISSUER**

### **FORMATION**

The Issuer was incorporated as a company with limited liability on 28 June 2016 under the laws of the British Virgin Islands. The registered office of the Issuer is at the offices of Intertrust Corporate Services (BVI) Limited, 171 Main Street, P.O. Box 4041, Road Town Tortola VG1110, British Virgin Islands. As at the date of this Offering Circular, the Issuer is authorised to issue a maximum of 50,000 shares of one class of shares of par value US\$1.00 and the Issuer has 1,000 shares in issue.

### **BUSINESS ACTIVITIES**

The Issuer is a wholly-owned subsidiary of the Guarantor, which is wholly-owned by the Company. As at the date of this Offering Circular, the Issuer has not engaged, since its incorporation, in any material activities, other than entering into arrangements for the proposed issue of the Bonds. As at the date of this Offering Circular, the Issuer has no subsidiaries or employees.

### **DIRECTORS**

The directors of the Issuer as at the date of this Offering Circular are Mr. Wang Jun, Mr. Cai Chun and Ms. Hu Weixi.

### **SHARE CAPITAL**

As at the date of this Offering Circular, the Issuer is authorised to issue a maximum of 50,000 shares of a single class each with a par value of US\$1.00. As at the date of this Offering Circular, 1,000 ordinary shares, which are held by the Company, had been issued and credited as fully paid, representing the entire issued shares of the Issuer. None of the equity securities of the Issuer was listed or dealt in on any stock exchange and no listing or permission to deal in such securities was being or was proposed to be sought as at the date of this Offering Circular.

### **FINANCIAL STATEMENTS**

As at the date of this Offering Circular, the Issuer has not prepared any financial statements and has no outstanding borrowings or contingent liabilities other than the proposed issue of the Bonds.

## DESCRIPTION OF THE GUARANTOR

### FORMATION

The Guarantor was incorporated as a company with limited liability on 18 July 2007 under the laws of Hong Kong. The registered office of the Guarantor is at Room 4501, 45/F, Far East Finance Centre, No. 16 Harcourt Road, Admiralty, Hong Kong. The Guarantor is a wholly-owned subsidiary of the Company. As at 31 December 2015, it has ten subsidiaries across six countries and one representative office in Beijing. The Guarantor was set up to explore overseas resources and manage the Group's investments in foreign countries. As at 31 December 2014 and 2015, the Guarantor Group had consolidated total assets of RMB151.9 billion and RMB164.7 billion which contributes to approximately 31.2 per cent. and 33.9 per cent. of the Group's consolidated total assets. For the years ended 31 December 2014 and 2015, the Guarantor Group recorded a net profit of RMB1.47 billion and RMB1.90 billion, respectively.

### BUSINESS ACTIVITIES

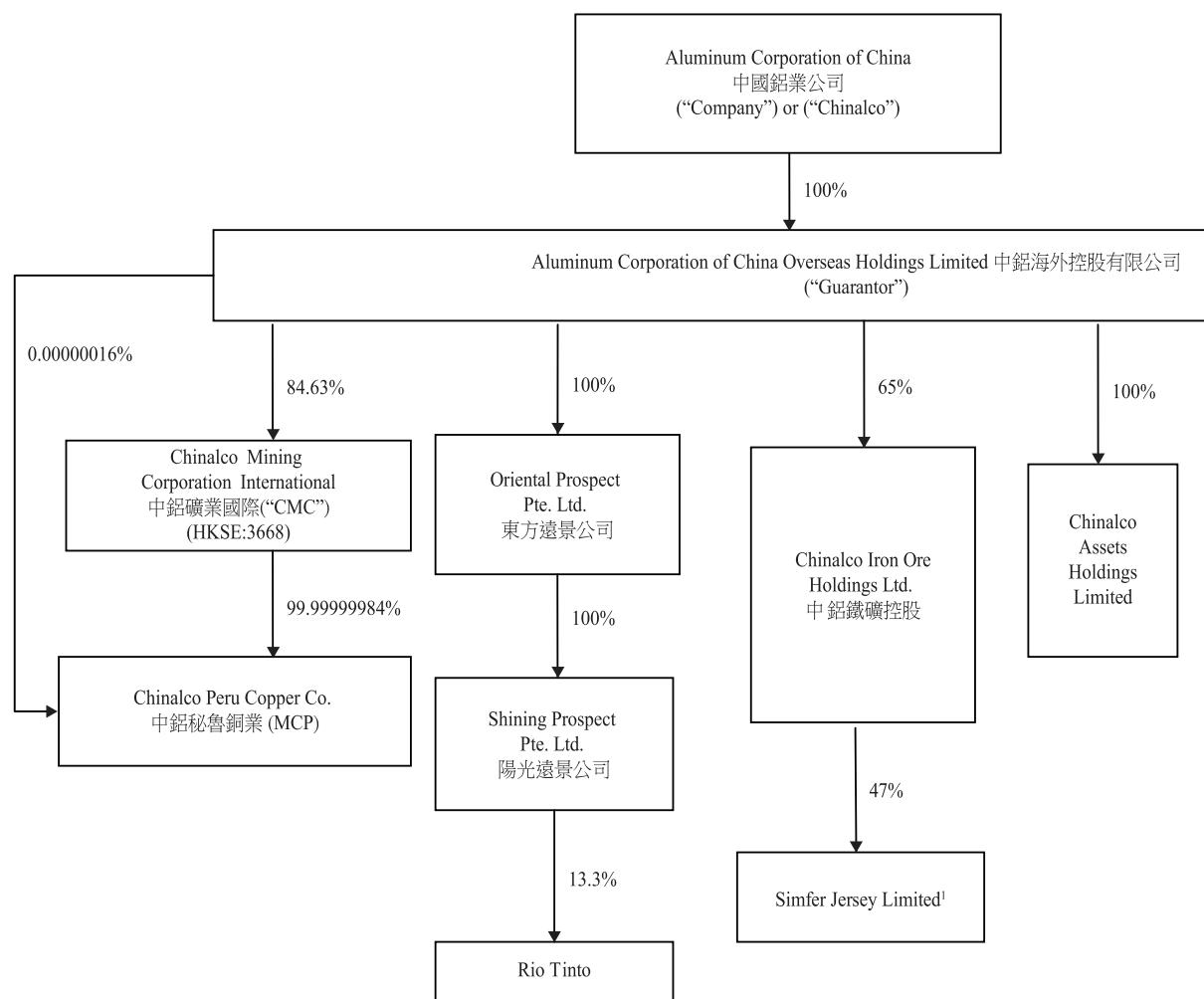
The Guarantor serves as the Group's offshore financing and investment platform. It principally operates overseas resources development and foreign investments management businesses.

As at 31 December 2015, the Guarantor mainly held equity interests in the following companies or projects:

- the Guarantor held approximately 13.3 per cent. of the issued share capital of Rio Tinto through two SPV companies, which made the Guarantor the largest single shareholder of Rio Tinto. See "*Description of the Group — Other Businesses — Overseas Investment*" for more information;
- the Guarantor controlled Toromocho Project through CMC, of which the Guarantor held 84.63 per cent. of the issued share capital. See "*Description of the Group — Copper Business*" for more information;
- the Guarantor held a 65 per cent. interest in Chinalco Iron Ore Holding (中鋁鐵礦控股) and holds a 26.9 per cent. interest indirectly in the Simandou Project. See "*Description of the Group — Rare Earth Metals Business*" for more information;
- the Guarantor's wholly owned subsidiary, Chinalco Finance Holdings Limited, issued US\$500 million bonds in December 2014 with a maturity of five years; and
- the Guarantor held one real property in Hong Kong via Chinalco Assets Holdings Limited which is a wholly owned subsidiary of the Guarantor.

## SIMPLIFIED CORPORATE STRUCTURE

The following chart sets forth a simplified corporate structure of the Guarantor Group as at 31 December 2015:



*Note 1:* Simfer Jersey Limited is incorporated in Jersey and, as at 31 December 2015, the Rio Tinto Group owns a 53 per cent. shareholding in

## **DIRECTORS**

The directors of the Guarantor as at the date of this Offering Circular are Mr. Ge Honglin, Mr. Liu Caiming, Mr. Wang Jun, Mr. Yu Hongwei and Mr. Cai Chun.

## **SHARE CAPITAL**

As at 31 December 2015, the authorised share capital of the Guarantor was HK\$565,962,800 divided into 565,962,800 ordinary shares of HK\$1.00 each, 565,962,800 shares of which have been issued and are fully paid. None of the equity securities of the Guarantor is listed or dealt in on any stock exchange and no listing or permission to deal in such securities is being or is proposed to be sought.

## **FINANCIAL STATEMENTS**

The Guarantor has prepared the financial statements as at and for the years ended 31 December 2014 and 2015 which have been audited by Baker Tilly and disclosed elsewhere in this Offering Circular.

## DESCRIPTION OF THE GROUP

### OVERVIEW

The Group is a leading diversified and vertically integrated producer of non-ferrous metals in China with a primary focus on alumina, primary aluminium, copper and various rare earth metals. Chinalco believes that the Group is the largest supplier of non-ferrous metals in China and a leading alumina corporation with significant influence globally. The Group believes that it ranks first in terms of overall corporate strength among copper enterprises in the PRC for the year ended 31 December 2015. In addition, the Group occupies a dominant market position in rare earth metals industry with operations covering the complete industry chain and the Group believes that it has the capacity to lead industry consolidation. The Group principally engages in exploration and mining of mineral resources, refining, smelting, fabrication and trading of non-ferrous metals, mainly bauxite, alumina, primary aluminium, copper and rare earth metals. In addition, the Group also derives revenue from other services including engineering and technical services, mineral resources development, overseas investment and financial services.

Established in 2001, Chinalco is a wholly-owned and directly supervised state-owned backbone enterprise of the SASAC. As at 31 December 2015, the Group has an issued capital of RMB26.2 billion and a total asset value of RMB486.8 billion. The Group has operations in over 20 countries and has over 430 subsidiaries and affiliates worldwide, including six major subsidiaries that are listed in Shanghai, Shenzhen, Hong Kong, Australia and/or New York. According to *Fortune Magazine*, Chinalco has been a Fortune Global 500 company for eight consecutive years since 2008 and was ranked 240th among the Fortune Global 500 in 2015.

The Group's principal lines of business include the following:

**Aluminium business:** The Group's aluminium business is principally conducted through Chalco, which is a leading enterprise in the non-ferrous metal industry, and in terms of scale, Chalco ranked among the top enterprises in the global aluminium industry for the year ended 31 December 2015. Chalco has been listed on the Hong Kong Stock Exchange since December 2001 (stock code: 2600), on the New York Stock Exchange (by way of American Depository Receipts) since December 2001 (ticker symbol: ACH) and on the Shanghai Stock Exchange since April 2007 (stock code: 601600). The Group's aluminium business principally involves bauxite mining, the production and sale of alumina, primary aluminium and aluminium alloy products, the operation of coal and electricity businesses, trading of non-ferrous metal products as well as a logistics business. The aluminium business is the Group's largest business line, accounting for 52.0 per cent. and 51.7 per cent. of the Group's revenue for the years ended 31 December 2014 and 2015 respectively. As at 31 December 2015, the Group owned and operated 20 mines in China that had approximately 270.6 million tonnes of aggregate bauxite reserves and it continues to explore new bauxite reserves to replenish its reserves.

**Copper business:** The Group's copper business is principally conducted by China Copper and CMC, which holds the entire stake of the Toromocho Project in Central Peru, one of the largest copper mines in the world. The Group's copper business principally engages in copper mining, copper refining and production and copper fabrication. The copper business is the Group's second largest business line, accounting for 39.3 per cent. and 36.7 per cent. of the Group's revenue for 2014 and 2015 respectively. China Copper has five principal subsidiaries in this segment, including Yunnan Copper Industry, Chinalco Luoyang Copper, Chinalco Kunming Copper, Chinalco Shanghai Copper and Chinalco Central China Copper. Yunnan Copper Industry is a leading copper producer in China engaging in the

production of high-purity copper cathode, copper wire bar for electrical purposes, industrial sulphuric acid, gold ingots, silver ingots, round copper wire for electrical purposes, bluestone and the recycling of various metals such as gold, silver, aluminium, bismuth, tin, platinum and palladium. Chinalco Luoyang Copper, Chinalco Kunming Copper, Chinalco Shanghai Copper and Chinalco Central China Copper engage in copper fabrication. CMC is the Group's core overseas platform for the future acquisition, investment, development and operation of non-ferrous and non-aluminium mineral resources and projects. CMC has been listed on the Hong Kong Stock Exchange since January 2013 (stock code: 3668). As at 31 December 2015, the Group owned 27 copper mines (24 of which are in production and the remaining three are under development) in China with over 9.0 million tonnes of aggregate copper reserves.

**Rare earth metals business:** The Group's rare earth metals business is principally conducted by China Rare Earth, which produces and sells a wide range of rare earth products, such as titanium, molybdenum, tungsten, bismuth, tin, nickel and cobalt.

**Engineering and technical services business:** The Group's engineering and technical services business is principally conducted through Chalieco. Chalieco was listed on the Hong Kong Stock Exchange in July 2012 (stock code: 2068) and is a leading technology, engineering services and equipment provider in the non-ferrous metals industry in the PRC and provides fully integrated engineering solutions covering the complete value chain of the non-ferrous metals industry.

**Other businesses:** The Group also conducts a number of ancillary businesses in support of its principal businesses, including mineral resource development, overseas investment and financial services.

For the years ended 31 December 2014 and 2015, the Group recorded a revenue of RMB273.0 billion and RMB238.8 billion, respectively. As at 31 December 2014 and 2015, the Group's total assets amounted to RMB486.4 billion and RMB486.8 billion, respectively.

The following table sets forth the revenue breakdown by business lines for the periods indicated:

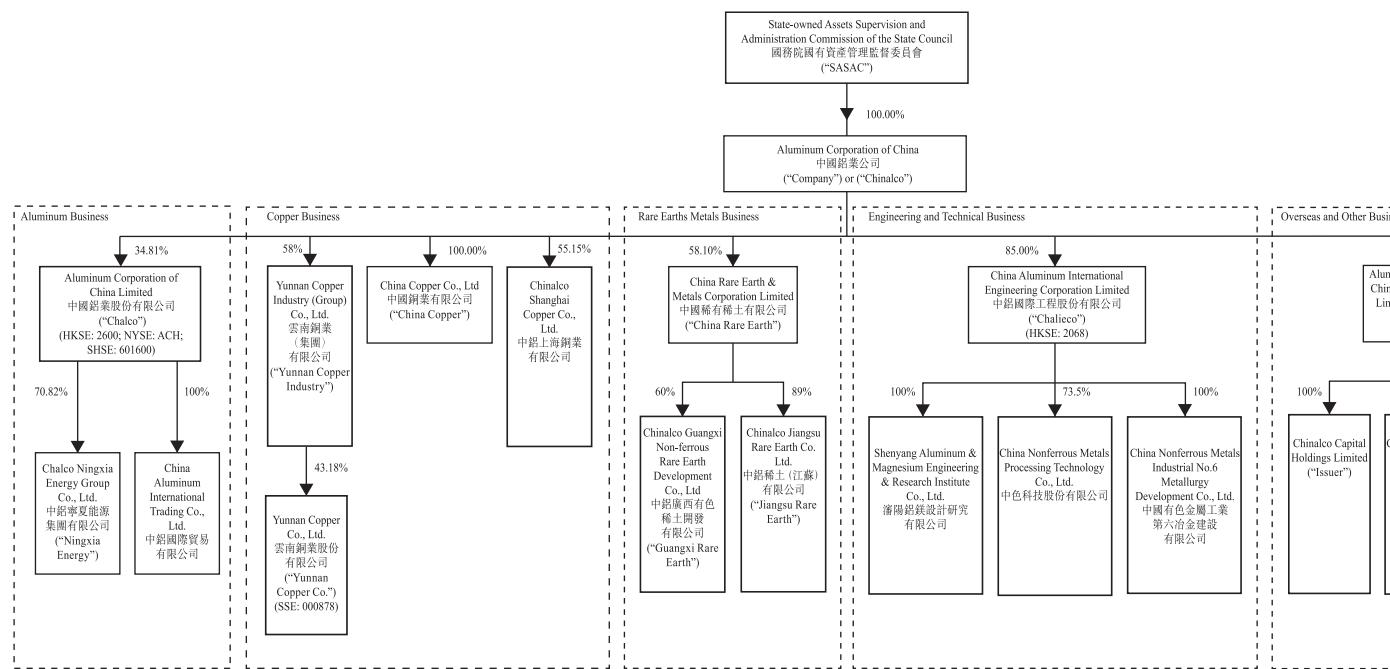
Principal business lines	For the year ended 31 December			
	2014		2015	
	(RMB million)	%	(RMB million)	%
Aluminium	141,999.8	52.0%	123,445.9	51.7%
Copper	107,251.2	39.3%	87,746.0	36.7%
Rare Earth Metals	2,074.5	0.8%	2,123.6	0.9%
Others	21,693.6	7.9%	25,463.6	10.7%
<b>Total</b>	<b>273,019.1</b>	<b>100.0%</b>	<b>238,779.1</b>	<b>100.0%</b>

The following table sets forth the gross profit and gross profit margin by business lines for the periods indicated:

Principal business lines	For the year ended 31 December			
	2014		2015	
	Gross profit (RMB million)	Gross profit margin %	Gross profit (RMB million)	Gross profit margin %
Aluminium	2,058	1.4%	4,288	3.5%
Copper	3,404	3.2%	3,244	3.7%
Rare Earth Metals	249	12.0%	234	11.0%
Others	4,732	9.5%	5,652	11.3%
<b>Total</b>	<b>10,443</b>	<b>4.6%</b>	<b>13,418</b>	<b>5.6%</b>

## SIMPLIFIED CORPORATE STRUCTURE

The following chart sets forth a simplified corporate structure of the Group as at 31 December 2015:



\* CMC is managed by the Group's copper segment

## CORPORATE HISTORY AND MILESTONES

Chinalco's history can be traced back to 1979 when the Non-ferrous Metals Company (Headquarters) of the Ministry of Metallurgical Industry (“冶金部有色金屬公司(總局)”) was established. Following three successive stages of corporate restructuring, the Non-ferrous Metals Company (Headquarters) of the Ministry of Metallurgical Industry was re-established as China Non-ferrous Metals Industry Corporation (“中國有色金屬工業總公司”), the State Administration of Non-ferrous Metals Industry (“國家有色金屬工業局”), and was subsequently divided into the “Three Non-ferrous Metals Corporations of China” (“中國三大有色金屬集團公司”), encompassing China Copper Lead Zinc Corporation (“中國銅鉛鋅集團公司”), China Aluminum Corporation (“中國鋁業集團公司”) and China Rare Earths Corporation (“中國稀有稀土集團公司”).

On 23 February 2001, Chinalco was established as a wholly owned and directly supervised state-owned enterprise of SASAC. Upon establishment, Chinalco initially held eight aluminium entities, two engineering entities and two research and design institutes. After more than a decade of organic growth and strategic expansion in China and around the world, as at 31 December 2015, Chinalco held 436 directly- or indirectly-owned subsidiaries. The table below sets out Chinalco's major corporate milestones since inception:

Time	Milestone Event
February 2001	Chinalco was established in China.
December 2001	Chalco was listed on the Hong Kong Stock Exchange and the New York Stock Exchange (through American Depository Receipts), respectively.
April 2007	Chalco was listed on the Shanghai Stock Exchange.
August 2007	Chinalco acquired all the shares of Canada-incorporated Peru Copper Inc., which held the Toromocho Project in central Peru through two layers of wholly owned subsidiaries, CMC and Minera Perú Copper S.A. (presently known as “Minera Chalco Perú S.A.”), respectively. This marked the Group's entry into the copper business.
October 2007	Chinalco signed a strategic collaboration agreement with the People's Government of Yunnan Province regarding the Company's capital injection into Yunnan Copper Industry.
February 2008	Chinalco acquired a 12.0 per cent. equity interest in Rio Tinto (representing 9.33 per cent. of the equity interest of Rio Tinto Group) together with Alcoa. After Alcoa's exit, Chinalco became the single largest shareholder of Rio Tinto Group.
June 2010	SASAC authorised the expansion of Chinalco's business scope to the exploration, development and processing of all mineral resources except petroleum and natural gas.

<u>Time</u>	<u>Milestone Event</u>
July 2010	Chalco signed a joint development agreement with the Rio Tinto Group for the establishment of a joint venture company to develop the Simandou iron mine in Guinea.
June 2011	Jiangsu Rare Earth was established, which marked the Group's entry into the rare earth metals business.
July 2012	Chalieco was listed on the Hong Kong Stock Exchange.
December 2012	The Group completed the restructuring of Ningxia Energy.
January 2013	CMC was listed on the Hong Kong Stock Exchange.
December 2013	The Toromocho Project was commissioned.
August 2014	With the approval from Ministry of Industry and Information Technology of the PRC, the Group became one of the six recognised large-scale rare earth enterprises.
April 2015	The first production line (with annual production capacity of approximately 800,000 tonnes) of Guizhou Huajin Aluminum Corporation Limited (貴州華錦鋁業有限公司) aluminium oxide production facility project (with annual production capacity of approximately 1.6 million tonnes) commenced production.
June 2015	The Toromocho Project commenced commercial-production.
	Chalco non-publicly issued an additional 1,379,310,344 A shares, and the total share capital of the Company increased from 13,524,487,892 shares to 14,903,798,236 shares. The net proceeds from the issue of the A shares, amounting to approximately RMB7.9 billion, were mainly used to replace the self-raised funds invested in advance in the Chalco Xing County Alumina Project and the Chalco Zhongzhou Branch Bayer Ore-dressing Process Expansion Construction Project.
December 2015	Zhongjianlv New Material Corporation Limited (中建鋁新材料有限公司), Chinalco Aluminum Foil Corporation Limited (中鋁鋁箔有限公司) and Zhongjianlv New Material (Chengdu) Corporation Limited(中建鋁新材料(成都)有限公司) were established in Chengdu.

## RANKINGS AND AWARDS

Over the years, the Group's accomplishments and industrial presence have been recognised by various publications and organisations. The list below sets out some of the recent rankings and awards assigned to the Group:

- According to *Fortune Magazine*, the Group has been a Fortune Global 500 company for nine consecutive years and was ranked 262th among the Fortune Global 500 for the year ended 31 December 2015 in terms of revenue.
- In 2015, the Group was awarded the China Relieving Poverty Welfare Medal (中國扶貧公益事業勳章獎) by the China Enterprises Welfare Organising Committee (中國企業公益事業組織委員會).
- In 2015, the Group was awarded the 2015 China Outstanding Corporate Social Responsibility Award (2015年中國責任品牌優秀企業) by the China Association of Social Workers (中國社會工作聯合會).
- In 2015, the Group was recognised as a five-star enterprise for social responsibility (社會責任指數五星級企業) by SASAC and the Chinese Academy of Social Sciences (中國社會科學院).

## RECENT DEVELOPMENT

The Company expects to publish its unaudited interim financial statements as at and for the six months ended 30 June 2016 at around end of August 2016. As of 30 June 2016, the Company's total assets increased compared to 31 December 2015. For the six months ended 30 June 2016, the Company recorded decreases in total operating income and operating profit primarily due to the lower production volume of electrolytic aluminium, aluminium and copper as a result of the implementation of the PRC's industrial policies in relation to reducing outdated production capacity. The Company's gross profit increased as compared to the same period in 2015 primarily because the Company conducted effective cost control measures. In addition, the Company's net profit increased as compared to the six months ended 30 June 2015 primarily because the Company improved the utilisation of low-productive or idle assets. Investors are cautioned against placing undue reliance on any information to be disclosed in the Company's unaudited interim financial statements since none of such information will be subject to any audit or review by the Company's auditors and none of the Issuer, the Guarantor nor the Company represents that any such unaudited financial information has or will have the same quality as the information reported in the Company's historical audited financial statements.

In July 2016, upon the expiration of the term of office of the external supervisors of the Company, the SASAC appointed four new external supervisors with a term of three years.

## COMPETITIVE STRENGTHS

### Strong state-owned enterprise background and government support

Chinalco is a key state-owned enterprise directly supervised and wholly owned by the SASAC and is one of the 53 backbone enterprises in the PRC. The Group is a strategic corporate platform for the PRC non-ferrous industry. Since inception, the Group has received incentives and preferential policies from the PRC government to encourage its development. As the PRC's leading non-ferrous producer, the

Group has benefited and believes that it will continue to take advantage of various preferential business policies, government grants and tax benefits. For example, in 2014, the Group was selected by the State Council as one of the only six major rare earth metals groups in China to explore and develop rare earth resources in China. In addition, the Group was also invited by government authorities to participate in the setting of national standards for the aluminium industry, such as relating to electricity and resource consumption, Regulatory Conditions for the Aluminium Industry 《鋁行業規範條件》, environmental protection and safety production.

In addition, due to its close and enduring relationship with the PRC government as well as its leading positions in the aluminium and copper industries globally and within the PRC, the Group enjoys competitive advantages for securing bauxite and copper ore resources and is well-positioned to capture market opportunities and adapt to changes in the industry. The Group has the benefit of having the largest bauxite resources in China.

#### **A leader in the aluminium and copper industries in China and globally with a vertically integrated value chain and diverse product mix**

Through over more than a decade of operations, the Group maintains its leading market positions across the aluminium and copper industry. For the year ended 31 December 2015, Chinalco believes that the Group is the largest supplier of non-ferrous metals in China and a leading alumina corporation with significant influence globally. The Group believes that it ranks first in terms of overall corporate strength among copper enterprises in the PRC for the year ended 31 December 2015. In addition, the Group occupies a dominant market position in rare earth metals industry with operations covering the complete industry chain and the Group believes that it has the capacity to lead industry consolidation. The large scale of the Group's aluminium and copper operations increased the Group's bargaining power enabling the Group to be less susceptible to price fluctuations and economic cycles.

The Group's aluminium and copper businesses possess a vertically integrated production chain that encompasses upstream exploration and mining as well as midstream smelting and downstream refining and value-added fabrication. The Group also engages in the trading business which consists of the trading of various mineral and metal products, particularly those closely related to its alumina, aluminium and copper productions, such as alumina, aluminium, non-ferrous metal products and coal. A vertically integrated value chain enables the Group to remain competitive and become more resistant to economic and industry cycles. For example, when the markets for alumina and primary aluminium are over supplied, the Group is able to focus more on high-end downstream aluminium fabrication products with more advanced technologies as well as the trading business to capture more value in the business.

In response to the government policies to consolidate the rare earth industry, the Group entered the rare earth metals industry in 2011 as part of its strategic initiative to seize industry consolidation opportunities and optimise business structure. The Group's principal businesses currently consist of the production of primary aluminium, copper and rare earth, as well as engineering and technical services. The Group currently sells a diverse range of non-ferrous metal product offerings, covering alumina, primary aluminium, aluminium fabrication products, copper and copper fabrication products as well as rare earth metals, such as titanium, tungsten and tin. The segment revenue from the Group's aluminium, copper, rare earth metals and other businesses accounted for 51.7 per cent., 36.7 per cent., 0.9 per cent. and 10.7 per cent., respectively, of its total revenue for the year ended 31 December 2015. A diverse product mix enables the Group to compete more effectively in the non-ferrous industry and become more resistant to the industry and economy cycles.

## **Well positioned to benefit from China's rapidly growing economy and favorable industry policies**

The Group is well positioned to benefit from China's rapidly growing economy. China's GDP increased at a growth rate of 7.3 per cent. for the year ended 31 December 2014 and 6.9 per cent. for the year ended 31 December 2015. China's economic growth and large-scale manufacturing industries have resulted in China being the largest market for aluminium and copper consumption in the world. Driven by continued urbanisation and industrialisation trends, it is expected that China's economy will continue to grow with further adjustments in its structure, which could lead to significant growth potential in the market demand for aluminium, copper and other non-ferrous metal products. The future demand growth in China is expected to come from key industries such as transportation, high-tech construction, power, consumer goods and packaging and other industries. The Group believes that it is well positioned to capture the opportunities based on its established leading positions in the aluminium and copper industries in the PRC and the world, its rich bauxite and copper ore resources, extensive experience and insight into the relevant market through its trading business and marketing network and vertically integrated operating structure.

In recent years, the PRC government implemented various measures to improve the efficiency of the aluminium industry in China, including promoting integration of aluminium operations with energy operations, requesting the demolition of outdated production capacity and securing high-quality bauxite resources in China and overseas. The Group's aluminium business is strategically aligned with those policies which strengthen its leading market positions in China's aluminium industry. For the year ended 31 December 2015, the Group further optimised its industrial layout and accelerated the promotion of transformation and upgrading of its aluminium business. The Group has preliminarily formed the concept of resource-dependent alumina layout which includes the planning and establishment of alumina production bases in the regions with the most concentrated and richest bauxite resources in the PRC. Due to the energy intensive nature of the electrolytic aluminium layout, the Company vigorously built electrolytic aluminium production bases in the areas with high energy supplies, and set up a batch of competitive electrolytic aluminium enterprises. During the year ended 31 December 2015, in accordance with such industrial layout plan, the Group made significant progress in the implementation and construction of various key projects. Guizhou Huajin Project, a newly constructed alumina project with the annual output of approximately 1.6 million tonnes of the Company, recorded profit in the year of 2015 upon the commencement of production; in addition, the 2×660MW ultra-supercritical power generation project of Ningxia Energy also progressed smoothly. In addition, the Group took active initiatives to upgrade its aluminium production technologies, dispose of or shut down outdated production capacity, acquire and consolidate suitable aluminium producers in China, so that it could further improve its competitiveness and survive the industrial restructuring.

## **Significant upstream resources and competitive cost structure**

For its aluminium business, the Group attaches great importance to stable upstream resources through the acquisition and development of high-quality bauxite mines. As at 31 December 2015, the Group owned 20 bauxite mines in China, one bauxite mine in Laos and three bauxite mines in Indonesia. The Group also holds the requisite mining permit or exploration permit for three bauxite mines in West Kalimantan, Indonesia through its 96.28 per cent. owned subsidiary, PT Nusapati Prima. The supply from the Group's owned bauxite mines accounted for 55.4 per cent. and 55.4 per cent. of the Group's bauxite sourcing requirements for 2014 and 2015, respectively. The Group estimates that its own and jointly-operated bauxite mines are able to support its alumina and primary aluminium production for approximately 28 years without any third party supply, based on its annual alumina production output as at 31 December 2015 and the amount of resources. In addition, during the year

ended 31 December 2015, significant achievements were made in the Group's aluminium business in respect of reducing costs and increasing profits through further reinforcement of production and operation management, reducing consumption and technological innovation. In addition, the Group also shut down certain outdated production lines with over capacity and loss-making enterprises. Leveraging the advanced experiences learnt from other companies, the Group also improved its management performance in respect of production activities, human resources and administrative affairs. As a result, for the year ended 31 December 2015, Chalco, through which the Group operates its aluminium business, reduced its cost of operations by 14.4 per cent. and its administrative expenses by 51.7 per cent. compared to 2014.

For its copper business, the Group strives to increase the self-sufficiency of copper concentrate through acquisition and development of rich copper reserves in China and globally. As at 31 December 2015, the Group owned 27 copper mines in China and one copper mine in Peru (the Toromocho Project). The Group estimates that its own copper mines are able to support its copper production for approximately 42 years without any third party supply, based on its annual copper cathode production output as at 31 December 2015 and the amount of resources. In addition, during the year ended 31 December 2015, the Group also made significant progress in improving production efficiency and cost control and continued to lower its administrative expenses. Yunnan Copper Co, one of the Company's principal subsidiaries in copper business, significantly improved its main performance indicators in the production of copper. For the year ended 31 December 2015, Yunnan Copper Co. further reduced its comprehensive cost of smelting and processing activities and recorded the best performance indicators in terms of energy consumptions and recycling rate of copper smelting since its incorporation.

As the PRC government continues to encourage the consolidation and reorganisation in the rare earth metals industry, the Group has recently been designated as one of the six major rare earth metals groups in China to explore and develop rare earth resources in China.

Owing to its rich reserves, the Group enjoys the flexibility of choosing between its own supply and third party suppliers based on the fluctuating market price to optimise cost benefit.

To secure the sustainable development and maintain its leading market positions, the Group attaches great importance to the improvement of its capacity in managing bauxite and copper ore resources. In addition to the development of bauxite and copper mines owned by the Group to enhance mining output and efficiency, the Group also seeks to develop bauxite and copper ore resources in overseas markets, such as in Australia, Brazil, Guinea and Vietnam, and has an established presence in Laos, Indonesia and Peru. To optimise its cost structure and improve profitability, the Group acquired Ningxia Energy in 2013 and started to engage in the coal mining and power generation business. The Group expects to increase the supply of the electricity to be used in its businesses from its owned power plants in the future. Through those efforts, the Group is able to increase its self-sufficiency in respect of bauxite, coal and electricity supply, which is expected to reduce the Group's costs in relation to raw materials and electricity and improve its profitability.

#### **Advanced technologies in the non-ferrous metals industry**

The Group believes that its strong capability for continuous technological innovation will enable it to maintain a leading position in terms of technologies in the non-ferrous metals industry, especially aluminium and copper fabrication products specifically for use in the aerospace and civil aviation industries. The Group is the major supplier of non-ferrous metals to the aerospace, defence and major state-level engineering projects in China. Its specialised aluminium and copper products are widely used

in the “Long March (長征)” rocket family, “Shenzhou (神州號)” airships, “Chang’e (嫦娥號)” lunar-orbiting spacecraft and “Tiangong 1 (天宮一號)” space station as well as PRC’s on-going Large Commercial Aircraft project.

The Group possesses six state-level corporate technology centres and branches, two national engineering technology research institutions, three professional research institutions, six design and research institutions, five national post-doctoral scientific research stations and 15 state- and industry-recognised laboratory and testing centres. The Group has established a team of technicians with extensive expertise and experience and has developed a series of advanced technologies relating to the mining, smelting and metal material processing of non-ferrous metals including aluminium, copper, rare metals and rare earth metals.

The Group applied its advanced technologies in the non-ferrous metals industry to its bauxite and copper mining operations and production procedures to improve efficiency and control energy costs. For example, the technologies employed in the Bayer process designed and applied by the Group in its alumina production could significantly increase the useful life of bauxite mines and provide greater efficiency in bauxite usage; and the Group has built the first “1+4” hot rolling aluminium production line in China which enhance production efficiency and product quality. In addition, the Group also actively implements technologies such as the extraction of iron from bauxite residue, desulphurisation and dust control with an aim to improve environmental protection and sustainable development as well as to achieve cost advantages in the long term. The Group was successful in reducing its production costs primarily as a result of its advanced technologies.

### **Strong liquidity position with access to various sources of capital**

The Group has a disciplined capital expenditure programmes and access to various funding sources. The Group’s primary sources of funding include bank loans, short-term notes and bonds. The Group has developed strategic partnerships with major PRC banks and maintained long-term relationships with various reputable international banks. As at 31 December 2015, the aggregate unutilised banking facilities of the Group amounted to approximately RMB246.4 billion.

In addition, the Group also raised funds from the PRC and international capital markets. In 2014 and 2015, Chinalco and its subsidiaries have successfully completed a number of medium term notes and short-term notes offerings in China and two issuances of perpetual securities as well as a bond offering in the international markets. As at 31 December 2015, the Group had cash and cash equivalents of RMB47.0 billion and total debt of RMB416.8 billion.

In addition, Chinalco has six major subsidiaries that are listed in Shanghai, Shenzhen, Hong Kong, Australia and/or New York which enable the Group to take advantage of the equity markets around the world through follow-on offerings, right issues or private placements of equity securities.

The Group believes that it has sufficient sources of funds to expand its business operations and capture potential growth opportunities in the future.

### **Experienced management and operations teams**

The Group maintains a dedicated management team with extensive industry experience and global vision, which assists in identifying and capturing marketing opportunities, developing and enhancing its competitive edge over other industry peers in terms of resources, manufacturing capacity and technologies and brand recognition. The Company’s management team has significant experience in the

global aluminium, copper and non-ferrous metals industries. Most of the Company's senior management team have over 15 years business management experience in the mining industry. In addition, many members of the Group's management team have received education or on-job training overseas and participated in cross-border mergers and acquisitions. See the section headed "*Directors, Supervisors and Senior Management.*" As a result, the Group's management team has accumulated valuable experience in managing and operating overseas projects. The significant experience and proven track record of the Group's successful development provides the Group's management team with an in-depth understanding of the non-ferrous market as well as other associated sectors, such as the energy industry. This allows them to develop a long-term strategy to enhance the Group's leading position and achieve sustainable development in the future.

In addition, the Group's visionary management team is supported by distinguished team of experts and professional technicians.

The Group considers its ability to attract, nurture and incentivise human resources to be of critical importance. The Group encourages innovation, and has continuously focused on attracting new talent to join and has formed a talent pool with a wide range of expertise and diversified and comprehensive personnel resources, laying a solid foundation for the Group's future development.

## **BUSINESS STRATEGIES**

The Group aims to become a leading international resources and mining company with sustainable growth potential and international competitiveness. The Group's principal strategy is to optimise its aluminium business, strengthen its copper business and further develop its rare earth metals business. In addition, the Group intends to further develop other business lines (including engineering and technical services, mineral resources development and financial services) supporting these core businesses and to focus on sectors in upstream value chains of relevant industries and high-value products. To achieve this goal, the Group intends to implement the following strategies:

### **Strengthen the aluminium business as the Group's core competitive strength**

The Group actively optimises and develops its alumina business and adjusts the lay-out of the electrolytic aluminium business. As to the downstream product development, the Group intends to enter into strategic corporations with certain major clients and other leading companies in aluminium product area to speed up the development of aluminium alloy products. The Group intends to further expand its bauxite resource base through securing more high-quality resources in China and overseas. By increasing efficiency of bauxite mining and alumina processing, the Group can convert its resource advantages into cost advantages, which in turn would increase its profitability. The Group will continue to optimise the geographic coverage of its aluminium production facilities in China to take advantage of low transportation or energy costs by locating alumina and aluminium production capacity within close proximity to areas with raw material costs and/or energy advantages. The Group also plans to focus on aluminium fabricates with advanced technologies and higher margin and decommission or restructure less-competitive and loss-making aluminium plants to enhance the Group's profitability in the long run.

In addition, the Group will continue to invest in the coal mining industry and develop coal-fired power plants for internal consumption to deliver long-term, stable and low-cost electricity to the Group's production facilities. The Group also plans to establish centralised sales and marketing, logistics and

procurement platforms to allocate and share resources and information more efficiently among all entities of the Group and secure local logistics and warehouse resources to establish a modernised “production-delivery-sales” logistics system.

### **Optimise the copper business to enhance market share and competitive advantage**

The Group intends to secure more copper ore resources around the world through exploring, acquiring and developing high-quality large-scale copper mines, especially those with long mining life, in order to increase the Group’s copper mining capacity and profitability. The Group also plans to improve its production and smelting techniques and efficiency to lower production costs and increase competitive advantage in the copper industry. In terms of product strategy, the Group will focus on the research and development of high-end copper fabrication products with high added-value, such as copper motor rotors, in response to increasing market demand for high efficiency motors used in industrial, home appliance, aviation and marine sectors. The Group will also consider restructuring non-essential and loss-making copper subsidiaries.

### **Further develop the rare earth metals business to diversify the Group’s product mix**

The Group intends to further diversify its business operations and product mix from a reliance on aluminium and copper to a variety of other non-ferrous metals, such as titanium, molybdenum, tungsten, bismuth, tin, nickel and cobalt. The Group aims to consolidate and utilise resources in the rare earth metals industry, and build a large scale rare earth metals platform in China with advanced technologies which enable it to compete more effectively in the marketplace. In particular, the Group plans to implement the following strategies to further develop its rare earth metals business:

- Continue to secure high-quality rare earth resources through acquisition and industry consolidation;
- Further develop and improve downstream smelting, processing and fabrication techniques to offer high-end rare earth materials; and
- Selectively develop certain types of rare earth metals, such as titanium, molybdenum and tungsten.

### **Further develop the engineering and technical services business as well as other businesses including mineral resources development and finance service to improve the Group’s overall profitability and market competitiveness**

The Group’s engineering and technical services business enjoys relatively higher profitability compared to its other principal business lines and the Group intends to expand this business and maintain a leading position in this industry through the following:

- Continue to leverage its advanced technologies and core competency in engineering design and consultancy and further develop construction contracting services;
- Expand upstream and downstream engineering services to develop equipment manufacturing capacities; and
- Explore opportunities in eco-friendly and new materials industries such as aluminium used in engineering projects to increase profit growth.

In addition, the Group also plans to grow its other businesses. As to its mineral resources development business, the Group plans to accelerate exploration and implement effective reserve and proactive liquidation strategies. In addition, the Group also intends to develop its finance businesses through consolidating industry resources, securing financing sources and channels, adopting innovative operation systems and providing finance services to other members of the Group.

The Group believes that further growth of the engineering and technical services business as well as other businesses will help diversify the Group's product mix and revenue sources and also improve the Group's overall profitability and market competitiveness as well as facilitate the Group's core business growth.

#### **Continue to seek overseas expansion**

Where suitable opportunities arise, the Group intends to acquire or invest in companies or assets in the mineral resources and non-ferrous industries around the world that Chinalco believes will enhance its revenue growth, operations and profitability. The Group continues to evaluate potential acquisitions of, and investments in, companies involved in the mining and non-ferrous sectors, with a primary geographic focus in Africa, Australia, South America and Asia. The Group has developed an internal set of investment criteria which include selecting investments of a strategic nature which are complementary to its existing operations. In line with this strategy, the Group has entered into joint ventures with other businesses to expand its operations into ferrous metals, such as iron ore. In July 2012, Chalco entered into a joint development agreement with Rio Tinto and Rio Tinto Iron Ore Atlantic Limited, an affiliate of Rio Tinto, for the development and operation of the Simandou Project, a premium open-pit iron ore mine located in Guinea, West Africa. In December 2013, Chalco transferred its entire interest in the Simandou Project to Chinalco.

#### **BUSINESS ACTIVITIES**

The Group principally engages in mining, refining, smelting, fabrication and trading of non-ferrous metals, mainly bauxite, alumina, primary aluminium, copper and rare earth metals, as well as providing engineering and technical services. The following table sets forth a breakdown of the Group's revenue by principal business lines for the years ended 31 December 2014 and 2015, respectively:

Principal business lines	For the year ended 31 December	
	2014	2015
	(RMB million)	
Aluminium	141,999.8	123,445.9
Copper	107,251.2	87,746.0
Rare Earth Metals	2,074.2	2,123.6
Engineering and Technical Services	18,885.0	19,449.5
Others	31,151.3	30,532.8
Elimination	(28,342.4)	(24,518.7)
<b>Total</b>	<b>273,019.1</b>	<b>238,779.1</b>

## Aluminium Business

### *Overview*

The Group conducts its aluminium business primarily through Chalco, which is a leading alumina corporation with significant influence globally. As at 31 December 2015, the Company directly holds a 32.8 per cent. equity interest in Chalco and, together with its subsidiaries, holds an aggregate 34.8 per cent. equity interest in Chalco.

The Group has benefited from the strong growth of the PRC aluminium market, one of the world's fastest growing major aluminium markets. The Group refines bauxite into alumina, which is then smelted into primary aluminium. Primary aluminium, in turn, is a widely used metal and the key raw material in aluminium fabrication. Aluminium fabrication products have applications in the construction, transportation, power generation, automobile, packaging, machinery and durable goods industries. In addition to alumina, primary aluminium and aluminium fabrication products, the Group also produces and sells a relatively small amount of alumina chemical products (alumina hydrate and alumina based industrial chemical products), carbon products (carbon anodes and cathodes) and gallium. The Group is also engaged in the trading of alumina, primary aluminium, aluminium fabrication products, other non-ferrous metal products, coal products and raw and ancillary materials in bulk, both manufactured by the Group and sourced from external suppliers domestically and abroad. In addition, the Group is engaged in coal mining and power generation through Chalco. Accordingly, the Group's aluminium business includes five principal segments: alumina, primary aluminium, aluminium fabrication, trading and energy. The Group derives a majority of its revenue from the aluminium business which amounted to RMB142.0 billion and RMB123.4 billion, representing approximately 52.0 per cent. and 51.7 per cent. respectively, for the years ended 31 December 2014 and 2015.

The Group's alumina segment includes the mining and purchasing of bauxite and other raw materials, and production and sale of alumina as well as alumina related products, such as alumina hydrate, alumina based chemical products and gallium. Alumina chemical products are used in the production of chemical, pharmaceutical, ceramic and construction materials. In the process of refining bauxite into alumina, the Group produces a small amount of gallium as a by product. Gallium is a rare, high value metal with applications in the electronics and telecommunication industries.

The Group's primary aluminium segment includes the production and sale of primary aluminium and aluminium related products, such as carbon products. The Group's principal primary aluminium products are ingots and molten aluminium. The Group's standard 20 kilogram remelt ingots are used for general aluminium fabrication in the construction, power generation, automobile, packaging, machinery and durable goods industries. The Group internally produces substantially all the carbon products used at its smelters and sells its remaining carbon products to external customers.

The Group's aluminium fabrication segment includes the production and sale of fabrication products, including casts, planks, strips, screens, extrusions, ingots and profiles, which are widely used in the construction, power generation, automobile, packaging, machinery and durable goods industries. In June 2013, Chalco disposed of substantially all of its aluminium fabrication operations to Chinalco in line with Chalco's development strategy to focus on the upstream sectors of the aluminium industry chain and the production of high value added products. Since then, the Group has operated the aluminium fabrication business through Chinalco.

The Group's trading segment includes sales of alumina, primary aluminium, aluminium fabrication products, other non-ferrous metal products, coal products and raw and ancillary materials in bulk both manufactured by it and sourced from external suppliers domestically and abroad.

Chalco established its energy segment in January 2013 as a result of its acquisition of Ningxia Energy, which was in line with its development strategy to partially offset its future energy costs and secure a portion of the coal which Chalco consumes in its operations. The Group's energy segment includes coal mining and power generation, including conventional coal fired power generation and renewable energy generation such as wind power and photovoltaic power. The Group's energy segment is in line with the Group's development strategy to partially offset its future energy costs and secure a portion of the coal it consumes in its operations. For the year ended 31 December 2015, the Group supplied part of the electricity it generated for its own production use, supplied a portion of the coal output to its own electric power plant and sold the remaining portion to external customers, including power generation enterprises and cement plants.

For the year ended 31 December 2015, the Group carried out a wide range of measures to control losses and increase profits, transform and upgrade, as well as reform and achieve innovation in its aluminium business. Firstly, by virtue of technological innovation and lean management, the Group continuously optimised the main indicators in the production of alumina and electrolytic aluminium such as its electricity consumption efficiency. To improve the utilisation rate of its facilities and profitability, the Group also shut down certain outdated production lines and loss-making production facilities. Further, the Group has obtained more favourable prices and payment terms from its suppliers by means of centralised purchasing, separate negotiation and regional collaboration. Secondly, the Group streamlined its capacity layout in accordance with energy availability and cost, and further improved its operational efficiency. The Group has formed an initial concept of resource-dependent alumina layout which aims to establish alumina bases in the regions with the richest bauxite resources in the PRC. Due to the energy-dependent characteristic of the electrolytic aluminium business, the Group has vigorously built electrolytic aluminium production bases in the areas with rich energy provision. Under such development plans, the Group has made significant progress in the construction of several major projects. For example, Guizhou Huajin Project, a newly constructed alumina project with the annual capacity of approximately 1.6 million tonnes, recorded profit during the year ended 31 December 2015 upon commencement of production and the 2×660MW ultra-supercritical power generation project of Ningxia Energy progressed smoothly. Thirdly, the Group continued to expedite technological innovation and reduced the costs of aluminium production through developing and utilising advanced energy conservation and production technologies. For the year ended 31 December 2015, Chalco carried out 62 technological research and development projects in different categories, including 18 key special projects, six technological promotion projects and 38 independent research and development projects covering mine, alumina, chemical alumina, aluminium electrolysis, carbon, recovery and comprehensive utilisation of industrial wastes, safety and environmental protection, and other fields. Fourthly, the Group further cut down its administrative costs by reform and innovation of internal management.

Going forward, the Group will further expand its energy segment to provide a stable and cost competitive power supply for its aluminium operations, in order to effectively control its production costs. The costs of electricity of primary aluminium enterprises will be further reduced through the construction of projects integrating coal, electricity and aluminium and obtaining preferential electricity prices. The Group will actively implement advanced management experiences and skills gained from other leading companies in terms of production management, human resources management and

administrative affairs management. The Group will also consider restructuring non-essential and loss-making subsidiaries and optimising human resources and cost management at the subsidiary level to enhance the Group's profitability in the long run.

### ***Production Capacity***

As at 31 December 2015, the Group's annual production capacity for alumina, primary aluminium and aluminium fabrication production was approximately 16.8 million tonnes, 3.9 million tonnes and 1.1 million tonnes, respectively. The following table sets forth the production capacity of each of the Group's principal plants by product segment as at the indicated date:

Plant	As at 31 December 2015	
	Alumina	Primary Aluminium (in thousand tonnes) <sup>(1)</sup>
Guangxi branch	2,210.0	—
Chalco Zhongzhou	3,050.0	—
Qinghai branch	—	374.3
Shanxi branch	2,600.0	—
Guizhou branch	—	333.7
Henan branch	2,410.0	—
Chalco Shandong	2,270.0	55.0
Zunyi Alumina	1,000.0	—
Chongqing branch	800.0	—
Shanxi Huaxing <sup>(2)</sup>	800.0	—
Shanxi Huaze	—	424.0
Lanzhou branch	—	388.0
Shanxi Huasheng	—	220.0
Fushun Aluminum	—	330.0
Zunyi Aluminum	—	235.0
Shandong Huayu	—	200.0
Gansu Hualu	—	230.0
Baotou Aluminium	—	538.0
Research Institute	20.0	—
Liancheng branch	—	523.0
Guizhou Huajin	1,600.0	—
<b>Total</b>	<b>16,760.0</b>	<b>3,851.0</b>

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*Notes:*

- (1) Production capacity is calculated based on designed capacity, which accounts for various assumptions including downtime for ordinary maintenance and repairs, the ore grade of bauxite feedstock and subsequent capacity modifications.
- (2) The Group disposed 50 per cent. of equity interest in Shanxi Huaxing at the end of December 2015, and as a result Shanxi Huaxing has become its joint venture in accordance with relevant accounting standards.

The Group's production of alumina and primary aluminium represented approximately 22.8 per cent. and 10.7 per cent., respectively, of the total output in China for the year ended 31 December 2015.

The following table sets forth a breakdown of the Group's production volume by product segment for the periods indicated:

Production Volume by Product	Year ended 31 December	
	2014	2015
	(in thousand tonnes, except Gallium)	
<b><i>Alumina segment</i></b>		
Alumina	12,024.0	13,296.4
Alumina chemical products	1,822.3	1,959.1
Gallium (in tonnes)	81.2	121.4
<b><i>Primary aluminium segment</i></b>		
Primary aluminium <sup>(1)</sup>	3,381.6	3,307.6
Carbon	1,877.4	1,786.6
<b><i>Aluminium fabrication<sup>(2)</sup></i></b>		
Aluminium fabrication products	1013.7	1102.0

*Notes:*

(1) Including ingots, molten aluminium and other primary aluminium products.

(2) The Group disposed of substantially all of its aluminium fabrication operations in June 2013. As a result, the Group ceased to have its aluminium fabrication business as a separate segment.

### **Production Process**

#### *Alumina*

Alumina is refined from bauxite, an aluminium bearing ore, through a chemical refining process. The refining process applied is determined by the mineral composition of the bauxite used in production. The Group's refineries may employ the Bayer process, the Bayer-sintering series process, the Bayer-sintering combined process or the ore-dressing Bayer process. Most of the bauxite reserves in China contain diasporic bauxite, which contains high alumina content and relatively high silica content, resulting in bauxite reserves with low alumina to silica ratio. The Bayer process cannot efficiently refine diasporic bauxite that has not undergone processing to increase its alumina to silica ratio. The sintering process or the Bayer sintering combined process is suitable for refining low alumina to silica ratio bauxite. The Group has developed and improved these processes to increase its refining yield. When the Group refines alumina using the Bayer process, it produces gallium as a by product, which undergoes further processing before sale. In the process of refining alumina, the Group also produces a relatively small amount of alumina chemical products (alumina hydrate and alumina based industrial chemical products).

#### *Primary Aluminium*

The Group smelts alumina into primary aluminium through electrolytic reduction. The electrolytic process takes place in a reduction cell, or pot, a steel shell lined with carbon cathodes and refractory materials. Powerful electric currents are passed through the pot to produce molten aluminium. The molten aluminium is transferred to holding furnaces and then poured directly into molds to produce foundry ingots, or further refined to form fabricating ingots, which may be used directly in the aluminium fabrication process. Most of the primary aluminium the Group produces is in the form of ingots or molten aluminium.

All of the Group's primary aluminium smelters use pre-bake anode reduction pot-lines. In the pre-bake reduction process, the anodes are preformed in a separate facility where pollutants can be contained. The cells themselves are enclosed with removable panels so that waste gas produced during the process can be extracted using large exhaust fans. The Group's waste gas is treated and purified to reduce dust and fluoride emissions to acceptable levels set by state environmental protection agencies.

#### *Aluminium Fabrication Products*

Traditionally, the aluminium fabrication process begins with the refining of primary aluminium materials. Such treatment is performed to ensure the cleanliness and purity of the output. Alloying ingredients are usually added to increase strength or provide special properties. In the subsequent stage, the treated aluminium is cast into ingots of various shapes, sizes and compositions for a number of uses. Ingots are then converted into sheet, plate or foil products, as well as extruded shapes for engineering and architectural applications. Value-added foundry alloy ingots for shape castings and unalloyed ingots for re-melting are sold mainly to third parties.

In recent years, the Group actively promotes the application of continuous casting as an alternative technique for aluminium fabrication. When this technique is performed, molten metal is cast directly into semi-finished form, bypassing the ingot stage. As it is unnecessary to re-melt ingots, substantial energy and cost saving can be achieved while damage due to overheating could be avoided. Continuous casting is becoming more widely used for sheet and foil products, particularly for rods, which are subsequently drawn into many forms of electrical and mechanical wire.

#### *Production Facilities*

##### *Alumina*

The Group currently operates nine alumina refineries and one research institute (for research and development purposes) with a total designed annual production capacity of approximately 16.8 million tonnes as at 31 December 2015. One of the Group's refineries is integrated with primary aluminium smelters. For the year ended 31 December 2015, the Group supplied approximately 5.3 million tonnes, or 39.8 per cent. of the Group's total production, of alumina to its own smelters and sold the remaining alumina to other domestic smelters.

The following table sets forth the annual production capacity, output of alumina and alumina chemical products, utilisation rate of and production process applied in each of the Group's alumina refineries and its Research Institute:

	As at 31 December 2015		For the Year Ended 31 December 2015		
	Annual Production Capacity <sup>(1)</sup>	Utilisation Rate <sup>(2)</sup>	Alumina Production Output	Alumina Chemical Products Output	Production Process
			(in thousand tonnes, except percentages)		
Shanxi branch	2,600.0	93%	2,407.0	28.4	Bayer-sintering
Henan branch	2,410.0	35%	1,963.9	191.4	Bayer-sintering
Chalco Shandong	2,270.0	100%	1,636.9	1,197.0	Sintering and Bayer
Chalco Zhongzhou	3,050.0	72%	2,031.2	372.8	Sintering and Bayer
Guangxi branch	2,210.0	100%	2,452.8	125.1	Bayer
Zunyi Alumina	1,000.0	100%	1,061.6	2.9	Bayer
Chongqing branch	800.0	—	—	—	Bayer-sintering
Shanxi Huaxing <sup>(3)</sup>	800.0	100%	1,196.2	5.3	Bayer
Research Institute <sup>(4)</sup>	20.0	—	—	36.2	Bayer
Guizhou Huajin	1,600.0	100%	546.8	—	Bayer
<b>Total</b>	<b>16,760.0</b>	<b>80.0%</b>	<b>13,296.4</b>	<b>1,959.1</b>	

*Notes:*

- (1) Production capacity is calculated based on designed capacity, which accounts for various assumptions including downtime for ordinary maintenance and repairs, the ore grade of bauxite feedstock and subsequent capacity modifications.
- (2) Capacity utilisation rate is calculated by dividing the utilised production capacity as at the date indicated by the total designed annual production capacity.
- (3) The Group disposed 50% of equity interest in Shanxi Huaxing at the end of December 2015, and as a result Shanxi Huaxing has become its joint venture in accordance with relevant accounting standards.
- (4) The alumina chemical products produced at its Research Institute are sold commercially and such sales are included in the total revenues.

*Primary Aluminium*

The Group operates 12 primary aluminium smelters located across in China, including its Research Institute, which produces a limited amount of primary aluminium in connection with its research and development activities. The Group's smelters had an aggregate annual production capacity of approximately 3.9 million tonnes as at 31 December 2015.

For the year ended 31 December 2015, the Group produced approximately 3.3 million tonnes of primary aluminium and the average utilisation rate for its smelters decreased from 94.0 per cent. in 2014 to 71.0 per cent. for the year ended 31 December 2015. This is mainly because the Group suspended the operations of certain primary aluminium production facilities in its Gansu Hualu and Fushun Aluminium with an aggregate annual designed production capacity of approximately 560,000 tonnes since September 2015. Considering the sustained weak primary aluminium pricing environment and continued deterioration in primary aluminium prices, the international and domestic price of primary aluminium was in a downward trend and further experienced a cliff-like drop in the fourth quarter. The price remained at a low level although it stabilised following a dip at the end of 2015.

The following table sets forth the annual production capacity, aluminium output, utilisation rate and smelting equipment used in each of the Group's aluminium smelters and its Research Institute:

Plant	As at 31 December 2015		For the Year Ended 31 December 2015	
	Annual Production Capacity <sup>(1)</sup>	Utilisation Rate <sup>(2)</sup>	Aluminium Output	Smelting Equipment
	(in thousand tonnes, except percentages)			
Baotou Aluminum	538.0	98.7%	545.7	200Ka, 240Ka and 400Ka pre-bake
Fushun Aluminum <sup>(3)</sup>	330.0	—	181.9	200Ka and 350Ka pre-bake
Gansu Hualu <sup>(4)</sup>	230.0	—	192.1	160Ka and 210Ka pre-bake
Guizhou branch	333.7	77.2%	306.9	160Ka and 230Ka pre-bake
Lanzhou branch	388.0	94.6%	403.0	200Ka and 350Ka pre-bake
Qinghai branch	374.3	99.7%	399.5	160Ka and 200Ka pre-bake
Shandong Huayu	200.0	97.9%	216.8	240Ka pre-bake
Chalco Shandong <sup>(5)</sup>	55.0	—	—	200Ka pre-bake
Shanxi Huasheng	220.0	99.6%	222.9	300Ka pre-bake
Shanxi Huaze	424.0	78.2%	263.5	300Ka pre-bake
Zunyi Aluminum	235.0	41.1%	102.7	200Ka and 350Ka pre-bake
Liancheng branch	523.0	66.2%	472.6	200Ka and 500Ka pre-bake
<b>Total</b>	<b>3,851.0</b>	<b>71.0%</b>	<b>3,307.6</b>	

*Notes:*

- (1) Production capacity takes into account designed capacity, downtime for ordinary maintenance and repairs and subsequent capacity modifications.
- (2) Capacity utilisation rate is calculated by dividing the utilised production capacity as at the date indicated by the total designed annual production capacity.
- (3) The Group suspended the operations of primary aluminium production facilities in Fushun Aluminum in 2015.
- (4) The Group suspended the operations of primary aluminium production facilities in Gansu Hualu in 2015.
- (5) The Group suspended the operations of primary aluminium production facilities in Chalco Shandong since June 2013.

*Aluminium Fabrication Products*

The Group mainly operates seven aluminium fabrication plants located across five provinces in the PRC. The following table sets forth the annual production capacity, output of aluminium fabrication products and utilisation rate of each of the Group's aluminium fabrication plants:

Plant	As at 31 December 2015		Year ended 31 December 2015	
	Annual Production Capacity <sup>(1)</sup>	Aluminium Fabrication Output	Utilisation Rate <sup>(2)</sup>	
	(in thousand tonnes, except percentages)			
Southwest Aluminum	340	260	76%	
Chalco Ruimin	320	200	63%	
Chalco-SWA Cold Rolling	430	210	49%	
Chalco-SWA Hot Tandem Rolling	350	262	75%	
Chalco Henan Aluminum Fabrication	120	78	65%	
Northeast Light Alloy	120	80	67%	
Northwest Aluminum	50	12	24%	
<b>Total</b>	<b>1,730</b>	<b>1,102</b>	<b>64%</b>	

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*Notes:*

- (1) Production capacity takes into account designed capacity, downtime for ordinary maintenance and repairs and subsequent capacity modifications.
- (2) Capacity utilisation rate is determined by dividing the production output by production capacity.

## **Raw Materials**

### *Alumina*

Bauxite is the principal raw material in alumina production. Most of the bauxite in China is  $\text{Al}_2\text{O}_3 \cdot \text{H}_2\text{O}$  mineral. Bauxite deposits have been discovered across a broad area of central China and are especially abundant in the southern and northern parts of central China. The largest bauxite deposit in China lies in Shanxi Province.

To support the growth of the Group's alumina production, the Group continuously seeks opportunities to streamline and optimise procurement of bauxite. Except for the Group's Shandong branch, all of its refineries are located in the four provinces where over 90 per cent. of China's potentially mineable bauxite has been found. The Group generally sources its bauxite from mines close to its refineries to control transportation costs. Historically, the Group has procured its bauxite supply principally from three main sources:

- the Group's own bauxite mining operations;
- jointly-operated mines; and
- third-party suppliers, which principally include small independent mines in China and, to a lesser extent, international suppliers.

On average, the Group's refineries consume approximately 2.2 tonnes of bauxite to produce one tonne of alumina for the year ended 31 December 2015. The Group used approximately 31.64 million tonnes and 32.38 million tonnes of bauxite in its alumina production in 2014 and 2015, respectively. The production of the Group's own mines was approximately 17.9 million tonnes for the year ended 31 December 2015. The Group purchases bauxite from a number of suppliers and does not rely on any single supplier for its bauxite requirements. For the year ended 31 December 2015, bauxite secured from third-party suppliers accounted for approximately 44.6 per cent. of the Group's total bauxite supply, primarily because the Group's demand for bauxite exceeded the production of its own mines.

The following table sets forth the volumes and percentages of bauxite supplied by the Group's own mines, jointly-operated mines and third-party suppliers for the periods indicated:

	Year Ended 31 December			
	2014		2015	
	Bauxite Supply	Percentage of Bauxite Supply (%)	Bauxite Supply	Percentage of Bauxite Supply (%)
(in thousand tonnes, except percentages)				
Own mines	17,542.6	55.4	17,930.2	55.4
Jointly-operated mines <sup>(1)</sup>	—	—	—	—
Other suppliers	14,105.4	44.6	14,452.0	44.6
<b>Total</b>	<b>31,648.0</b>	<b>100.0</b>	<b>32,382.2</b>	<b>100.0</b>

*Note:*

(1) As at 31 December 2015, the Group no longer owned any jointly-operated mines.

*Own Mines.* As at 31 December 2015, the Group owned and operated 20 mines in China that had approximately 270.6 million tonnes of aggregate bauxite reserves. The Group will continue to explore new bauxite reserves to replenish the Group's reserves. The Group also owns and operates a bauxite mine in Laos through Lao Service Mining, in which the Group holds 60 per cent. of the equity interest. The Group also holds the requisite mining permit or exploration permit for three bauxite mines in West Kalimantan, Indonesia through the Group's 96.28 per cent. owned subsidiary, PT Nusapati Prima. The Group's bauxite deposits in Indonesia are lateritic gibbsite and were formed by weathering and leaching of aluminium-rich silicate rock in tropical climates. The Group used low temperature Bayer process to refine alumina from the Group's bauxite deposits in Indonesia, which results in relatively low energy consumption and high dissolution rate, before the Group's operation of bauxite mining in Indonesia was suspended in September 2014.

For the two years ended 31 December 2014 and 2015, the Group extracted approximately 17.3 million tonnes and 17.9 million tonnes, respectively, of bauxite from the Group's own mines. In order to retain the title to the Group's mines, or obtain the title to new mines in China, the Group is required to comply with mining qualifications approved by the relevant PRC authorities and pay an annual fee equivalent to RMB1,000 per km<sup>2</sup> for the Group's mines.

The Group's reported bauxite reserves for its own mines in China do not exceed the quantities that the Group estimates could be extracted economically if future prices were at similar levels to average historical prices for traded metals for the years ended 2014 and 2015, or the three year historical contracted prices for bulk commodities. However, the Group does not use the three year historical bauxite or aluminium price to determine bauxite reserves, nor did the Group utilise any currency conversion factors or pricing related mechanisms. Instead, the primary criteria are the specifications required by the Group's aluminium refineries, as well as certain modifying factors that are dependent on reserve quality.

The following table sets forth information for the Group's own mines as at 31 December 2015:

<b>Mine</b>	<b>Location</b>	<b>Nature of Ownership<sup>(1)</sup></b>	<b>Mining Method</b>	<b>Permit Renewal<sup>(1)</sup></b>	<b>Present Condition/ Current State of Exploration</b>	<b>Bauxite Production (in thousand tonnes)</b>
Pingguo mine	Guangxi Zhuang Autonomous Region, China	100% owned and operated by Chalco	Open pit	October 2030 — April 2036	Fully developed and operational	5,670
Guizhou mine <sup>(2)</sup>	Guizhou Province, China	100% owned and operated by Chalco	Open pit/underground	September 2016 — December 2038	Fully developed and operational	1,312
Zunyi mine	Guizhou Province, China	100% owned and operated by Chalco	Open pit/underground	August 2017 — May 2021	Two stopes are currently under development	306
Xiaoyi mine	Shanxi Province, China	100% owned and operated by Chalco	Open pit	December 2015 — September 2031	Fully developed and operational	2,376
Shanxi Other Mines	Shanxi Province, China	100% owned and operated by Chalco	Open pit/underground	December 2015 <sup>(3)</sup> — July 2035	Fully developed and operational or under development	2,837
Mianchi mine	Henan Province, China	100% owned and operated by Chalco	Open pit/underground	December 2015 <sup>(3)</sup> — October 2031	Four stopes are currently under development	441
Luoyang mine	Henan Province, China	100% owned and operated by Chalco	Open pit/underground	December 2015 <sup>(3)</sup> — October 2031	Two stopes are currently under development	928
Xiaoguan mine	Henan Province, China	100% owned and operated by Chalco	Open pit/underground	May 2017 — October 2031	Fully developed and operational	341
Gongyi mine	Henan Province, China	100% owned and operated by Chalco	Open pit/underground	August 2016 — April 2029	Fully developed and operational	702
Dengfeng mine	Henan Province, China	100% owned and operated by Chalco	Open pit/underground	June 2016 — July 2019	Fully developed and operational	209
Xinmi mine	Henan Province, China	100% owned and operated by Chalco	Open pit/underground	July 2017 — July 2020	Three stopes are currently under infrastructure development	11
Sanmenxia mine	Henan Province, China	100% owned and operated by Chalco	Underground	April 2017 — October 2026	Fully developed and Operational	12
Xuchang mine	Henan Province, China	100% owned and operated by Chalco	Open pit/underground	September 2015 <sup>(3)</sup> — August 2024	Fully developed and operational	204
Jiaozuo mine	Henan Province, China	100% owned and operated by Chalco	Open pit/underground	September 2016 — October 2024	Two stopes are currently under development	124
Pingdingshan mine	Henan Province, China	100% owned and operated by Chalco	Open pit/underground	June 2015 <sup>(3)</sup> — October 2024	Fully developed and operational	301
Ruzhou mine <sup>(4)</sup>	Henan Province, China	100% owned and operated by Chalco	Open pit	October 2015 <sup>(3)</sup> — December 2018	One stope is current under development	63.8
Yangquan mine	Shanxi Province, China	100% owned and operated by Chalco	Open pit	June 2016 — November 2035	Suspended production	—
Nanchuan mine	Chongqing Municipality, China	100% owned and operated by Chalco	Underground	November 2016 — December 2026	Suspended production	—
Huaxing mine <sup>(5)</sup>	Shanxi Province, China	100% owned and operated by Chalco	Underground	August 2018 — September 2018	Fully developed and operational	2,020

Mine	Location	Nature of Ownership <sup>(1)</sup>	Mining Method	Permit Renewal <sup>(1)</sup>	Present Condition/ Current State of Exploration	Bauxite Production (in thousand tonnes)
PT ALUSENTOSA	West Kalimantan, Indonesia	Owned and operated by PT NusapatiPrima, a 96.28% subsidiary of Chalco	Open pit	December 2027	Suspended production	—
PT KALMIN	West Kalimantan, Indonesia	Owned and operated by PT NusapatiPrima, a 96.28% subsidiary of Chalco	Open pit	December 2027	Suspended production	—
PT VISITAMA	West Kalimantan, Indonesia	Owned and operated by PT NusapatiPrima, a 96.28% subsidiary of Chalco	Open pit	December 2015 <sup>(3)</sup>	Under exploration	—
Laos bauxite mine	Attapeu Province and Sekong Province, Laos	Owned and operated by Laos Mineral Services Co., Ltd., a 60% subsidiary of Chalco	Open pit	June 2017	Exploration completed	—

*Notes:*

- (1) All conditions to retain the Group's properties or leases have been fulfilled as at 31 December 2015. Each mine may be covered by one or more mining permits or exploration permits and the range of permit renewal dates is set forth above.
- (2) Including Guizhou No. 1 mine and Guizhou No. 2 mine.
- (3) The Group is in the process of renewing these permits.
- (4) Chalco Zhongzhou established Ruzhou mine in 2015 to manage the stopes of Autou and Shengjiacun, which were originally managed by Pingdingshan mine.
- (5) The mining right in Ao Jiawan under the Huaxing mine was injected into Shanxi Huaxing as capital contribution in September 2015, and as at 31 December 2015, the transfer of the mining right in Ao Jiawan was in the process of filing with relevant government authorities.

The following table sets forth certain estimated details of the reserves for the Group's own mines in China as at 31 December 2015:

Mine	Total	Average Grade (%)		Ratio of Average A/S <sup>(3)</sup>
	Reserves <sup>(1)(2)</sup> (million tonnes)	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	
Pingguo mine	64.32	54.03	4.87	11.09
Guizhou No. 1 mine	0.81	65.40	9.77	6.69
Guizhou No. 2 mine	21.97	62.54	9.37	6.67
Zunyi mine	7.32	57.05	9.48	6.01
Xiaoyi mine	24.52	62.44	13.34	4.68
Shanxi Other Mines	18.59	64.47	11.63	5.55
Huaxing mine	6.26	62.84	10.14	6.20
Mianchi mine	2.77	63.26	12.00	5.27
Luoyang mine	3.54	61.14	9.80	6.24
Xiaoguan mine	26.27	63.54	15.06	4.22
Gongyi mine	2.70	64.00	14.13	4.53
Dengfeng mine	1.39	62.77	11.80	5.32
Xinmi mine	2.26	68.59	11.04	6.21
Sanmenxia mine	43.10	63.40	12.65	5.01
Xuchang mine	1.46	62.49	10.00	6.25
Jiaozuo mine	1.68	58.61	14.79	3.96
Pingdingshan mine	3.27	62.18	13.50	4.61
Ruzhou mine <sup>(4)</sup>	0.70	59.71	15.03	3.97
Yangquan mine	7.46	58.63	13.73	4.27
Nanchuan mine	30.17	60.62	13.95	4.35
Total (average) reserves	<b>270.56</b>	<b>60.42</b>	<b>10.75</b>	<b>5.62</b>
<b>By reserve type</b>				
Proven reserve	120.68	60.67	10.75	5.64
Probable reserve	149.88	60.22	10.75	5.60
<b>Total (average) reserves</b>	<b>270.56</b>	<b>60.42</b>	<b>10.75</b>	<b>5.62</b>

*Notes:*

- (1) The Group's reserves take into consideration mining dilution and loss factors, which generally vary from 5 per cent. to 10 per cent. and are based on the planned mining method and selected drill data for each site.
- (2) The Group's metallurgical recovery factors are calculated in accordance with the relevant PRC mining standards and vary from mine to mine.
- (3) Refers to the ratio of average grade of Al<sub>2</sub>O<sub>3</sub> to the average grade of SiO<sub>2</sub> of the reserves.
- (4) Chalco Zhongzhou established Ruzhou mine in 2015 to manage the stopes of Autou and Shengjiacun, which were originally managed by Pingdingshan mine.

*Jointly-operated Mines.* Historically, the Group has procured part of its bauxite supply from its jointly-operated mines. The Group managed these jointly-operated mines by contracting with local companies for their mining services to operate mines owned by us. In the years ended 31 December 2014 and 2015, the Group's jointly-operated mines did not produce any bauxite. As at 31 December 2015, the Group managed all its mines by its own and no longer had any jointly-operated mines.

*Third-party Suppliers.* In addition to the Group's own mines, the Group also sources bauxite from other third-party suppliers. A majority of third-party suppliers are small independent mines. Small independent mines are not affiliated with the Group and generally have annual bauxite production capacities not exceeding 200,000 tonnes. These mines have been an important source of bauxite for the

Group's operations. The Group purchases bauxite directly from small independent mines or through local distributors that procure bauxite from these mines. In addition, the Group also secures a portion of bauxite overseas.

*Alumina to Silica Ratio.* The production method for alumina refining is determined by the mineral composition of the bauxite, in particular, its alumina to silica ratio. Most of the bauxite reserves in China are diasporic with low alumina to silica ratios. Based on the Group's current technology, an efficient application of the Bayer process requires bauxite with an alumina to silica ratio of 10:1 or higher, while the sintering process can refine bauxite with an alumina to silica ratio as low as 4:1. In the year of 2015, the average alumina to silica ratio of the proven and probable reserves of the Group's mines ranges from approximately 3.96:1 to 11.09:1.

*Prices.* There is neither governmental regulation on bauxite prices nor an official trading market for bauxite in China. The Group negotiates bauxite prices with its suppliers based on ore quality, mining costs, market conditions, transportation costs and various governmental taxes or levies, including a resource tax imposed by local governments. The Group's total bauxite cost is influenced by the following factors:

- the cost of the Group's mining operations;
- the market conditions relating to purchases from small independent mines; and
- the market conditions relating to purchases from overseas

The average purchase price of bauxite per tonne from the Group's joint operations and other suppliers for the years ended 31 December 2014 and 2015 was approximately RMB412.0 and RMB383.0 respectively. The average cost of bauxite per tonne from the Group's own mines for the years ended 31 December 2014 and 2015 was approximately RMB246.9 and RMB251.6 respectively.

The Group purchases a substantial amount of bauxite to satisfy its alumina production needs. Additionally, to fully utilise the bauxite from the Group's mines, the Group refines all bauxite that meets the minimum technical requirements for its production of alumina. The Group also purchases higher grade ore from other suppliers and blends ore of various grades to meet the technical requirements for its alumina production. This practice allows for flexibility and the inclusion of lower grade bauxite to optimise the use of bauxite deposits available to the Group.

The following table sets forth the Group's capital expenditures for its bauxite mines for the periods indicated:

Production Volume by Product	Year Ended 31 December	
	2014	2015
	(RMB in thousands)	
<b>Capital Expenditures</b>		
Infrastructure construction	1,116,770.3	950,980.6
Facility upgrade	372,256.8	62,910.9
<b>Total</b>	<b>1,489,027.1</b>	<b>1,013,891.5</b>

### *Primary Aluminium*

An average of approximately 1.9 tonnes of alumina and 13,526 kWh of electricity were required to produce one tonne of primary aluminium for the year ended 31 December 2015. Alumina and electricity, the two principal components of costs in the smelting process, accounted for approximately 38.9 per cent. and 38.6 per cent., respectively, of the Group's unit primary aluminium production costs for the year ended 31 December 2015. Apart from alumina and electricity, the Group also requires carbon anodes, carbon cathodes, fluoride salt and cryolite for its smelting operations.

Alumina is the main raw material in the production of primary aluminium. In 2015, the Group supplied approximately 5.3 million tonnes, or 39.8 per cent. of its total production of alumina, to its own smelters and sold the remaining alumina to other domestic smelters. All of the alumina chemical products that the Group produced in 2015 were sold by alumina refineries directly to external customers or internally to Chalco Trading for subsequent external trading. The Group's primary aluminium plants that do not have integrated alumina refining operations onsite obtain alumina internally from the Group's alumina refineries located elsewhere or externally on the market.

### *Aluminium Fabrication Products*

The main raw material for the Group's aluminium fabrication operations is primary aluminium. The Group also uses other metal raw materials in aluminium fabrication, depending on the type of product. The Group meets the primary aluminium requirements of its aluminium fabrication segment with primary aluminium supplied by its own aluminium smelters.

### *Supplemental Materials, Electricity and Fuel*

The procurement department at Chalco's headquarters coordinates and manages the Group's supply chain for all of the Group's major raw materials in conjunction with the distribution center at each production facility, which manages the logistics and inventory of raw materials locally. The Group is able to purchase diesel, the main fuel used by its mining and manufacturing equipment, from the public markets, and the Group sources its water from local rivers, lakes or underground sources.

#### *Alumina*

Electricity, coal, alkali (caustic soda or soda ash) and heavy oil are the principal materials used in the Group's alumina production. Electricity is one of the principal cost components in the Group's refining process. The Group generates electricity at a number of refineries and purchases its remaining electric power requirement from regional power grids at government mandated rates. Most of the Group's power supply plants are one to three year renewable plants. Power prices in China can vary, sometimes substantially, from one region to another, based on demand and power production costs in the region. Power costs for the Group's various alumina refineries vary accordingly.

Large quantities of coal is used as a reducing agent and fuel to produce steam and gas in the alumina refining process. As at 31 December 2015, the Group held minority interests in a number of coal mining enterprises, including Shanxi Jiexiu, Qinghai Energy, Xuehugou Coal Industry Co., Ltd., Datong Coal Group Huasheng Wanjie Coal Co., Ltd., Dongdong Coal, Chalco Liupanshui, Huozhou Coal Group Xingshengyuan Coal Co., Ltd. and Guizhou Yuneng. The Group holds 70 per cent. of the equity interest in Gansu Huayang, which holds mining rights for coal deposits in the Luochuan mining

area, Gansu Province. The Group has also acquired the mining rights for coal deposits in the Laodonghe area, Guizhou Province. In addition, the Group has acquired 70.82 per cent. of the equity interest in Ningxia Energy, which holds mining rights for coal deposits in Ningxia Autonomous Region.

All of the coal mining enterprises in which the Group directly or indirectly have minority equity interest are currently in the extraction or trial production stage, except:

- Chalco Liupanshui, a joint venture company in which the Group holds 49 per cent. of the equity interest;
- Huozhou Coal Group Xingshengyuan Coal Co., Ltd., a joint venture company in which Shanxi Huasheng holds 43.03 per cent. of the equity interest; and
- Guizhou Yuneng, a joint venture company in which the Group holds 25 per cent. of the equity interest.

Guizhou Yuneng is under development. The production of Huozhou Coal Group Xingshengyuan Coal Co., Ltd. and one of the mines owned by Chalco Liupanshui is currently suspended due to production technology renovation. By investing in coal mining enterprises and acquiring mining rights for coal deposits, the Group plans to partially offset its future energy costs, and secure a portion of the coal the Group consumes in its operations.

Alkali is used as a supplemental material in alumina refining. The sintering process and the Bayer-sintering combined process require soda ash while caustic soda is used in the Bayer process. The Group's alumina refineries use, natural gas and coal gas as fuel to refine alumina. The Group purchases these raw materials from external suppliers under negotiated supply contracts, which the Group believes are competitively priced.

#### *Primary Aluminium*

Smelting primary aluminium requires a substantial and continuous supply of electricity. The availability and price of electricity are key factors in the Group's primary aluminium production. Electricity costs may fluctuate from time to time due to cyclical demand and government policies to regulate key industries.

The Group generates electricity at four of its smelters and purchases its remaining electric power requirement from regional power grids or directly from power generation enterprises. As at 31 December 2015, eight of its smelters have entered into direct purchase agreements with power generation enterprises. In 2015, Baotou Aluminum entered into a multi-sides electricity purchase agreement, pursuant to which Baotou Aluminum is able to purchase electricity from various sellers in the electricity market with a broker or the electricity exchange center sitting in the middle to arrange and facilitate the transaction. The Group purchases electricity from the regional power grids at prices set by the government for the rest of its smelters. Industrial users within each region are generally subject to a common electricity tariff schedule, but prices vary, sometimes substantially, across regions. The Group believes its power supply from regional grids is generally not reliant upon any particular generation facility supplying the grid. Electricity purchased from different power grids is subject to different tariff levels for the year ended 31 December 2015. The average electricity cost of the Group's smelters was approximately RMB0.34/kWh in 2015, which decreased by 18.8 per cent. as compared to 2014, primarily due to its diversified electricity purchase arrangement, the increased proportion of self-generated electricity and decreased price of coal.

Carbon anodes and cathodes are key raw materials in the smelting process. Each of the Group's smelters is able to produce carbon products necessary for its operations other than carbon cathodes. Guizhou branch is able to produce carbon cathodes.

### ***Sales and Marketing***

The Group coordinates substantially all of its sales and marketing activities of its self-produced alumina products and the sales and marketing activities of its self-produced primary aluminium products through Chalco Trading. Chalco's subsidiaries and branches sell substantially all of its self-produced aluminium fabrication products and some of its self-produced primary aluminium products directly to external customers. The Group's alumina refineries sell its alumina chemical products directly to external customers or indirectly through Chalco Trading for subsequent external trading. For all of Chalco's self-produced products that are sold either through Chalco Trading for subsequent external sale or directly to external customers, Chalco's subsidiaries and branches play an important role in providing after sales services and strengthening Chalco's presence in the marketplace. Since late 2009, Chalco also has been engaged substantially in the trading of non-ferrous metal products including alumina, primary aluminium, copper, zinc and lead as well as coal products that it sources from third-party suppliers through Chalco Trading.

#### *Alumina*

The Group sells its self-produced alumina to customers primarily through Chalco Trading, giving priority to customers with whom the Group has long standing relationships and who have established a strong credit history, after reserving sufficient alumina for the Group's forecasted primary aluminium production. In addition, the Group also procures and sells outsourced alumina under long-term agreements or on the spot market through Chalco Trading. The Group sold approximately 2.2 million tonnes and 1.3 million tonnes of outsourced alumina for the years ended 31 December 2014 and 2015, respectively.

The sales prices of alumina that the Group's alumina refineries sell internally to Chalco Trading are determined based on both a percentage of the average three-month primary aluminium futures prices on the Shanghai Futures Exchange in the preceding calendar month and the average spot price of alumina in the domestic market in the preceding calendar month. Chalco Trading coordinates the external sales of the Group's alumina products. Chalco Trading sells the Group's self-produced alumina and alumina sourced from third-party suppliers to smelters throughout China. All of Chalco's major customers in the past three years have been domestic smelters. In the case of alumina sourced from third-party suppliers, the Group may procure alumina under long-term supply agreements or on the spot market. The Group's long-term supply agreement for the procurement of alumina normally sets forth the quantity of alumina to be procured by the Group in each month with the price for each monthly delivery to be determined through negotiations in the month before delivery.

Chalco sells most of its self-produced alumina and a portion of the outsourced alumina under long-term sales agreements with terms ranging from one year to three years. Chalco's long-term sales agreement for alumina normally sets forth the quantity of alumina to be sold by it in each year or month with the price for each monthly delivery to be determined at a percentage of the average three-month primary aluminium futures prices on the Shanghai Futures Exchange in the calendar month before delivery. Chalco's customer is normally required to pay for its procurement before each delivery. As a result, fluctuations of primary aluminium prices on the Shanghai Futures Exchange affect alumina prices under Chalco's long-term sales agreements.

Chalco Trading sells the rest of the Chalco's self-produced and outsourced alumina products on the spot market. The Group sets the price for the external sales of alumina products by reference to alumina prices at reference markets and taking into account the following factors:

- international and domestic supply-demand situation;
- Cost, Insurance and Freight (CIF) Chinese ports prices for alumina imports into China;
- international and domestic transportation costs;
- the Group's short-term and mid-term projections for alumina; and
- relevant import expenses.

Chalco sells the rest of the outsourced alumina on the spot market at prices determined through negotiations with its customers.

#### *Primary Aluminium*

The Group's primary aluminium manufacturing subsidiaries and branches sell a portion of its primary aluminium output directly to external customers. Group's primary aluminium manufacturing subsidiaries and branches also sell a portion of the Group's primary aluminium output internally to Chalco Trading at prices based on the spot price of primary aluminium on the Shanghai Futures Exchange. Chalco Trading then coordinates the external sales of primary aluminium. The Group consumes the remaining primary aluminium output at its own aluminium fabrication plants. The Group's subsidiaries including Chalco Trading sell the Group's self-produced primary aluminium products to external customers through the following three channels:

- **Contract sales.** Most of the Group's primary aluminium sales are made pursuant to contracts entered into directly with the Group's long standing customers. Terms of the sales contracts for primary aluminium are typically one year. The Group prices its primary aluminium products based on the Shanghai Futures Exchange futures prices and spot market prices.
- **Sales on the Shanghai Futures Exchange.** As part of the Group's effort to manage market risk, it sells a portion of its primary aluminium products on the Shanghai Futures Exchange through futures contracts with terms ranging from one month to twelve months to hedge against declines in primary aluminium prices.
- **Sales on the spot market.** The Group also sells its primary aluminium products on the spot market at the reference prices the Group sets and adjusts as necessary.

In addition, Chalco also procures and sells outsourced primary aluminium on the spot market or through short-term futures and options transactions.

To improve the efficiency of Chalco's distribution, Chalco divides its China market into several regions as follows:

- Southern China (including Guangdong and Fujian Provinces);
- Eastern China (including Jiangsu and Zhejiang Provinces and Shanghai Municipality);

- Southwestern China (including Sichuan Province and Chongqing Municipality);
- The Beijing Tianjin Tanggu area; and
- Central China.

Chalco sells substantially all of its self-produced and outsourced primary aluminium to domestic customers. Chalco expects China to remain the Group's key market for primary aluminium for the foreseeable future. Customers of Chalco's primary aluminium products principally consist of aluminium fabricators and distributors that resell Chalco's primary aluminium products to aluminium fabricators or other purchasers. The Group establishes pricing guidelines for Chalco Trading to conduct external domestic sales of the Group's self-produced primary aluminium products, taking into account three main factors: the primary aluminium spot prices and futures price on Shanghai Futures Exchange; spot price in the regions of eastern China and southern China; the Group's production costs and expected profit margins; and supply and demand. The Group determines its sales prices of the outsourced primary aluminium through negotiations with its customers, taking into consideration factors including its procurement prices and the prevailing market conditions. The smelter filling an order from an external customer is generally responsible for negotiating the pricing and delivery terms and must comply with the market pricing guidelines. In general, the Group satisfies each purchase order with products from its nearest smelter to minimise transportation costs.

#### *Aluminium Fabrication Products*

The Group produces aluminium fabrication products based on market demand. For the year ended 31 December 2015, the Group's aluminium fabrication subsidiaries and branches sold substantially all of its aluminium fabrication products directly to external customers. The Group extends credit terms for sales of aluminium fabrication products, requiring payment within a short period after delivery. The prices for the Group's aluminium fabrication products are set by agreement with its customers.

#### *Delivery*

The Group relies on railway and trucks for the delivery of products within China. The Group's alumina is transported by rail or trucks, and transportation costs are generally borne by the Group's customers and excluded from the Group's sales prices. For long distance deliveries, the Group maintains spur lines connecting its plants to the national railway routes. The price of rail shipping on the PRC national railway system is fixed by the government. Most of the Group's primary aluminium products are transported by rail.

### **Copper Business**

#### *Overview*

The Group's copper business is principally conducted by China Copper as well as CMC which holds the entire stake in the Toromocho Project in Central Peru, one of the largest copper mine in the world. For the years ended 31 December 2014 and 2015, the Group's copper business contributed RMB107.3 billion and RMB87.7 billion, respectively, to the Group's revenue, representing approximately, 39.3 per cent. and 36.7 per cent., respectively, of the Group's total revenue.

China Copper holds five principal subsidiaries in this segment, including Yunnan Copper Industry, Chinalco Luoyang Copper, Chinalco Kunming Copper, Chinalco Shanghai Copper and Chinalco Central China Copper. As at 31 December 2015, China Copper holds 58.00 per cent. of the equity interest in Yunnan Copper Industry, which in turn holds 48.17 per cent. of the equity interest in Yunnan Copper Co, which was listed on the Shenzhen Stock Exchange in June 1998 (stock code: 000878). CMC was listed on the Hong Kong Stock Exchange in January 2013 (stock code: 3668). As at 31 December 2015, Chinalco holds 84.63 per cent. of the issued share capital of CMC through the Guarantor. Yunnan Copper Industry is a renowned copper producer in China engaged in the production of high-purity copper cathode, copper wire bar for electrical purposes, industrial sulphuric acid, gold ingots, silver ingots, round copper wire for electrical purposes, bluestone and the recycling of various non-ferrous metals such as gold, silver, aluminium, bismuth, tin, platinum and palladium. CMC is a resource development company acting as the Group's core platform for the future acquisition, investment, development and operation of non-ferrous and non-aluminium mineral resources and projects outside China. CMC holds nearly the entire stake in the Toromocho Project in central Peru, one of the largest copper mines in the world, which commenced commercial production since 17 June 2015. The Toromocho Project achieved annual production of 763.5 thousand tonnes of copper concentrate and 182.3 thousand tonnes of copper contained in the concentrate for the year ended 31 December 2015, being the first year of its operations. The Group expects that the Toromocho Project will produce approximately 756 thousand tonnes of copper concentrate with 179 thousand tonnes of copper contained in the concentrate for the year ended 31 December 2016.

The Group's copper fabrication segment is principally conducted through Chinalco Luoyang Copper, Chinalco Shanghai Copper, Chinalco Kunming Copper and Chinalco Central China Copper. The Group's copper fabrication subsidiaries are among the largest producers of copper fabrication products and are equipped with advanced production facilities in the PRC. The Group's copper fabrication products are offered in the forms of tubes, pipes, plates, sheets, foils, rods, rolls, strips, cables, wires, pipe fittings, forgings and castings. Such fabricates have been widely employed in the high-technology industry, information, electronics, aviation, automobile, ship-building, household appliances, construction materials and electricity supply sectors. As at 31 December 2015, the Group offers over five categories of copper fabricates, which are further divided into over seven species and over 100 specifications.

### **Production Capacity**

As at 31 December 2015, the Group's annual production capacity for copper and copper fabrication products was approximately 630 thousand tonnes and 588 thousand tonnes, respectively, compared to an annual production capacity for copper and copper fabrication products of approximately 630 thousand tonnes and 320 thousand tonnes respectively as at 31 December 2014. The following table sets forth the production capacity of each of the Group's principal copper subsidiaries by product segment as at the indicated date:

Plant	As at 31 December 2015	
	Refined Copper	Copper Fabrication Products
	(in thousand tonnes)	
Yunnan Copper Industry	630	—
Chinalco Luoyang Copper	—	195
Chinalco Shanghai Copper	—	110
Chinalco Kunming Copper	—	220
Chinalco Central China Copper	—	63
<b>Total</b>	<b>630</b>	<b>588</b>

According to China Non-Ferrous Metals Industry Association, the Group's production output of copper represented approximately 6.7 per cent. and 6.9 per cent. for the years ended 31 December 2014 and 2015, respectively, of the total production output in the PRC. As at 31 December 2015, the Group's production output of copper represented approximately 6.9 per cent. of the total production output in the PRC for the period.

The following table sets forth a breakdown of the Group's copper production volume by product segment for the periods indicated:

Production Volume by Product	Year ended 31 December	
	2014	2015
	(in thousand tonnes, except Golden and Silver)	
<b>Copper segment</b>		
Copper contained in copper concentrate	88.3	85.8
Refined Copper	520.5	538.9
<b>Copper Fabrication segment</b>		
Tubes and pipes	156	145
Plates and sheets	141	133
Rods	9	6
Others	8	4
<b>By-products</b>		
Gold (in tonnes)	6.7	10.2
Silver (in tonnes)	451.4	458.1
Iron ore pellets	730.2	670.4
Sulphuric acid	1985.7	2128.9
Zinc	117.8	144.0

## **Production Process**

### **Copper**

Copper is extracted from its ores through either the thermal extraction process or the solvent extraction process. The choice of extraction process depends on the chemical composition of the copper ores. The thermal extraction process is more suitable for ores containing predominantly copper sulphides, whereas the solvent extraction process is more suitable for ores containing predominantly copper oxides. Approximately 80 per cent. of copper is extracted through the thermal extraction process globally. For the years ended 31 December 2014 and 2015, the Group extracted approximately 505.4 thousand tonnes of copper and 451.4 thousand tonnes of copper, respectively, or approximately 97.1 per cent. and 83.7 per cent. of its total copper output of approximately 520.6 thousand tonnes and 538 thousand tonnes, respectively, through the thermal extraction process.

#### *Thermal Extraction Process*

Copper ore is first extracted and beneficiated into copper concentrate before the thermal extraction process starts. The thermal extraction process begins with the mixing of copper concentrate with fuel and melting agents according to specified ratios. The mixture is then fed into a furnace and roasted at a temperature of about 1,100 degree Celsius. At such temperature, some of the sulphur in the ores is converted to sulphur dioxide and removed from the furnace for further processing into sulphuric acid; the majority of impurities such as arsenic and antimony are also oxidised and vaporised. Some of the iron sulphide in the ores is converted to iron oxide and further combines with silica to form a residue. The remaining copper sulphide and iron sulphide in the molten ores will turn into a new mixture known as matte, which contains 20 per cent. to 50 per cent. of copper and 23 per cent. to 27 per cent. of sulphur. As the iron oxide-silica residue is lighter, it floats on the matte and could be readily removed.

The next stage of the thermal extraction process is the removal of iron and sulphur from the matte. The matte is led into a converting furnace and mixed with quartz sand. Air is led into the converting furnace to facilitate further combustion at temperatures between 1,100 and 1,300 degrees Celsius. Since iron has greater affinity to oxygen than copper, iron sulphide in the matte is oxidised before copper sulphide. The newly formed iron oxide adheres to the quartz sand and forms a residue. The copper sulphide in the matte is gradually oxidised into copper oxide and further reacts with the remaining copper sulphide to form crude copper and sulphur dioxide. At this stage, crude copper obtained from the converting furnace contains approximately 98.5 per cent. of copper.

Crude copper is further refined in an anode furnace to produce copper anode plates that are suitable for electrolysis. Air is fed into the anode furnace to further oxidise the impurities in the crude copper and facilitate their removal. Having removed a certain quantity of impurities, the crude copper is sprayed with heavy oil to initiate the reduction of copper oxide into copper and carbon monoxide. The final stage of the thermal extraction process is electrolysis. The copper anode plates obtained from the previous stage are inserted into electrolytic cells where electric current passes through a copper-containing electrolyte. Pure copper (containing 99.9 per cent. of copper) could be obtained at the cathode while previous metals such as gold and silver could be obtained from the residue at the anode.

#### *Solvent Extraction Process*

The solvent extraction process is performed by dissolving copper ores, refined copper ores or copper-containing calcine in a suitable solvent. As copper oxide in the copper ores or calcine is discharged into the solvent, it is concentrated in and finally removed from the solution. The extract will

be led into an electro-winning tank to undergo electro-winning, during which a current is passed from an inert anode through the extract so that copper is extracted as it is deposited onto the cathode. The end product is known as copper cathode.

#### *By-products*

The Group also produces gold, silver, zinc, iron ore pellets and sulphur dioxide as by-products during the copper refining process.

Gold and silver deposit in trace quantities are in the residue at the anode during electrolysis. These precious metals are washed out from the residue and refined to increase their purities.

Sulphur dioxide released during the initial stages of the thermal extraction process is converted into sulphuric acid via a couple of simple chemical reactions. On average, the production of one tonne of refined copper could yield three tonnes of sulphuric acid.

Owing to the rich iron content in the Group's copper ores, iron oxides could be obtained from the thermal extraction process. Iron oxides, which adhere to quartz sand and solidify, are recovered from the converting furnace and further processed into iron ore pellets.

#### *Copper Fabrication*

The ductility and malleability of copper and copper alloys make them ideally suited to fabrication methods that involve severe deformation such as tube forming, wire drawing, spinning, roll forming and deep drawing. These fabrication methods involve specialised heavy equipment and skilled operators. Raw copper materials are fed into specialised fabrication equipment which applies pressure on the materials to fix them into the desired shapes and dimensions. Mild heating could be applied to soften the materials so that they are more susceptible to the mechanical forces of the fabrication equipment.

The casting technique is employed to produce fabrication products with complex shapes. The most flexible casting technique utilises sand moulds, which can be used for producing simple one-off items and long casting runs which range in size from a few grams to many tonnes. Die casting is another popular casting technique which uses iron moulds. Die casting is suited to long casting runs. Bars, sections and hollows that require tight dimensional control are often produced by continuous casting. Rings, discs and other symmetrical shapes tend to be produced using centrifugal casting.

#### *Production Facilities*

##### *Copper*

Yunnan Copper Industry currently operates six copper refineries with a total designed annual refined copper production capacity of approximately 630 thousand tonnes as at 31 December 2015.

### Copper Fabrication Products

The Group operates four copper fabrication subsidiaries located in Henan Province, Yunnan Province, Hubei Province and Shanghai respectively. The Group's copper fabrication subsidiaries are equipped with production lines and machinery that meet up to international standards. For instance:

- the plants of Chalco Luoyang Copper are equipped with high-purity oxygen-free furnaces, hot 40MN horizontal double-action hydraulic presses, 20-high reversible cold rolling mills, double-high reversible copper belt hot rolling mills, four-high reversible cold strip mills and double-high heavy wide plate mills; and
- the plants of Chalco Shanghai Copper are equipped with purple brass belt lines, bronze and white copper strip lines, vertical continuous heat treatment furnaces, six-high CVC cold rolling mills and X-model six-high foil rolling mills.

The following table sets forth the annual production capacity, copper fabrication output, utilisation rate of each of the Group's copper fabrication subsidiaries:

Branch	For the year ended 31 December			
	2014		2015	
	Copper Fabrication Output	Utilisation Rate <sup>(1)</sup>	Copper Fabrication Output	Utilisation Rate <sup>(1)</sup>
(in thousand tonnes, except percentages)				
Chinalco Luoyang Copper	91	46.7%	89	45.6%
Chinalco Kunming Copper	167	75.9%	157	71.4%
Chinalco Shanghai Copper	36	32.7%	25	22.7%
Chinalco Central China Copper	20	31.7%	17	27.0%
<b>Total</b>	<b>314</b>	<b>53.4%</b>	<b>288</b>	<b>49.0%</b>

*Note:*

(1) Capacity utilisation rate is determined by dividing the production output by production capacity.

### Raw Materials

Apart from copper ore, raw materials such as blister copper and matte are also required for copper smelting. The Group refines copper ores into copper concentrate, and then refined copper, for external sales or further production at its own copper fabrication plants. For the years ended 31 December 2014 and 2015, approximately 22.5 per cent. and 21.6 per cent., respectively, of the copper ores processed by Yunnan Copper Industry was sourced from its own copper mines. The Group procures the remaining portion of copper ores from third-party suppliers in the domestic and international markets.

The following table sets forth the percentage of copper concentrate sourced from the Group's own mines, third-party suppliers in the domestic market and international market for the years ended 31 December 2014 and 2015, respectively:

Mines	For the year ended 31 December	
	2014	2015
	(in percentage)	
Own mines	22.5	21.6
Domestic third-party suppliers	43.4	41.9
International third-party suppliers	34.1	36.5

#### *Own Copper Mines*

As at 31 December 2015, the Group owned 27 copper mines (24 of which are in production and the remaining three are under development) in China with over 9.0 million tonnes of aggregate copper reserves. For the years ended 31 December 2014 and 2015, the Group extracted approximately 88.3 thousand tonnes and 85.8 thousand tonnes, respectively, of copper ores from its own copper mines. Through CMC, the Group also owns a large copper mine in Peru (the Toromocho Project), with approximately 7.3 million tonnes of copper reserves.

The following table sets forth information of the Group's copper mines in China as at 31 December 2015:

Mine	Location	Mining method	As at 31 December 2015	
			Total mine life	Remaining mine life
Dahongshan mine	Yunnan Province, China	Underground	24	8
Simao Dapingzhang mine	Yunnan Province, China	Open pit	28	2
Liuju mine	Yunnan Province, China	Underground	8	7
Lanniping mine	Yunnan Province, China	Underground	12	1
Tangdan mine	Yunnan Province, China	Underground	26	14
Yimin mine	Yunnan Province, China	Underground	12	3
Yangla mine	Yunnan Province, China	Underground	37	14
Shifengshan mine	Yunnan Province, China	Underground	10	6
Shizishan mine	Yunnan Province, China	Underground	12	8
Lala mine	Sichuan Province, China	Open pit	10	13
Tangtang mine	Sichuan Province, China	Underground	10	5
Haojiahe mine	Yunnan Province, China	Underground	9	1
Songjiapo mine	Yunnan Province, China	Underground	15	5
Dayao Guihua mine	Yunnan Province, China	Underground	20	8
Jiudingshan mine	Yunnan Province, China	Underground	10	5

#### *Toromocho Project*

In August 2007, through its Canadian subsidiary, the Group acquired all the shares of Canada-incorporated Peru Copper Inc., and transferred all the shares to CMC after its establishment. After the acquisition, CMC owned the Toromocho Project located in the core of the Morococha mining district in central Peru. The proved and probable JORC<sup>(1)</sup>-compliant reserves of the Toromocho Project deposit are estimated to contain approximately 7.3 million tonnes of copper, 290,000 tonnes of molybdenum and

(1) Australasian Joint Ore Reserves Committee. JORC Code means the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, a widely used and internationally recognised resource/reserve classification system, prepared by JORC in September 1999 and revised in December 2004.

10,500 tonnes of silver. The Toromocho Project was commissioned on 10 December 2013 and commenced commercial operations since 17 June 2015. The Toromocho Project achieved annual production of 763.5 thousand tonnes of copper concentrate and 182.3 thousand tonnes of copper contained in the concentrate for the year ended 31 December 2015, being the first year of its operations. The Group expects that the Toromocho Project will produce approximately 756 thousand tonnes of copper concentrate with 179 thousand tonnes of copper contained in the concentrate for the year ended 31 December 2016. CMC plans to process the copper sulphide ore on-site and sell copper concentrate primarily to China for smelting and production of refined copper.

The Toromocho Project has a long estimated mine life with significant potential for further exploration. Based on CMC's current estimated reserves and production plan, it is estimated that the Toromocho Project has an estimated mine life of 32 years. Based on CMC's current design, the processing facilities will continue to process recovered ores for four years after the end of the mine life, thus giving the Toromocho Project a projected operating life of 36 years. The Group plans to employ a semi-autogenous grinding mill/ball mill/flotation processing plant that is standard for the industry, with a designed average daily production capacity of 1,838 tonnes of 26.5 per cent. copper concentrate and a separate molybdenum hydrometallurgical plant with a designed average daily production capacity of 25.1 tonnes of molybdenum per day over the life of the mill. There are additional resources adjacent to the planned open pit, which are also covered by CMC's mining concessions, and are estimated to contain approximately 2.7 million tonnes of copper, 92,000 tonnes of molybdenum and 5,200 tonnes of silver.

The following tables summarise the estimated ore reserves and mineral resources in respect of the Toromocho Project as at 31 December 2015:

JORC <sup>(1)</sup> Ore Reserve Category	Grade			Metal Content		
	Tonnes (millions)	Copper (%)	Molybdenum (%)	Silver (grams/tonne)	Copper (million tonnes)	Molybdenum (tonnes)
Proved	690	0.512	0.020	6.42	3.53	138,000
Probable	784	0.434	0.018	7.31	3.40	141,000
<b>Total</b>	<b>1,474</b>	<b>0.471</b>	<b>0.019</b>	<b>6.89</b>	<b>6.93</b>	<b>279,000</b>
<b>JORC Measured and Indicated</b>	<b>Grade</b>			<b>Metal Content</b>		
Mineral Resources Category	Tonnes (millions)	Copper (%)	Molybdenum (%)	Silver (grams/tonne)	Copper (million tonnes)	Molybdenum (tonnes)
Measured	156	0.410	0.014	6.20	0.64	22,000
Indicated	364	0.360	0.012	6.06	1.31	44,000
<b>Total</b>	<b>520</b>	<b>0.375</b>	<b>0.013</b>	<b>6.10</b>	<b>1.95</b>	<b>66,000</b>
<b>JORC Inferred Mineral Resources Category</b>	<b>Grade</b>			<b>Metal Content</b>		
	Tonnes (millions)	Copper (%)	Molybdenum (%)	Silver (grams/tonne)	Copper (million tonnes)	Molybdenum (tonnes)
Inferred	174	0.460	0.015	11.54	0.80	26,000

### *Third-party supplies*

Due to the scarcity of copper resources and uneven distribution of copper deposits in China, the Group relies on third-party suppliers to supply copper concentrate for its production. For the years ended 31 December 2014 and 2015, the Group procured approximately 77.5 per cent. and 78.4 per cent. of copper ores from domestic and international third-party suppliers.

Copper concentrate acquired in the domestic market are mainly produced at small independent copper mines in Yunnan province and Sichuan province. The benchmark price for copper quoted by the Shanghai Metals Exchange serves as a general pricing guide to the Group's copper products. The purchase price is reached either by deducting production costs from the average price or spot price quoted by the Shanghai Metals Exchange, or by multiplying the average price or spot price by a relevant pricing ratio. The Group normally makes advance payments to a domestic supplier according to the payment schedule specified in the individual procurement agreement. The remaining balance is paid upon receipt of the copper ores and certification of satisfactory quality by its own laboratories.

Internationally procured copper concentrate are mainly imported from Africa, Australia and the United States. The Group have long-term contracts with several large international suppliers, such as Glencore plc and Teck Resources Limited. However, the Group also enters into some spot contracts, depending on the production plan and market conditions. The benchmark price for copper as quoted by the London Metals Exchange serves as a general pricing guide to the Group. The Group negotiates the production charges and refining charges with an international supplier and deduct such charges from the benchmark price to arrive at a contract price. Payment is made in accordance to the terms of the specific procurement agreement upon receipt of an invoice from the supplier. The contract price could be paid by instalments or in one lump sum. If payment is by instalments, the last instalment is paid upon confirmation of the quality of the copper ores. The contract price could either be paid to the international supplier by a letter of credit issued by the Group's banks, or paid by the Group to the international supplier's bank without a letter of credit.

### ***Sales and Marketing***

The Group is currently focusing on the domestic market in China. The Group's copper is mainly sold to large electrical cable producers and copper fabricate producers in eastern China, northern China and southwestern China whereas copper fabricates produced by the Group are mainly supplied to the information transmission and telecommunication enterprises in China.

The majority of the Group's copper is sold directly to customers with the remainder distributed through its distribution agents. Yunnan Copper Marketing and Sales, in which the Group holds 100 per cent. of its equity interest via Yunnan Copper Industry, and its 11 subsidiaries in Beijing, Dalian, Qingdao, Xi'an, Zhengzhou, Shanghai, Hangzhou, Changsha, Huizhou, Chengdu and Chongqing collectively form the distribution network for the sale of the Group's copper.

Chinalco Luoyang Copper, Chinalco Shanghai Copper and Chinalco Central China Copper sell and distribute their copper fabrication products to customers directly, such as Schneider Electric, ABB Group, Siemens and Chengdu Xuguang Electronics Co., Ltd.

By-products from the copper extraction process are also sold for profit. Sulphuric acid is mainly sold to fertiliser producers on the periphery of the Group's copper refineries. Gold is traded and sold on the Shanghai Metals Exchange and silver is mainly exported to overseas precious metal dealers. Iron ore pellets are supplied to iron refineries in China through the same channel as copper.

### ***Pricing***

The Group's copper is either sold as existing goods or future goods. Existing copper goods are sold by way of spot or long-term contracts. The selling price under a spot contract is determined with reference to the prevailing spot price for copper in the market. The selling price under a long-term contract is determined by adding an agreed premium to the monthly average of the close prices for refined copper in such month as quoted on the Shanghai Futures Exchange. Future copper goods are traded on the Shanghai Metals Exchange. The price of copper which is exported by the Group outside of China is mainly determined by spot and futures market prices on the London Metals Exchange.

The selling price of the Group's copper fabrication products is determined according to the price of raw materials and processing charges. The Group's copper fabrication products are sold directly to external customers or through distribution agents.

### ***Delivery***

The Group relies on railway and trucks for the delivery of copper products within China. The Group's copper is transported by rail or trucks, and transportation costs are generally borne by the Group's customers and excluded from the Group's sales prices. The Group's copper fabrication products are transported by trucks.

### **Rare Earth Metals Business**

The Group commenced its rare earth metals business in 2011 to further diversify its business lines. After five years of development, the rare earth metals business has grown from having RMB100 million registered capital at its inception to approximately RMB5 billion of assets as at 31 December 2015. The Group is one of the six rare earth metals groups in China. In particular, the Group intends to focus on titanium and molybdenum in expanding the range of rare earth metal products and developing expertise in the processing of rare earth metals.

For the years ended 31 December 2014 and 2015, the Group's rare earth metals business contributed RMB2,074.5 million and RMB2,123.6 million, respectively, to the Group's total revenue, representing approximately 0.8 per cent. and 0.9 per cent., respectively, of the Group's total revenue for the corresponding periods.

Despite its relatively insignificant contribution to the Group's revenue, Chinalco believes that the rare earth metals industry in China has great potential and considers this business as the Group's new strategic focus going forward. The Group is actively enhancing its rare earth metals business platform through a series of mergers and acquisitions and business restructuring. In April 2013, the Group acquired Ganzi Prefecture Yinfeng Mining Co., Ltd. to tap into the tungsten and tin reserves in Sichuan Province. In 2014, the Group established Chinalco Sichuan Rare Earth, but has yet to commence production. Currently, it is engaged in exploration and mining plans in preparation for exploration and mining operations. The PRC government continues to encourage the consolidation and reorganisation in the rare earth metals industry, and the Group is one of the only six major rare earth metals groups in China.

### ***Production Processes***

The rare earth manufacturing process can be simplified into the following stages. First, ores are processed to rare earth concentrates to be the raw material for smelting and separation process. The second step is called acidic solvent, where rare earth concentrates are soaked in an acidic solvent. After the rare earth concentrates have been reduced in the acidic solvent, the different rare elements are gradually separated into different containers. This is followed by precipitating solutions in these different containers containing rare earth elements. The final stage is burning, which means burning the precipitated materials in cylinders to obtain different rare earth element oxides, such as praseodymium, neodymium and dysprosium.

Jiangsu Rare Earth is one of the leading rare earth isolation and smelting companies in China in terms of production capacity, technology and equipment and diversity of product offering. The isolation technique applied by Jiangsu Rare Earth, namely the “interactive solvent extraction” technique, is the leading technique for isolation of rare earth metals in China.

### ***Production Facilities***

The Group’s rare earth metals business is primarily conducted by China Rare Earth through its subsidiaries, Guangxi Rare Earth and Jiangsu Rare Earth.

#### *Jiangsu Rare Earth*

In June 2011, Chinalco established Jiangsu Rare Earth by consolidating five rare earth companies in Jiangsu Province. Jiangsu Rare Earth engages in research and development, isolation, smelting and sale of rare earth metal oxides and compounds, magnetic rare earth materials, rare earth metals, rare earth luminescent materials and nano rare earth materials. Jiangsu Rare Earth’s product offering includes lanthanum oxide, cerium oxide, praseodymium oxide, neodymium oxide, praseodymium, neodymium, terbium oxide, dysprosium oxide, europium oxide, holmium oxide, erbium oxide, gadolinium, samarium oxide, yttrium oxide, yttrium and europium.

#### *Guangxi Rare Earth*

Guangxi Rare Earth was established in July 2011 by Chinalco with two joint venture partners, Guangxi Non-ferrous Metals Group Co., Ltd. and Grirem Advanced Metals Co., Ltd. The Group is the controlling shareholder of Guangxi Rare Earth, which is well positioned to exploit the undeveloped rare earth resources in the Guangxi Autonomous Region of the PRC. Guangxi Rare Earth is engaged in rare earth exploration, mining, extraction, fabrication and trading. Guangxi Rare Earth’s product offering includes light, medium and heavy rare earth oxides and concentrates such as lanthanum, cerium, praseodymium, neodymium and dysprosium and magnets.

### ***Raw Materials***

The Group’s Rare Earth business’ primary raw material is rare earth oxide, such as high yttrium mixed rare earth oxides, medium yttrium and rich europium mixed rare earth oxides, and low yttrium and low europium mixed rare earth oxides, which the Group acquires through external sourcing and its own production facilities. The Group extracts the mixed rare earth elements from the ores and refines them to produce rare earth metals.

### ***Sales and Marketing***

A unified transportation and sales mechanism for rare earth metals has been established in the PRC. Major industries in which the customers of the Group's rare earth metals business engage include neodymium iron and boron magnets, ceramic and rare earth metals.

### **Engineering and Technical Services Business**

The Group's engineering and technical services business is conducted through Chalieco, which is a leading technology, engineering services and equipment provider in the non-ferrous metals industry in the PRC and is capable of providing fully integrated engineering solutions covering the complete value chain of the non-ferrous metals industry. Chalieco was listed on the Hong Kong Stock Exchange in July 2012 under the stock code 2068. As at 31 December 2015, the Group holds 85.00 per cent. of the equity interest in Chalieco. In terms of revenue in the PRC and income from overseas business for the year ended 31 December 2015, Chalieco ranked first among engineering survey and design enterprises in the PRC non-ferrous industry.

Leveraging its advanced technology, Chalieco maintains engineering design and consultancy as its key business, which drives the development of its engineering and construction contracting business, as well as its equipment manufacturing business. Chalieco has also expanded its business to include providing engineering services in other sectors, such as ferrous metallurgy, transportation, power, oil, petrochemicals, construction materials, environmental protection, municipal and public utility construction and new materials, and its business has grown rapidly in overseas non-ferrous metals markets in recent years. Chalieco regards technological innovation as its core competency, and has developed a series of proprietary technologies relating to mining, smelting and metal material processing.

In July 2015, Fortune China announced the list of China's top 500 companies in 2015, selecting 500 Chinese companies listed inside and outside China with the largest scale of operations. Chalieco ranked 213rd on the list, an improvement of 54 places compared to the previous year. Chalieco was also placed on the "Top 150 Global Engineering Design Firm Rankings" and "Top 225 International Engineering Design Firm Rankings" released by the America Engineering News-Record in 2014. "Top 150 Global Engineering Design Firm Rankings" ranks according to the total global business revenue of the design firms, focusing on the integrated capacity of the design firms. Chalieco was placed on the list for the first time and ranked 119th. The "Top 225 International Engineering Design Firm Rankings" ranks according to the total revenue of overseas engineering business of the design firms, focusing on the business expansion capacity of the design firm. Chalieco ranked 189th on such list, an improvement of 20 places compared to 2013.

For the years ended 31 December 2014 and 2015, Chalieco contributed RMB18.9 billion and RMB 19.4 billion, respectively, to the Group's total revenue, representing approximately 6.8 per cent. and 8.1 per cent., respectively, of the Group's total revenue for the corresponding periods. Chalieco operates four reportable business segments, namely, engineering design and consultancy, engineering and construction contracting, equipment manufacturing and trading.

### ***Engineering design and consultancy***

Engineering design and consultancy has historically been the key business of Chalieco. The subsidiaries of Chalieco include four of the first eight large-scale design and research institutes established in the 1950s and 1960s in the PRC non-ferrous metals industry, namely Shenyang

Aluminium & Magnesium Engineering & Research Institute Co., Ltd. (瀋陽鋁鎂設計研究院有限公司), Guiyang Aluminium & Magnesium Design Institute Co., Ltd. (貴陽鋁鎂設計研究院有限公司), Changsha Engineering & Research Institute Limited for Nonferrous Metallurgy (長沙有色冶金設計研究院有限公司) and China Nonferrous Metals Processing Technology Co., Ltd. (中色科技股份有限公司) and one survey and design institute, namely China Nonferrous Metals Changsha Investigation and Design Research Institute Co., Ltd. (中國有色金屬長沙勘察設計研究院有限公司).

Chalieco has qualifications in engineering design, engineering consultancy, environmental impact evaluation consultancy, engineering costs consultancy, engineering and geological survey, mapping, geological hazards evaluation and treatment design and construction, special equipment design, municipal and rural planning, technology trading. Chalieco has established leading market positions in various fields of the PRC non-ferrous metals industry.

#### ***Engineering and construction contracting***

Leveraging its strengths in engineering design and consultancy, Chalieco has successfully developed engineering and construction contracting operations, which have become a new driver of growth for Chalieco. The engineering and construction contracting model of Chalieco is centred around its core competency in engineering design and consultancy and highlights the crucial role of engineering design in quality control, expense control and progress control during the course of an engineering and construction contracting project. This model distinguishes Chalieco from other engineering general contractors that focus on construction and project management, and has been increasingly recognised and accepted by its customers.

Five construction subsidiaries of Chalieco carry out engineering and construction contracting business for mining, ore-dressing, smelting and metal material processing projects. To meet the needs of Chalieco's construction contracting business, some of them have established an internal processing base for selected core equipment and metal components to ensure stability of supplies, maintain product quality and protect technological intellectual property.

#### ***Equipment manufacturing***

Equipment manufacturing is a high-technology industry that Chalieco has prioritised for development. The equipment manufacturing operations of Chalieco mainly focuses on producing equipment by utilising proprietary and patented technologies of Chalieco. Main products of this segment include customised core metallurgical and processing equipment, environmental protection equipment, mechanical and electronic equipment and industrial automation systems. The products are used in various aspects of the non-ferrous metals industry, and have been exported to countries such as Vietnam, India, Brazil, Nigeria, Pakistan and Venezuela.

#### ***Trading***

The trading business segment was introduced in 2014 as a new business segment of Chalieco. It is complementary to the other three business segments of Chalieco and aims to take advantage of the centralised purchasing and full supply chain services of Chalieco. This business segment expanded on Chalieco's previous equipment and raw materials trading businesses with a new procurement platform of Chalieco and is now managed as a separate trading business segment.

## **Other Businesses**

The Group also carries on a number of ancillary businesses in support of its principal businesses, including natural resources development, overseas investment, financial services and asset operations and management. These ancillary businesses are conducted through various subsidiaries and affiliates of the Group.

For the years ended 31 December 2014 and 2015, the Group's other businesses contributed RMB31.2 billion and RMB30.5 billion, respectively, to the Group's total revenue, representing approximately 11.4 per cent. and 12.8 per cent., respectively, of the Group's total revenue for the corresponding periods.

### ***Mineral Resources Development***

The Group actively engages in the development of mineral resources within and outside China through Chinalco Finance and Chinalco Mineral Resource Co., Ltd. The Group's mineral resources portfolio spans across bauxite, copper, iron ore, coal and rare earth metals.

### ***Overseas Investment***

In recent years, the Group has accelerated its overseas expansions and aims to become a leading international resources conglomerate. As at 31 December 2015, the Group had approximately 38.6 per cent. of its total assets located outside of China, representing RMB188.1 billion.

In 2008, the Group acquired a 12.0 per cent. equity interest in Rio Tinto (representing 9.33 per cent. of the shares of the Rio Tinto Group) together with Alcoa. After Alcoa's exit, Chinalco became the single largest shareholder of Rio Tinto. As at 31 December 2015, Chinalco, through its wholly-owned subsidiary, Shining Prospect Pte. Ltd, holds 13.3 per cent. of issued share capital of Rio Tinto. This interest gives Chinalco a voting power of 10.2 per cent. in the Rio Tinto Group on a Joint Decision matter.

The Simandou Project in Guinea is the highlight of the Group's overseas investment activities. In July 2010, Chalco signed a joint development agreement with Rio Tinto for the establishment of a joint venture company to develop Areas 3 and 4 of the Simandou Project in southeastern Guinea. In November 2011, Chinalco Iron Ore Holding (中鋁鐵礦控股), in which the Group holds a 65 per cent. equity interests was established to participate in the development of the Simandou Project. The Simandou Project is one of the largest known undeveloped high-grade iron ore orebodies in the world. In May 2014, the project company, on behalf of Rio Tinto, Chinalco Iron Ore Holding (中鋁鐵礦控股) and International Finance Corporation (a division of the World Bank), entered into a framework agreement with the Guinean state government which lays down the blueprint for the development of Areas 3 and 4 of the Simandou Project. As at 31 December 2015, the Group holds a 65 per cent. interest in Chinalco Iron Ore Holding (中鋁鐵礦控股) and holds a 26.9 per cent. interest indirectly in the Simandou Project. It is planned that Areas 3 and 4 will yield approximately 100 million tonnes of iron ores annually in the future business operations, and Chinalco Iron Ore Holding (中鋁鐵礦控股) will gain a share exceeding 40 million tonnes from the total output. The Group plans to consume a fraction of the iron ores internally and sell the remainder to steel mills in the PRC as priority.

## **Financial Services**

The Group's financial services business is principally conducted through Chinalco Finance, in which Chinalco holds 100.00 per cent. of its equity interest. Chinalco Finance is a registered non-bank financial institution in the PRC. In July 2011, Chinalco Finance was licensed by the China Banking Regulatory Commission to provide various types of financial services, such as deposit taking, settlement, bill discounting, provision of entrusted loans and financial consultancy to other members within the Group and commenced operation.

## **QUALITY CONTROL**

The Group has established and implemented strict quality control systems at various stages of the production processes for its respective products in accordance with applicable industry standards. The Group requests its quality management department to make regular checks on each batch of its products. In addition, the Group engages independent quality control institutions to make inspections on its products at least once a year at its manufacturing sites and customers facilities, respectively, to ensure the quality of its products.

For the years ended 31 December 2014 and 2015, the Group had not experienced any material disputes with the Group's customers or return of goods due to the quality of the Group's products.

## **EMPLOYEES**

As at 31 December 2015, the Group had 122,203 employees. The table below sets forth the number of the Group's employees by function as at 31 December 2015:

	<b>As at 31 December 2015</b>	
	<b>(number)</b>	<b>(%)</b>
<b>Function</b>		
Administration staff	13,508	11.1
Sale and marketing staff	2,021	1.7
Engineers and technicians	18,122	14.8
Production staff	79,842	65.3
Other staff	8,710	7.1
<b>Total</b>	<b>122,203</b>	<b>100.0</b>

The Group has workers' unions at the plant level that protect employees' rights and welfare benefits, organise educational programmes, encourage employee participation in management decisions and mediate disputes between individual employees and the Group. All employees are union members. The Group has not experienced any strikes or other labour disturbances that have interfered with its operations, and the Group believes that it maintains good relationships with its employees.

The remuneration package of the Group's employees includes salary, bonuses and allowances. Employees also receive welfare benefits including medical care, housing subsidies, childcare and education, retirement and other miscellaneous items.

In accordance with applicable PRC regulations, the Group participates in pension contribution plans organised by provincial and municipal governments, under which each of the Group's plants is required to contribute an amount equal to a specified percentage of its employees' salaries, bonuses and various allowances. The amount of contribution as a percentage of the employees' salary is, on average, approximately 20.0 per cent., depending in part on the location of the plant. The Group has made all

required pension contributions up to 31 December 2015. The Group provides to the Group's employees various social welfare benefits through various institutions owned by the Company and its other affiliates or through third parties.

## **CORPORATE SOCIAL RESPONSIBILITY**

### **Environment Protection**

The Group's operations are subject to a wide variety of PRC national and local environmental laws and regulations as well as international standards, including those governing mineral extraction, waste discharge, generation, treatment and disposal of hazardous materials, land reclamation, and air and water emissions. To enforce these standards, national environmental protection authorities have imposed discharge fees that increase for each incremental amount of discharge beyond the limit set by the regulation. The relevant PRC government authorities are authorised to order any entities with operations that exceed discharge limits to take remediation measures, which are subject to the relevant authorities' approval, or order the closure of any operations that fail to comply with applicable regulations.

The pollutants discharged from the Group's alumina refining process include red mud, waste water and gas emissions and particulates. The Group's primary aluminium production process generates fluorides, pitch fume and particulates. It is illegal to release these pollutants untreated, or those after treatment but still not complying with discharge limits, the discharge of these pollutants must comply with national and local discharge limits. Each of the Group's alumina refineries, primary aluminium smelters and other production plants has its own waste treatment facilities onsite or has developed other methods to dispose of industrial waste in compliance with applicable environmental laws and regulations. The Group was granted ISO14001 accreditations issued by China Quality Certification Centre and the International Certification Network in 2004. In 2013, the Group passed the review and the accreditations were renewed.

The Group incorporates pollution prevention and control into the whole process of its operation and adopts standardised management in reducing emission of the three wastes, namely, waste gas, waste water and solid waste, so as to minimise impact to the environment. The Group has established a strict system for its emission of waste gas, waste water and industrial residue with a standard higher than relevant standards of the state and industry. In order to better implement the concept of low-carbon economy, the Group includes environmental indexes into its development and production plans. For example, for the year ended 31 December 2015, the Group achieved energy savings of approximately 1.0 million tonnes of standard coal, reclaimed 4,035 mu of farmland, and reduced the emission of carbon dioxide by 29.9 per cent. and nitrogen oxides by 13.7 per cent. from the previous year. The Group's comprehensive utilisation rate of industrial residues was approximately 27.0 per cent. for the year ended 31 December 2015, which was an increase of approximately 1.0 per cent. from the previous year ended 31 December 2014. The Group's utilised 36.4 million tonnes of recycled water for the year ended 31 December 2015.

The Group strives to increase its energy efficiency by implementing new production techniques and technologies, upgrading its production facilities, optimising its production process and enhancing its logistics and operations management. The Group has incorporated clean technology and processes into its operations with a view to promote the concept of "zero emission" plants. Since 2009, in terms of the industrial waste water emission, the Group has achieved its target of "zero emission". In addition, the Group is focused on the reduction of greenhouse gas emission and continuing technological innovation

to promote low-carbon technology. During the 12th five-year plan, the Group conducted various technology and research projects related to mine safety, low-carbon smelting and comprehensive utilisation of resources.

The Group adopts a “zero tolerance” policy in environmental management. In case of any environmental incident, the Group will immediately take response measures or follow its emergency response plan, classify the incident and accordingly report it to the government and notify surrounding residents. If one of the Group’s listed companies is involved, the Group makes appropriate announcements to comply with the relevant regulations.

Furthermore, the Group adheres to the concept of “Responsible and Green Mining” and pays special attention to environmental restoration and conserves biodiversity to minimise effects of operational activities on the local environment.

The Group believes that its operations are in compliance with currently applicable national, provincial or international environmental regulations in all material respects and its business activities have not caused any pollution that might have a material effect on the Group’s operation, financial condition and reputation.

### **Health and Workplace Safety**

The Group strives to ensure production safety, strengthen the occupational health and safety system, and improve workplace conditions so as to promote its employees’ mental and physical health.

The Group is committed to a target of zero accidents in all of its activities and have implemented industry best practices in accident prevention. The Group attaches great importance to workplace safety and regard workers’ safety as its top priority. For the years ended 31 December 2014 and 2015, there has not been any material accident in the Group’s business operations. Production safety managers of the Group’s subsidiaries go through regular trainings to improve their capabilities and work performance. For the year ended 31 December 2015, the Group arranged physical examination related occupational health for all of its employees. The Group also conducts regular emergency drills to enhance its employees’ ability to respond to emergencies.

The Group explored and developed a new model of production safety management that centralises all organisational levels and employees. Under this management model, an Occupational Health, Safety and Environment Committee, headed by principal executives, has been set up in the Group’s headquarters, business segments, subsidiaries as well as their affiliated plants and mines. Each Occupational Health, Safety and Environment Committee and relevant responsible persons regularly supervise, check and improve the workplace conditions, and ensure the provision of protective equipments and conduct occupation health trainings. In line with the requirements of OHSAS18001 management system, the Group also incorporates contractor management into its Health, Safety and Environment management system so as to ensure contractors’ management and construction could meet its standard procedures. The Group will continue to provide training and appropriate and sufficient resources and materials for employees and contractors to work safely and effectively.

The labor unions of the Group’s subsidiaries value the role of inspection in identifying and correcting any situation that may cause accidents to workers. They perform regular inspections on safety and labour protection and are focused on finding habitual violations of safety rules.

The Group believes that it is in compliance with the relevant laws and regulations on labor and workplace safety in all material aspects.

### **Sustainable Development**

In order to achieve rational and efficient mining, the Group takes proactive measures to improve production methods, upgrade processes and technologies, as well as improve tailings recovery rate. The Group also tries to build “digitalised” mines to improve efficiency.

The Group strives to enhance energy management and continuously promotes energy efficiency. The Group has implemented an accountability system and an evaluation system for energy conservation, facilitates the research and development and expansion of energy-efficient technologies, and strives to reduce energy intensity and minimise environmental impacts throughout all production processes.

The Group also aims to build a greener industry chain through conserving resources, mitigating adverse impacts and maximising the utilisation of renewable resources. For example, the Group acquired Ningxia Energy in December 2012 and has invested in the green power industry. As at 31 December 2015, the Group completed the wind power and solar power project (“**Ning Xia Project**”) with an installed capacity of 1,141 MW, which contributes to approximately 25 per cent. of installed capacity of green power industry of Ning Xia.

### **Community Relations**

As the Group considers good community relationships to be an essential part of its long-term success in China and around the world, the Group plans to continue its efforts in maintaining and promoting community relationships. The Group established a communication mechanism and regularly communicates with relevant local communities and actively makes contributions to community activities. For the year ended 31 December 2015, the Group donated an aggregate amount of RMB23.7 million and its employees contributed 14,349 hours of pro bono work.

Chinalco Peru Mineral Corporation Limited, which is wholly owned by the Company, has entered into an agreement related to “zero emission of waste water” with Peru Government, pursuant to which Chinalco Peru Mineral Corporation Limited would design and construct water collection and treatment system for Morococha mining district. In 2015, Chinalco Peru Mineral Corporation Limited completed the construction of Kingsmill water treatment centre, which is able to treat all waste water from the production activities of Morococha mining district and significantly improve the living quality of local residents.

In general, the Group actively engages in communication with the local government, community and social groups to understand their needs from the impact of the Group’s corporate decisions and operations on their communities and seek mutual interests based on friendly consultations. When entering or leaving the host communities, the Group considers the concerns of various local stakeholders, consults with the local government and residents and assesses the impact to the local community to ensure compliance with applicable regulations and standards as well as internal procedures and minimise local impact and prevent damage to community development. For the year ended 31 December 2015, there was no dispute arising from entering or leaving the host communities.

## **INSURANCE**

The Group maintains insurance coverage for its assets, including but not limited to fixed assets and floating assets. The Group also has limited coverage for accidents and natural disasters such as typhoons, tornados, floods, landslides and lightning strikes. In addition, the Group transfers risks by choosing various insurance products.

The Group is not only covered under the injury and accidental death insurance provided by the local government labour departments but also separately maintains insurance such as overseas and domestic personal accident insurance. In addition, the Group has purchased environmental damage insurance to fulfil the requirement by the PRC government and to pursue its social responsibility.

## **LEGAL COMPLIANCE**

The Group is required to obtain and maintain valid permits, licences and certificates from various governmental authorities to conduct the Group's businesses, including, among others, those required for the Group's mining and trading of alumina products and its coal mining operations.

As at the date of this Offering Circular, the Group has obtained and maintained all the permits, licences and certificates material to its operations.

The Group is from time to time involved in legal proceedings arising in the ordinary course of its business, including as plaintiff or defendant in litigation or arbitration proceedings. To the best of its knowledge after due enquiry, no member of the Group is aware of any current or pending litigation or arbitration proceedings against the Group or any of its senior management team members that could have a material adverse effect on its businesses, financial condition and results of operations.

## DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

### Directors

The following table sets forth information regarding the Company's directors as at 31 December 2015:

Name	Age	Position
GE Honglin	60	Chairman of the Board
YU Dehui	56	Director and President
ZHANG Fusheng	66	Independent Director
SUN Youqi	64	Independent Director
ZHANG Xiaolu	64	Independent Director
ZHAO Xiaogang	65	Independent Director
YUAN Li	57	Employee Director

**Mr. GE Honglin**, 60, the Chairman and Secretary of the Party Committee of Chinalco. Mr. Ge graduated from University of Science and Technology, Beijing and University of Windsor, Canada in metallic material and thermal treatments. He holds a master's degree and a doctorate degree in Engineering and is a professor-level senior engineer. Prior to this, he previously served as the Vice Manager, Director of Research and Development, Director Assistant and Vice Director of the Shanghai Iron and Steel Research Institute, Director and Vice Chairman of Shanghai Metallurgical Holding Group Corporation, Vice General Manager as well as Chairman of Shanghai Wugang Group Corporation, Dean of Shanghai Baosteel Academic Institute and Director of its Technology Center as well as Department Director of its Group Planning Division, Chairman of Shanghai Wugang Group Corporation, Vice Secretary of Municipal Party Committee of Chengdu, the Mayor, the Alternate Mayor and then Vice Major of Chengdu and also, the Director of Chalco.

**Mr. YU Dehui**, 56, the General Director and Deputy Secretary of the Party Committee of Chinalco and the Chairman of Chalco. He graduated from Ecole des Hautes Etudes en Sciences Sociales and School of Economics of Paris University Nanterre, majoring in development economics, with a doctoral degree in economics, and he has been a professor. He successively served as the deputy general director and the general director for technology of France Sipeike Environmental Protection Engineering Co., Ltd. (法國斯佩克環保工程公司), the deputy general director and the general director of the department of science, technology and standards of the State Environmental Protection Administration. He had also served as a vice governor of the government of the Inner Mongolia Autonomous Region, a Vice General Director and the Party Committee member of China Power Investment Corporation and State Power Investment Corporation.

**Mr. ZHANG Fusheng**, 66, Independent Director of Chinalco. Mr. Zhang was previously the Secretary of Party Committee and the Vice President of China Ocean Shipping (Group) Company, and Chairman of Board and Executive Director of COSCO International Holdings Limited. He received master's degree in transportation management in Wuhan Transportation University.

**Mr. SUN Youqi**, 64, Independent Director of Chinalco. Mr. Sun was previously a member of the Party Committee and the Vice General Manager and Chief Accountant of China National Nuclear Corporation. He received a bachelor's degree in industrial accounting in Shanxi Institute of Finance and Economics.

**Ms. ZHANG Xiaolu**, 64, Independent Director of Chinalco. Ms. Zhang was previously Vice General Manager and a member of the Party Committee of China Power Investment Corporation. She received a master's degree in hydraulics and mechanical control in the School of Mechanical Engineering, Xi'an Jiaotong University.

**Mr. ZHAO Xiaogang**, 65, Independent Director of Chinalco. Mr. Zhao was previously General Manager and Vice Secretary of the Party Committee of China South Locomotive & Rolling Stock Corporation Limited, and Chairman of the Board and Secretary of the Party Committee of China South Locomotive & Rolling Stock Corporation Limited.

**Mr. YUAN Li**, 57, Workers' Director of Chinalco. Mr. Yuan is also the Chairman, Secretary of the Party Committee as well as President of the Labor Union of Northeast Light Alloy Company Limited. He received his Professional Training College degree in Chinese Language and Literature in Shanxi Normal University and is a senior political worker. Mr. Yuan was previously the Vice Director of the Manager's Office and then Director of Research Division in China Non-ferrous Metals Industry Corporation. Mr. Yuan then became the Chief Secretary in State Nonferrous Metals Industry Bureau; Vice Director of Political Work Department; Vice Chief and Chief of the Party and People Affairs Department, and Director of the News Centre of Chinalco; General Manager of Corporate Culture Department of Chalco.

## Supervisors

The following table sets forth information regarding the internal and external supervisors of the Company respectively as at 31 December 2015:

Name	Age	Position
LI Keming	58	Chairman of the Supervisory Committee, Chairman of No. 8 Division of the SASAC Supervisory Committee
TAO Yongshan	55	SASAC External Supervisor, Director of No. 8 Division of the SASAC Supervisory Committee
SUN Qinghong	47	SASAC External Supervisor, Director of No. 8 Division of the SASAC Supervisory Committee
ZHU Wenshan	49	SASAC External Supervisor, Vice Director of No. 8 Division of the SASAC Supervisory Committee
ZHAO Xiaofei	42	SASAC External Supervisor, Division-level Supervisor of No. 8 Division of the SASAC Supervisory Committee
OU Xiaowu	51	Internal Supervisor, Chief Financial Officer of China Copper

**Mr. Li Keming**, 58, Chairman of the Supervisory Committee and Chairman of No. 8 Division of the SASAC Supervisory Committee.

**Mr. TAO Yongshan**, 55, Director of No. 8 Division of the SASAC Supervisory Committee. Mr. Tao received his bachelor's degree from Jilin University of Finance and Economics.

**Mr. SUN Qinghong**, 47, Director of the Supervisory Committee. Mr. Sun has been the Supervisor of Chinalco since July 2013. He received his Executive master's degree of Business Administration in China-Europe International Business School.

**Mr. ZHU Wenshan**, 49, SASAC External Supervisor and Vice Director of No. 8 Division of the SASAC Supervisory Committee.

**Mr. ZHAO Xiaofei**, 42, SASAC External Supervisor and Division-level Supervisor of No. 8 Division of the SASAC Supervisory Committee.

**Mr. OU Xiaowu**, 51, Chief Financial Officer of China Copper. He received his bachelor's degree in statistics in Xiamen University. Mr. OU was previously Cadre, then Vice Chief and then Chief of Second Division of the Audit Department of China Non- ferrous Metals Industry Corporation; and then Chief of First Division of the Audit Department of China Non-ferrous Metals Industry Corporation; Chief Level Cadre of the Preparatory Group and then Chief of the General Finance Division and Audit Division of China Copper Lead Zinc Corporation; Vice Manager of General Affairs Division and then Director of General Finance Affairs Division (Audit Division) of Finance Department of Chinalco; Vice General Manager of Chalco Guizhou Branch; Director of Finance (Audit) Department of Chinalco; Supervisor and then Chief Manager of Finance Department of Chalco.

## Senior Management

The following table sets forth information regarding the senior management of the Company as at 31 December 2015:

Name	Age	Position
GE Honglin	60	Chairman of the Party Committee; Chief Director
YU Dehui	56	Vice Chairman of the Party Committee; General Manager
AO Hong	55	Member of the Party Committee; Vice General Manager
LIU Caiming	53	Member of Party Committee; Vice General Manager
ZHANG Chengzhong	56	Member of Party Committee; Vice General Manager
ZHAO Zhao	54	Member of Party Committee and Chief of the Discipline Inspection Team of the Party Committee
LIU Xiangmin	54	Member of Party Committee; Director of Safety
LIU Jianping	48	Member of Party Committee; Vice General Manager
LU Dongliang	42	Member of Party Committee; Vice General Manager

Please see the subsection headed “Directors” for the description of Mr. Ge and Mr. Yu’s experience.

**Mr. AO Hong**, 55, Member of the Party Committee and Vice General Manager of Chinalco; and Executive Director and Chairman of Chalco. Mr. Ao is a professor-level senior engineer and a doctorate degree holder in management science and engineering of the Central South University. He was previously a member of the Party Committee and Secretary of the Communist Youth League of General Research Institute of Beijing Non-Ferrous Metals; then Vice Secretary of the Party Committee of its R&D office; Vice Director and then Director of its General Office. Subsequently, Mr. Ao became its Vice Secretary of the Party Committee; and then Secretary of its Discipline Inspection Committee; its Vice Director; and Secretary of its Party Committee. He was also Chairman of Grimm Semiconductor Materials Co., Ltd., Guorui Electronic Materials Co., Ltd and Beijing Guo Jing-hui Infrared Optical Technology Co., Ltd. Mr. Ao was also Chairman of Hong Kong Guo Jing Micro-electronic Holdings Limited and Chinalco Rare Earth.

**Mr. LIU Caiming**, 53, Member of the Party Committee and Vice General Manager of Chinalco. Mr. Liu is a senior accountant and a Certified Public Accountant registered in China. He received a doctorate degree in political economics from Fudan University. He was previously Vice Chief and the Chief of the Finance Division, China Non-Ferrous Metals External Works Corporation; Vice General Manager of China Non-ferrous Metals Construction Group Limited; Vice General Manager of China Non-ferrous Construction Group Limited; Vice General Manager of China Non-ferrous Metal Industry’s Foreign Engineering and Construction Co., Ltd.; Vice General Manager of China Non-ferrous Metals Mining and Construction (Group) Co., Ltd; President of China Copper; a member of the Party Committee and Vice Head of the Finance Department of Yunnan Provincial Government; Director and Secretary of the Party Committee to the State-Owned Assets Supervision and Administration Commission of Yunnan Province; Assistant to the Governor of Yunnan Province; Executive Director, and then Senior Vice President and Chief Financial Officer of Chalco.

**Mr. ZHANG Chengzhong**, 56, Member of the Party Committee and Vice General Manager of Chinalco. Mr. Zhang is a professor-level senior engineer. He obtained his doctorate degree in non-ferrous metals metallurgy from Northeastern University. Mr. Zhang was previously the First Vice Manager of the Alumina Branch of Shanxi Aluminum Plant; Director of the Research Institute of Shanxi Aluminum Plant; Vice Manager and then Manager of Shanxi Aluminum Plant; Vice President of Chalco; Chairman of Chalco and the Chairman and President of China Copper.

**Mr. ZHAO Zhao**, 54, Member of the Party Committee of Chinalco; chief of the discipline inspection team of its Party Committee. Mr. Zhao is a senior political worker and obtained a doctorate degree in world economics from Beijing Normal University. He was previously Vice Secretary of Communist Youth League Committee to direct subordinated agencies of the Ministry of Communications; Director of Propaganda Department of Communist Youth League Committee and Communist Youth League Working Committee to Central State Agencies; Head of General Office of Communist Youth League Working Committee to Central State Agencies; Vice Secretary of Communist Youth League Working Committee to Central State Agencies; Vice Head of Mass Work Department of Party Working Committee to Central Enterprises; Vice Secretary of Communist Youth League Working Committee to Central Enterprises; Vice Director of Mass Work Bureau of the State Assets Supervision and Administration Commission under the PRC State Council; and Secretary of Communist Youth League Working Committee to Central Enterprises.

**Mr. LIU Xiangmin**, 54, Member of the Party Committee of Chinalco; Director of Safety; Executive Director of Chalco. Mr. Liu is a professor-level senior engineer. He obtained a doctorate degree in non-ferrous metals metallurgy from the Central South University. He was previously the Vice Manager and then Manager of the Alumina Branch of Zhongzhou Aluminum Plant; Vice Manager of Zhongzhou Aluminum Plant; General Manager of Zhongzhou Branch of Chalco and Executive Director, Vice President and Senior Vice President of Chalco.

**Mr. LIU Jianping**, 48, Member of the Party Committee and Vice General Manager of Chinalco; Director of China Copper. Mr. Liu received master's degree in commodities in Renmin University of China. He was previously the Vice Director of the Personnel Section of Personnel Department of China Grain Reserves Corporation, the Vice Section Director Level Researcher of the First Section of the Forth Cadres of the Central Organization Department Bureau, the Vice Section Director Level Researcher of the Second Section of Enterprise Cadres Office, the Vice Section Director Level Researcher and Vice Section Director of the Second Section of the Fifth Bureau, the Section Director of the First Section of Training Centre, the Section Director of the Forth Section of the First Bureau of Enterprise Leaders Management of State-owned Assets Supervision and Administration Commission of the State Council, the Director and Vice Director of Human Resource Department (Working Department of Veteran Cadre) of Chalco and the General Manager Assistant of Chalco.

**Mr. LU Dongliang**, 42, Member of the Party Committee and Vice General Manager of Chinalco; Executive Director and Senior Vice President of Chalco. He received bachelor degree in accounting in North China University of Technology and is an accountant. He previously was the Vice Manager and Manager of Capital Management Department of the Ministry of Finance, the Manager of Division of General Management of Chalco, the Vice General Manager and General Manager of Finance Department and President Assistant of Chalco. He was also the General Manager, Party Secretary and Chairman of the Labour Union of Lan Zhou Branch of Chalco.

## PRC LAWS AND REGULATIONS

This section summarises the principal PRC laws and regulations which are relevant to the Group's business and operations as at the date of this Offering Circular. As this is a summary, it does not contain a detailed analysis of the PRC laws and regulations which are relevant to the Group's business and operations.

### THE PRC LEGAL SYSTEM

The PRC legal system is based on the PRC Constitution and is made up of written laws, regulations, directives and local laws, laws of Special Administrative Regions and laws resulting from international treaties entered into by the PRC government. In general, PRC court judgments do not constitute binding precedents. However, they are used for the purposes of judicial reference and guidance.

The National People's Congress of the PRC (the "NPC") and the Standing Committee of the NPC are empowered by the PRC Constitution to exercise the legislative power of the State. The NPC has the power to amend the PRC Constitution and enact and amend basic laws governing State agencies and civil, criminal and other matters. The Standing Committee of the NPC is empowered to enact and amend all laws except for the laws that are required to be enacted and amended by the NPC.

The State Council is the highest organ of the State administration and has the power to enact administrative rules and regulations. The ministries and commissions under the State Council are also vested with the power to issue orders, directives and regulations within the jurisdiction of their respective departments. All administrative rules, regulations, directives and orders promulgated by the State Council and its ministries and commissions must be consistent with the PRC Constitution and the national laws enacted by the NPC. In the event that a conflict arises, the Standing Committee of the NPC has the power to annul such administrative rules, regulations, directives and orders which contradict the PRC Constitution and the national laws.

The State Council has the power to alter or annul any inappropriate rules of the ministries under the State Council. The people's congresses or their standing committees of the provinces, autonomous regions and municipalities directly under the Central Government may, in light of the specific conditions and actual needs of their respective administrative areas, enact local regulations, provided that such regulations do not contradict the PRC Constitution, the national laws and the administrative regulations. The People's Congresses or their standing committees of certain large cities may, in light of the specific local conditions and actual needs, enact local regulations, provided that they do not contradict the PRC Constitution, the national laws, the administrative regulations and the local regulations of their respective provinces or autonomous regions, and they shall submit the regulations to the standing committees of the people's congresses of the provinces or autonomous regions for approval before implementation.

The people's governments of the provinces, autonomous regions, municipalities directly under the Central Government and certain large cities may, in accordance with the national laws and administrative regulations and the local regulations of their respective province, autonomous regions or municipalities, enact rules.

In relation to certain matters except the coercive measures and punishment in respect to crime and criminal penalty, deprivation of political rights and restriction of personal liberty, and to judicial system, the State Council can enact administrative regulations under the authorisation from the NPC and the

Standing Committee of NPC. After such administrative regulations have been tested in practice and when the conditions are mature for enacting a law on the aforementioned matters, the State Council shall propose to the NPC and the Standing Committee of NPC in a timely manner for enacting the law.

The PRC Constitution vests the power to interpret laws in the Standing Committee of the NPC. The Supreme People's Court has the power to give general interpretation on the application of laws in judicial proceedings, according to Resolution of the Standing Committee of the NPC Providing an Improved Interpretation of the Law (《全國人民代表大會常務委員會關於加強法律解釋工作的決議》). The State Council and its ministries and commissions are also vested with the power to interpret rules and regulations that they have promulgated. At the regional level, the power to interpret regional rules and regulations is vested in the regional legislative and administrative bodies which promulgated such laws.

## THE PRC JUDICIAL SYSTEM

Under the PRC Constitution and the Law of Organisation of the People's Courts, the judicial system is made up of the Supreme People's Court, the local courts, military courts and other special courts.

The local courts are comprised of the basic courts, the intermediate courts and the higher courts. The basic courts are organised into civil, criminal, economic, administrative and other divisions. The intermediate courts are organised into divisions similar to those of the basic courts, and are further organised into other special divisions, such as the intellectual property division. The higher level courts supervise the basic and intermediate courts. The people's procuratorates also have the right to exercise legal supervision over the civil proceedings of courts of the same level and lower levels. The Supreme People's Court is the highest judicial body in the PRC. It supervises the administration of justice by all other courts.

The courts employ a two-tier appellate system. A party may appeal against a judgment or order of a local court to the court at the next higher level. Second judgments or orders given at the next higher level and the first judgments or orders given by the Supreme People's Court are final. First judgments or orders of the Supreme People's Court are also final. If, however, the Supreme People's Court or a court at a higher level finds an error in a judgment which has been given by any court at a lower level, or the president of a court finds an error in a judgment which has been given in the court over which he presides, the case may then be retried in accordance with the judicial supervision procedures.

The Civil Procedure Law of the PRC (《民事訴訟法》), which was adopted on 9 April 1991 and amended on 28 October 2007 and 31 August 2012, respectively, sets forth the criteria for instituting a civil action, the jurisdiction of the courts, the procedures to be followed for conducting a civil action and the procedures for enforcement of a civil judgment or order. All parties to a civil action conducted within the PRC must comply with the Civil Procedure Law. Generally, a civil case is initially heard by a local court of the municipality or province in which the defendant resides. The parties to a contract may, by express agreement, select a jurisdiction where civil actions may be brought, provided that the jurisdiction is either the plaintiff's or the defendant's place of residence, the place of execution or implementation of the contract or the place of the object of the contract. However, such selection cannot violate the stipulations of grade jurisdiction and exclusive jurisdiction in any case.

A foreign individual or enterprise generally has the same litigation rights and obligations as a citizen or legal person of the PRC. If a foreign country's judicial system limits the litigation rights of PRC citizens and enterprises, the PRC courts may apply the same limitations to the citizens and enterprises of that foreign country within the PRC. If any party to a civil action refuses to comply with a judgment or order made by a court or an award granted by an arbitration panel in the PRC, the aggrieved party may apply to the court to request for enforcement of the judgment, order or award. The time limit imposed on the right to apply for such enforcement is two years. If a person fails to satisfy a judgment made by the court within the stipulated time, the court will, upon application by any party to the action, mandatorily enforce the judgment.

A party seeking to enforce a judgment or order of a court against a party who is not located within the PRC and does not own any property in the PRC may apply to a foreign court with proper jurisdiction for recognition and enforcement of the judgment or order. A foreign judgment or ruling may also be recognised and enforced by a PRC court in accordance with the PRC enforcement procedures if the PRC has entered into, or acceded to, an international treaty with the relevant foreign country, which provides for such recognition and enforcement, or if the judgment or ruling satisfies the court's examination in accordance with the principle of reciprocity, unless the court finds that the recognition or enforcement of such judgment or ruling will result in a violation of the basic legal principles of the PRC, its sovereignty or security, or for reasons of social and public interests.

## FOREIGN EXCHANGE CONTROLS

The lawful currency of the PRC is the Renminbi, which is subject to foreign exchange controls and is not freely convertible into foreign exchange at this time.

On 21 July 2005, PBOC announced that, beginning from 21 July 2005, the PRC will implement a regulated and managed floating exchange rate system based on market supply and demand and by reference to a basket of currencies. The Renminbi exchange rate is no longer pegged to the US dollars only. PBOC will announce the closing price of a foreign currency such as the US dollars traded against the Renminbi in the inter-bank foreign exchange market after the closing of the market on each business day, setting the central parity for trading of the Renminbi on the following business day.

On 30 March 2015, SAFE issued the "Notice of the SAFE on Reforming the Administrative Approach Regarding the Settlement of the Foreign Exchange Capitals of Foreign-invested Enterprises" (《國家外匯管理局關於改革外商投資企業外匯資本金結匯管理方式的通知》) ("Circular 19"), which became effective from 1 June 2015. "Notice of the General Affairs Department of the SAFE on the Relevant Operating Issues concerning the Improvement of the Administration of Payment and Settlement of Foreign Currency Capital of Foreign-funded Enterprises" (《國家外匯管理局綜合司關於完善外商投資企業外匯資本金支付結匯管理有關業務操作問題的通知》) and "Supplementary Notice of the General Affairs Department of the SAFE on the Relevant Operating Issues concerning the Improvement of the Administration of Payment and Settlement of Foreign Currency Capital of Foreign-funded Enterprises" (《國家外匯管理局綜合司關於完善外商投資企業外匯資本金支付結匯管理有業務操作問題的補充通知》) have been replaced by Circular 19. The "Circular of the SAFE on Reforming and Regulating Policies on the Control over Foreign Exchange Settlement of Capital Account" (《國家外匯管理局關於改革和規範資本項目結匯管理政策的通知》) ("Circular 16") was promulgated and became effective on 9 June 2016. Under Circular 19 and Circular 16, Foreign-invested enterprises are allowed to settle their foreign exchange capitals on a discretionary basis, and it is required that RMB converted from the foreign currency denominated capital of a FIE may only be used for purposes within the business scope approved by the relevant governmental authorities and may not be used for equity investments or other

investment with the exception of bank financial products that can guarantee the principal within the PRC unless otherwise specifically provided. Besides, the converted RMB shall not be used to make loans for related enterprises unless it is within the business scope or to build or purchase any real estate that is not for the enterprise own use with the exception for the real estate enterprise.

## **CROSS-BORDER SECURITY LAWS**

### **NDRC Circular 2044**

On 14 September 2015, the NDRC issued the Circular on Promoting the Reform of the Administrative System on the Issuance by Enterprises of Foreign Debt Filings and Registrations (國家發展改革委關於推進企業發行外債備案登記制管理改革的通知 (發改外資[2015]2044號) (the “**Circular 2044**”), which came into effect on the same date. According to the Circular 2044, domestic enterprises and their overseas controlled entities shall procure the registration of any debt securities issues outside the PRC with NDRC prior to the issue of the securities and notify the particulars of the relevant issues within 10 working days after the completion of the issue of the securities. The Circular 2044 itself is silent on the legal consequences of non-compliance with the pre-issue registration requirement. Although the Company obtained the pre-issuance registration certificate in respect of the offering of the Bonds from NDRC on 22 July 2016, if NDRC finds the Company to be guilty of maliciously obtaining quota of foreign debts or providing false information, NDRC may blacklist or publish on the national credit information platform a bad credit record against the Company, or even punish the Company with other related authorities. In the worst case scenario, it might become unlawful for the Company to perform or comply with any of its obligations under the Bonds and the Bonds might be subject to enforcement as provided in Condition 14 of the Terms and Conditions. Similarly, there is no clarity on the legal consequences of non-compliance with the Post-issuance Filing under the Circular 2044. The Company has undertaken to notify NDRC of the particulars of the issue of the Bonds within 10 business days after the Issue Date.

## EXCHANGE RATE INFORMATION

### PRC

The People's Bank of China (the “**PBOC**”) sets and publishes daily a base exchange rate with reference primarily to the supply and demand of Renminbi with reference to a basket of currencies in the market during the prior day. The PBOC also takes into account other factors such as general conditions existing in the international foreign exchange markets. Since 1994, the conversion of Renminbi into foreign currencies, including US dollars, has been based on rates set by the PBOC, which are set daily based on the previous day's interbank foreign exchange market rates and current exchange rates in the world financial markets. From 1994 to July 2005, the official exchange rate for the conversion of Renminbi to US dollars was generally stable. Although PRC Governmental policies were introduced in 1996 to reduce restrictions on the convertibility of Renminbi into foreign currency for current account items, conversion of Renminbi into foreign exchange for capital items, such as foreign direct investment, loans or securities, requires the approval of the SAFE and other relevant authorities. On 21 July 2005, the PRC Government introduced a managed floating exchange rate system to allow the value of the Renminbi to fluctuate within a regulated band based on market supply and demand and by reference to a basket of currencies. The PRC Government has since made and in the future may make further adjustments to the exchange rate system. The PBOC authorised the China Foreign Exchange Trading Center, effective since 4 January 2006, to announce the central parity exchange rate of certain foreign currencies against the Renminbi at 9:15 AM each business day. This rate is set as the central parity for the trading against the Renminbi in the inter-bank foreign exchange spot market and the over the counter exchange rate for that business day. On 18 May 2007, the PBOC enlarged, effective on 21 May 2007, the floating band for the trading prices in the inter-bank foreign exchange spot market of Renminbi against the US dollar from 0.3 per cent. to 0.5 per cent. around the central parity rate. This allows the Renminbi to fluctuate against the US dollar by up to 0.5 per cent. above or below the central parity rate published by the PBOC. On 19 June 2010, the PBOC announced that it intended to further reform the Renminbi exchange rate regime by allowing greater flexibility in the Renminbi exchange rate and the band was expanded to 1.0 per cent. on 16 April 2012 and it was further expanded to 2.0 per cent. on 17 March 2014. More adjustments may be made to the exchange rate system by the PRC government in the future. Currently, the PRC announces the closing price of a foreign currency traded against Renminbi in the inter-bank foreign exchange spot market after the closing of the market on each business day, and makes it the central parity for the following business day.

On 11 August 2015, the PBOC announced that the exchange rates between the Renminbi and foreign currencies would become more market driven, taking into account of the closing exchange rates on the previous trading day, supply and demand of foreign currencies and the fluctuations of exchange rates between major international currencies. From 11 August to 13 August 2015, the value of the Renminbi depreciated by approximately 4.4 per cent. against the US dollar and has stabilised since then. The PRC government may make further adjustments to the exchange rate system in the future.

The following table sets forth the noon buying rates for US dollars in New York City for cable transfers payable in Renminbi as certified by the Federal Reserve Bank of New York for customs purposes for and as at the periods indicated as set forth in the H.10 statistical release of the Federal Reserve Board.

<u>Period</u>	<b>Noon Buying Rate</b>			
	<u>Low</u>	<u>Average<sup>(1)</sup></u> <b>(Renminbi per US\$1.00)</b>	<u>High</u>	<u>Period End</u>
2009	6.8176	6.8295	6.8470	6.8259
2010	6.6000	6.7696	6.8330	6.6000
2011	6.2939	6.4475	6.6364	6.2939
2012	6.2221	6.2990	6.3879	6.2301
2013	6.0537	6.1478	6.2438	6.0537
2014	6.0402	6.1704	6.2591	6.2046
2015	6.1870	6.2869	6.4896	6.4778
2016				
January	6.5219	6.5726	6.5932	6.5752
February	6.5154	6.5501	6.5795	6.5525
March	6.4480	6.5027	6.5500	6.4480
April	6.4571	6.4754	6.5004	6.4738
May	6.4738	6.5259	6.5798	6.5798
June (up to 24 June)	6.5590	6.5772	6.6150	6.6150

*Note:*

(1) Averages are calculated by averaging the rates on the last business day of each month during the relevant year. Monthly averages are calculated by averaging the daily rates during the relevant monthly period.

On 31 May 2016, the noon buying rate for US dollars in New York City for cable transfers in Renminbi was US\$1.00 to RMB6.5798 as set forth in the H.10 statistical release of the Federal Reserve Board.

## TAXATION

*The following summary of certain British Virgin Islands, Hong Kong and PRC tax consequences of the purchase, ownership and disposition of Bonds is based upon applicable laws, regulations, rulings and decisions in effect as of the date of this Offering Circular, all of which are subject to change (possibly with retroactive effect). This discussion does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to purchase, own or dispose of the Bonds and does not purport to deal with consequences applicable to all categories of investors, some of which may be subject to special rules. Persons considering the purchase of Bonds should consult their own tax advisers concerning the tax consequences of the purchase, ownership and disposition of Bonds.*

### **British Virgin Islands**

As the Issuer is incorporated pursuant to the BVI Business Companies Act, 2004 (as amended) (the “**BVI BC Act**”) of the British Virgin Islands (“**BVI**”), (i) payment of principal, premium (if any) and interest in respect of the Bonds will not be subject to taxation in the BVI, (ii) no withholding tax will be required to be deducted by the Issuer on such payments to any holder of a Bond, and (iii) the Bonds will not be liable to stamp duty in the BVI.

Gains derived from the sale of the Bonds by persons who are not otherwise liable to BVI income tax, payroll tax and social security payment will not be subject to BVI income tax. The BVI currently has no capital gains tax, estate duty, inheritance tax or gift tax.

### **Hong Kong**

#### **Withholding tax**

No withholding tax is payable in Hong Kong on payments of principal or interest on the Bonds or in respect of any capital gains arising from the sale of the Bonds.

#### **Profits tax**

Hong Kong profits tax is chargeable on every person carrying on a trade, profession or business in Hong Kong in respect of profits arising in or derived from Hong Kong from such trade, profession or business. (excluding profits arising from the sale of capital assets)

Under the Inland Revenue Ordinance (Cap. 112) of the Laws of Hong Kong (the “**Inland Revenue Ordinance**”) as it is currently applied by the Inland Revenue Department, interest on the Bonds may be deemed to be profits arising in or derived from Hong Kong from a trade, professional or business carried on in Hong Kong in the following circumstances:

- (a) interest on the Bonds is received by or accrues to a financial institution (as defined in the Inland Revenue Ordinance) and arises through or from the carrying on by the financial institution of its business in Hong Kong; or
- (b) interest on the Bonds is derived from Hong Kong and is received by or accrues to a company (other than a financial institution) carrying on a trade, profession or business in Hong Kong; or

- (c) interest on the Bonds is derived from Hong Kong and is received by or accrues to a person, other than a company (such as a partnership), carrying on a trade, profession or business in Hong Kong and is in respect of the funds of that trade, profession or business.

Sums derived from the sale, disposal or redemption of the Bonds will be subject to Hong Kong profits tax where received by or accrued to a person, other than a financial institution, from the carrying on of a trade, profession or business in Hong Kong and the sum has a Hong Kong source. The source of such sums will generally be determined by having regard to the manner in which the Bonds are acquired and disposed of.

Sums received by or accrued to a financial institution by way of gains or profits arising through or from the carrying on by the financial institution of its business in Hong Kong from the sale, disposal and redemption of the Bonds will be subject to profits tax.

#### ***Stamp duty***

No Hong Kong stamp duty will be chargeable upon the issue or transfer of a Bond.

#### **PRC**

The following summary describes the principal PRC tax consequences of ownership of the Bonds by beneficial owners who, or which, are not residents of mainland China for PRC tax purposes. These beneficial owners are referred to as (a) non-PRC Bondholders, or (b) beneficial owners who are entities or individuals located outside of the PRC in this “PRC Taxation” section. In considering whether to invest in the Bonds, investors should consult their individual tax advisers with regard to the application of PRC tax laws to their particular situations as well as any tax consequences arising under the laws of any other tax jurisdiction.

#### **Income Tax**

Pursuant to the EIT Law and its implementation regulations, enterprises that are established under the laws of foreign countries and regions whose “de facto management bodies” are within the territory of the PRC are treated as PRC tax resident enterprises for the purpose of the EIT Law. The EIT Laws provide that the “de facto management body” of an enterprise is the organisation that exercises substantial and overall management and control over the production, employees, books of accounts and properties of the enterprise. If the relevant PRC tax authorities decide, in accordance with applicable tax rules and regulations, that the “de facto management body” of the Issuer is within the territory of the PRC, the Issuer may be treated as a PRC tax resident enterprise for the purpose of the EIT Law and income or gains paid with respect to the Bonds may be considered to be derived from sources within the PRC.

#### ***Taxation on Interest***

The EIT Law and its implementation regulations impose withholding tax at the rate of 10 per cent., or a lower rate if tax treaty benefits are available, on PRC-source income paid to a “non-resident enterprise” that does not have an establishment or place of business in the PRC or that has an establishment or place of business in the PRC but the relevant income is not effectively connected therewith. Pursuant to these provisions of the EIT Law, in the event the Issuer is considered to be a PRC resident enterprise by the PRC tax authorities in the future, interest payable to non-resident enterprise holders of the Bonds may be treated as income derived from sources within the PRC and be subject to

such PRC withholding tax at a rate of 10 per cent. Further, in accordance with the Individual Income Tax Law of the PRC which was amended on 30 June 2011 and took effect on 1 September 2011 and its implementation regulations, if the Issuer is considered to be a PRC tax resident enterprise, interest payable to non-resident individual holders of the Bonds may be treated as income derived from sources within the PRC and be subject to a 20 per cent. individual income tax which the Issuer would be obliged to withhold from payments of interests to non-resident individual holders of the Bonds. To the extent that the PRC has entered into arrangements relating to the avoidance of double-taxation with any jurisdiction, such as Hong Kong, that allow a lower rate of withholding tax, such lower rate may apply to qualified holders of the Bonds.

As confirmed by the Issuer, as at the date of this Offering Circular, the Issuer has not been given notice or informed by the PRC tax authorities that it is considered a PRC tax resident enterprise for the purpose of the EIT Law. On that basis, non-resident enterprise holders of the Bonds will not be subject to income tax imposed by any governmental authority in the PRC in respect of the holding of the Bonds or any repayment of principal and payment of interest made thereon. However, there is no assurance that the Issuer will not be treated as a PRC tax resident enterprise under the EIT Law and related implementation regulations in the future.

In addition, if the relevant PRC tax authorities decide, in accordance with applicable tax rules and regulations, that the “de facto management body” of the Guarantor is within the territory of the PRC, the Guarantor may be treated as a PRC tax resident enterprise for the purpose of the EIT Law and, in the event that the Guarantor is required to fulfill its obligations under the Guarantee by making interest payments on behalf of the Issuer, such interest payments under the Guarantee may be considered to be derived from sources within the PRC. In such case, the Guarantor may be obliged to withhold PRC tax at a rate of 10 per cent. on such payments to non-PRC resident enterprise holders of the Bonds and 20 per cent. for non-resident individual holders of the Bonds. To the extent that the PRC has entered into arrangements relating to the avoidance of double-taxation with any jurisdiction, such as Hong Kong, which allows a lower rate of withholding tax, such lower rate may apply to qualified holders of the Bonds. Repayment of the principal will not be subject to PRC withholding tax.

#### ***Taxation on Capital Gains***

The EIT Law and its implementation regulations impose a tax at the rate of 10 per cent., or a lower rate if tax treaty benefits are available, on income derived from sources within the PRC realised by a “non-resident enterprise” that does not have an establishment or place of business in the PRC or that has an establishment or place of business in the PRC but the relevant gain is not effectively connected therewith. The Individual Income Tax Law and its implementation regulations impose a tax at the rate of 20 per cent. on income derived from sources within the PRC realised by non-resident individuals. If the Issuer is considered a PRC resident enterprise by the PRC tax authorities in the future, and if the capital gains realised by holders of the Bonds are treated as income derived from sources within the PRC, such gains will be subject to such PRC tax. To the extent that the PRC has entered into arrangements relating to the avoidance of double-taxation with any jurisdiction, such as Hong Kong, that allow a lower rate of tax, such lower rate may apply to qualified non-resident holders of the Bonds.

### ***VAT (for interest payments from 1 May 2016)***

On 23 March 2016, the Ministry of Finance and SAT issued the Circular of Full Implementation of Business Tax to VAT Reform (《關於全面推開營業稅改征增值稅試點的通知》 Caishui [2016] No. 36, “**Circular 36**”) which provides for that the VAT pilot programme will cover construction industry, real estate industry, finance industry and life service industry on a nation-wide basis from 1 May 2016. Since then, the income derived from the provision of financial services which attracted business tax will be entirely replaced by, and subject to, VAT.

According to Circular 36, entities and individuals providing services within China are subject to VAT. The services are treated as being provided within China where either the service provider or the service recipient is located in the PRC. The services subject to VAT include the provision of financial services such as the provision of loans. It is further clarified under Circular 36 that the “loans” refers to the activity of lending capital for another’s use and receiving the interest income thereon. Based on the definition of “loans” under Circular 36, the issuance of Bonds may be regarded as financial services by holders of the Bonds and the payments under the Bonds may be subject to VAT if the Issuer is a PRC resident enterprise for PRC tax purposes.

Where a holder of the Bonds who is an individual resells the Bonds, the VAT may be exempted according to Circular 36 if the resale of Bonds is treated as resale of financial products. Where a holder of the Bonds who is an entity located outside of the PRC resells the Bonds to an entity or individual located outside of the PRC and derives any gain, since neither the service provider nor the service recipient is located in the PRC, Circular 36 should not apply and the Issuer does not have the obligation to withhold the VAT or the local levies. However, where a holder of the Bonds who is an entity resells the Bonds, there is uncertainty as to the applicability of VAT if either the seller or buyer of Bonds is located inside the PRC.

Circular 36 has been issued quite recently, the above statement may be subject to further change upon the issuance of further clarification rules and/or different interpretation by the competent tax authority. There is uncertainty as to the application of Circular 36.

### ***Stamp Duty***

No PRC stamp duty will be imposed on non-PRC Bondholders either upon issuance of the Bondholders upon a subsequent transfer of Bonds to the extent that the register of holders of the Bonds is maintained outside the PRC and the issuance and the sale of the Bonds is made outside of the PRC.

## SUBSCRIPTION AND SALE

The Issuer, the Guarantor and the Company have entered into a subscription agreement with BOC, BOCI, Barclays Bank PLC, SPDB International Capital Limited, China CITIC Bank and Haitong International Securities Company Limited (together, the “**Joint Lead Managers**”) dated on or about [●] 2016 (the “**Subscription Agreement**”) pursuant to which and subject to certain conditions contained in the Subscription Agreement, the Issuer has agreed to sell to the Joint Lead Managers, and the Joint Lead Managers have severally and not jointly agreed to subscribe and pay for the aggregate principal amount of the Bonds set forth in the Subscription Agreement opposite its name below:

<u>Joint Lead Managers</u>	<u>Principal amount of Bonds to be subscribed</u>	
		(US\$)
Bank of China Limited . . . . .		[●]
BOCI Asia Limited . . . . .		[●]
Barclays Bank PLC . . . . .		[●]
SPDB International Capital Limited . . . . .		[●]
China CITIC Bank International Limited . . . . .		[●]
Haitong International Securities Company Limited . . . . .		[●]
 Total . . . . .		 [●]

The Subscription Agreement provides that the Issuer, the Guarantor and the Company will jointly and severally indemnify the Joint Lead Managers against certain liabilities in connection with the offer and sale of the Bonds. The Subscription Agreement provides that the obligations of the Joint Lead Managers are subject to certain conditions precedent and entitle the Joint Lead Managers to terminate it in certain circumstances prior to payment being made to the Issuer.

The Joint Lead Managers and their affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities (“**Banking Services or Transactions**”). The Joint Lead Managers and their affiliates may have, from time to time, performed, and may in the future perform, various Banking Services or Transactions with the Issuer, the Guarantor and the Company for which they have received, or will receive, fees and expenses.

In connection with the Offering of the Bonds, the Joint Lead Managers and/or their affiliates may place orders, receive allocations and purchase Bonds for their own account (without a view to distributing such Bonds). Such entities may hold or sell such Bonds or purchase further Bonds for their own account in the secondary market or deal in any other securities of the Issuer, the Guarantor or the Company, and therefore, they may offer or sell the Bonds or other securities otherwise than in connection with the offering. Accordingly, references herein to the Bonds being “offered” should be read as including any offering of the Bonds to the Joint Lead Managers and/or their affiliates for their own account. Such entities are not expected to disclose such transactions or the extent of any such investment, otherwise than in accordance with any legal or regulatory obligation to do so. Furthermore, it is possible that only a limited number of investors may subscribe for a significant proportion of the Bonds. If this is the case, liquidity of trading in the Bonds may be constrained (see “*Risk Factors* —

*The liquidity and price of the Bonds following this offering may be volatile*”). The Issuer, the Guarantor, the Company and the Joint Lead Managers are under no obligation to disclose the extent of the distribution of the Bonds amongst individual investors.

In the ordinary course of their various business activities, the Joint Lead Managers and their respective affiliates make or hold a broad array of investments and 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, and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the Issuer, the Guarantor and/or the Company, including the Bonds. Certain of the Joint Lead Managers or their affiliates that have a lending relationship with the Issuer, the Guarantor and/or the Company may routinely hedge their credit exposure to the Issuer, the Guarantor and/or the Company consistent with their customary risk management policies. Typically, such Joint Lead Managers and their affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in the Issuer’s, the Guarantor’s and/or the Company’s securities, including potentially the Bonds offered hereby. Any such short positions could adversely affect future trading prices of the Bonds offered hereby. The Joint Lead Managers and their affiliates may make investment recommendations and/or publish or express independent research views (positive or negative) in respect of the Bonds or other financial instruments of the Issuer, the Guarantor or the Company, and may recommend to their clients that they acquire long and/or short positions in the Bonds or other financial instruments.

In connection with the issue of the Bonds, the Stabilising Manager or any person acting on behalf of the Stabilising Manager may, to the extent permitted by applicable laws and directives, over-allot the Bonds or effect transactions with a view to supporting the price of the Bonds at a level higher than that which might otherwise prevail, but in so doing, the Stabilising Manager or any person acting on behalf of the Stabilising Manager shall act as principal and not as agent of the Issuer, the Guarantor or the Company. However, there is no assurance that the Stabilising Manager or any person acting on behalf of the Stabilising Manager will undertake stabilisation action. Any stabilisation action may begin on or after the date on which adequate public disclosure of the terms of the Bonds is made and, if begun, may be ended at any time, but it must end no later than the earlier of 30 days after the issue date of the Bonds and 60 days after the date of the allotment of the Bonds. Any loss or profit sustained as a consequence of any such overallotment or stabilisation shall be for the account of the Stabilising Manager, or as the case may be, the Joint Lead Managers in the manner agreed by them.

## **General**

The Bonds are a new issue of securities with no established trading market. No assurance can be given as to the liquidity of any trading market for the Bonds.

The distribution of this Offering Circular or any offering material and the offering, sale or delivery of the Bonds is restricted by law in certain jurisdictions. Therefore, persons who may come into possession of this Offering Circular or any offering material are advised to consult with their own legal advisers as to what restrictions may be applicable to them and to observe such restrictions. This Offering Circular may not be used for the purpose of an offer or invitation in any circumstances in which such offer or invitation is not authorised.

No action has been taken or will be taken in any jurisdiction that would permit a public offering of the Bonds, or possession or distribution of this Offering Circular or any amendment or supplement thereto or any other offering or publicity material relating to the Bonds, in any country or jurisdiction where action for that purpose is required.

### **United States**

The Bonds and the Guarantee have not been and will not be registered under the Securities Act and, subject to certain exceptions, may not be offered or sold within the United States. The Bonds and the Guarantee are being offered and sold outside of the United States in reliance on Regulation S.

In addition, until 40 days after the commencement of the offering of the Bonds and the Guarantee, an offer or sale of Bonds or Guarantee within the United States by any dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act.

### **United Kingdom**

Each Joint Lead Manager has represented, warranted and agreed that:

- (a) 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 Financial Services and Markets Act 2000 (the “**FSMA**”)) received by it in connection with the issue or sale of the Bonds in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer or the Guarantor; and
- (b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the Bonds in, from or otherwise involving the United Kingdom.

### **British Virgin Islands**

Each Joint Lead Manager has represented and agreed that no invitation has been or will be made directly or indirectly to any person resident in the British Virgin Islands to subscribe for any of the Bonds but the Bonds may be acquired by British Virgin Islands persons who receive the offer of the Bonds outside of the British Virgin Islands and in a manner which does not contravene the laws of the jurisdiction in which such offer is received.

### **Hong Kong**

Each Joint Lead Manager has represented, warranted and agreed that:

- (a) it has not offered or sold and will not offer or sell in Hong Kong, by means of any document, any Bonds other than (a) to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) 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 or which do not constitute an offer to the public within the meaning of that Ordinance; and
- (b) it has not issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Bonds, which is directed at, or the contents of which are

likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Bonds 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 and any rules made under that Ordinance.

### **Singapore**

Each Joint Lead Manager has acknowledged that this Offering Circular has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each Joint Lead Manager has represented and agreed that it has not offered or sold any Bonds or caused such Bonds to be made the subject of an invitation for subscription or purchase and will not offer or sell such Bonds or cause such Bonds 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 Circular or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of such Bonds, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the “SFA”), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), 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.

This Offering Circular has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this Offering Circular and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of any Bonds may not be circulated or distributed, nor may any Bonds be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the SFA, (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), 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 Bonds are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) 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
- (b) 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 (as defined in Section 239(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 Bonds pursuant to an offer made under Section 275 of the SFA except:
  - (i) to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, 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 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

#### **The PRC**

Each Joint Lead Manager has represented and agreed that the Bonds are not being offered or sold and may not be offered or sold, directly or indirectly, in the People's Republic of China (for such purposes, not including the Hong Kong and Macau Special Administrative Regions or Taiwan), except as permitted by the securities laws of the People's Republic of China.

#### **Japan**

The Bonds 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 "**Financial Instruments and Exchange Act**"). Accordingly, each Joint Lead Manager has represented and agreed that it has not, directly or indirectly, offered or sold and will not, directly or indirectly, offer or sell any Bonds 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 organised under the laws of Japan) or to others for re-offering or re-sale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and other relevant laws and regulations of Japan.

## GENERAL INFORMATION

### **Authorisations**

The Issuer has obtained all necessary consents, approvals and authorisations in connection with the issue and performance of its obligations under the Bonds, the Trust Deed, the Agency Agreement and the Keepwell Deed. The issue of the Bonds was authorised by the resolutions of the board of directors of the Issuer on 14 July 2016. The Guarantor has obtained all necessary consents, approvals and authorisations in connection with the giving and performance of the Guarantee and the execution of the Keepwell Deed, the Deed of Equity Interest Purchase Undertaking, the Trust Deed and the Agency Agreement. The giving of the Guarantee was authorised by the resolutions of the board of directors of the Guarantor on 14 July 2016. The Company has obtained all necessary consents, approvals and authorisations in connection with entry into the Trust Deed, the Keepwell Deed and the Deed of Equity Interest Purchase Undertaking and the entry into the transaction documents in connection with the Bonds was authorised by resolutions of the board of directors of the Company on 16 January 2016 and the resolutions of the general manager meeting of the Company on 26 June 2016.

### **Litigation**

There are no legal or arbitration proceedings against or affecting the Issuer, the Guarantor, the Company, any of their respective subsidiaries or any of their assets, and none of the Issuer, the Guarantor and the Company is aware of any pending or threatened proceedings, which are material in the context of the issue of the Bonds or the giving of the Guarantee.

### **No material adverse change**

Save as disclosed in this Offering Circular, since 31 December 2015, there has been no material adverse change, nor any development or event involving a prospective material adverse change, in or affecting the general affairs, financial condition, results of operations or prospects of the Issuer, the Guarantor, the Company and any of their respective subsidiaries.

### **Documents available**

Copies of the Guarantor's and the Company's latest annual reports and interim reports may be obtained free of charge, and copies of the Trust Deed, the Agency Agreement, the Keepwell Deed, the Deed of Equity Interest Purchase Undertaking and the articles of association of the Issuer, the Guarantor and the Company will be available for inspection, at the principal office of the Trustee, which at the date of this Offering Circular is at 1/F., Far East Consortium Building, 121 Des Voeux Road Central, Hong Kong, during normal business hours following prior written request and proof of holding, so long as any of the Bonds is outstanding.

### **Clearing system and settlement**

The Bonds have been accepted for clearance through the facilities of Euroclear and Clearstream under ISIN [●] and Common Code [●].

## **Financial Statements**

This Offering Circular contains Chinalco's audited consolidated financial information as at and for the years ended 31 December 2014 and 2015 which is derived from its audited consolidated financial statements for the year ended 31 December 2015 have been audited by Baker Tilly. The audited consolidated financial statements of Chinalco were prepared in accordance with PRC GAAP.

This Offering Circular also contains the Guarantor's audited consolidated financial information as at and for the years ended 31 December 2014 and 2015 which is derived from its audited consolidated financial statements for the year ended 31 December 2015 have been audited by Baker Tilly. The audited consolidated financial statements of the Guarantor were prepared in accordance with the PRC GAAP.

## **Listing of the Bonds**

Application will be made to the Hong Kong Stock Exchange for listing of, and permission to deal in, the Bonds by way of debt issues to professional investors, and such permission is expected to become effective on or about [●] 2016.

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## AUDITOR'S REPORT

Baker Tilly China [2015] No. 10529-8

To Aluminum Corporation of China,

We have audited the accompanying financial statements of Aluminum Corporation of China ("the Company"), which comprise the consolidated balance sheet as at 31 December 2015 the consolidated income statement, the consolidated cash flow statement for the year then ended, and the notes to the financial statements.

### **I. The Management's Responsibility for the Financial Statements**

The management of the Company is responsible for the preparation and fair presentation of the financial statements. This responsibility includes: (1) preparing the financial statements in accordance with Accounting Standards for Business Enterprises to achieve fair presentation of the financial statements; (2) designing, implementing and maintaining internal control which is necessary to enable that the financial statements are free from material misstatement due to fraud or error.

### **II. Auditor's Responsibility**

Our responsibility is to express an audit opinion on the financial statements based on our audit. We conducted our audit in accordance with China Standards on Auditing. China Standards on Auditing require that we comply with the Code of Ethics for Chinese Certified Public Accountants and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing audit procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, Certified Public Accountants consider the internal control relevant to the preparation and fair presentation of the financial statements 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 the internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **III. Opinion**

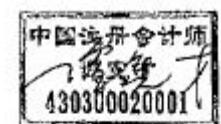
In our opinion, the financial statements of the Company present fairly, in all material respects, the consolidated financial position as of 31 December 2015, and the consolidated result of operations and cash flows for the year then ended in accordance with Accounting Standards for Business Enterprises.

### **IV .Emphasis of Matter**

We ask the users of financial statements to pay attention that, as of 31 December 2015, the subsidiary of the Company, Shining Prospect Pte. Ltd. holds 182.55 million shares of Rio Tinto listed in United Kingdom, of which the total actual investment cost is RMB101.26 billion. At 31 December 2015, the closing price of Rio Tinto is 19.795 pounds per share, and the total market value of Rio Tinto shares held by Shining Prospect Pte. Ltd. is RMB 34.64 billion, which is RMB 66.62 billion less compared to the investment cost. Considering that the Company is the sole majority shareholder of Rio Tinto and the investment purpose is not for holding in short term, the Rio Tinto shares are classified as available-for-sale financial assets and measured by historical cost method. Our opinion is not qualified in respect of this matter.



Chinese Certified Public  
Accountant:



Chinese Certified Public  
Accountant:



Chinese Certified Public  
Accountant:



## Consolidated Balance Sheet

Legal representative: Ge Honglin

Chief accountant: Liu Caiming

Person in charge of accounting body: Wang Jun

## Consolidated Balance Sheet (Continued)

Company: Aluminum Corporation of China	31 December 2015	Currency: RMB
Item	Closing balance	Opening balance
<b>Current Liabilities:</b>		
Short-term borrowings	79,785,224,620.27	88,444,979,600.82
Loans from the central bank		
Customer deposits and deposits from banks and other financial institution	22,381,621.70	19,856,696.46
Taking from banks and other financial institution		
Financial liabilities measure by fair value through profit or loss	315,974,597.46	29,384,203.11
Derivative financial liabilities	4,496,878.63	
Notes payable	13,529,927,607.00	10,757,698,511.59
Accounts payable	21,206,365,041.08	25,423,613,197.39
Receipts in advance	5,285,052,026.26	7,786,023,094.09
Financial assets sold under repurchase agreements	138,000,000.00	
Fees and commissions payable	2,483,001.95	1,432,550.00
Employee benefits payable	3,229,844,185.85	3,590,112,531.49
Taxes payable	-1,079,330,617.41	-1,674,543,596.36
Interest payable	2,643,999,518.06	2,824,536,290.96
Dividends payable	535,260,666.30	228,606,166.08
Other payable	12,309,777,791.39	14,051,261,348.33
Amounts payable under reinsurance contracts		
Insurance contract reserves		
Funds from securities trading agency		
Funds from underwriting securities agency		
Divided into holding liabilities for sale		
Non-current liabilities due within one year	19,106,012,575.05	17,064,547,847.94
Other current liabilities	37,106,634,310.86	51,712,636,673.48
<b>Total Current Liabilities</b>	<b>194,142,103,824.45</b>	<b>220,260,145,115.38</b>
<b>Non-current Liabilities:</b>		
Long-term borrowings	161,628,821,451.76	153,560,608,135.29
Bonds payable	42,945,450,825.53	42,190,609,124.41
Long-term payables	6,366,930,202.57	2,638,609,447.30
Long-term employee benefits payable	3,285,675,027.62	3,590,601,372.27
Special payables	580,710,916.40	1,292,229,580.24
Provisions	896,346,791.67	963,881,756.21
Deferred income	2,697,827,198.24	1,519,999,871.85
Deferred tax liabilities	4,154,384,526.85	4,672,992,277.84
Other non-current liabilities	137,053,000.00	211,786,715.25
<b>Total Non-current Liabilities</b>	<b>222,693,199,940.64</b>	<b>210,641,318,280.66</b>
<b>Total Liabilities</b>	<b>416,835,303,765.09</b>	<b>430,901,463,396.04</b>
<b>Owners' equity:</b>		
Paid-in capital (share capital)	26,192,102,980.67	22,822,372,980.67
Other equity instruments	8,026,234,166.65	4,933,819,444.44
Capital reserves	15,265,018,151.07	9,302,617,105.95
Less: Treasury shares		
Other comprehensive income	-3,100,474,128.76	-6,446,356,882.26
Including: Exchange fluctuation reserve	-4,891,378,270.49	-7,713,998,306.06
Special reserves	112,226,744.55	139,642,264.15
Surplus reserves	1,419,398,973.78	1,419,398,973.78
General risk reserves	226,281,889.90	172,237,306.91
Retained earnings	-35,041,722,886.33	-25,036,045,046.13
<b>Total Owners' Equity Attributable To the Company</b>	<b>13,099,065,891.53</b>	<b>7,307,686,147.51</b>
Minority interests	56,909,663,732.41	48,142,617,564.00
<b>Total Owners' Equity</b>	<b>70,008,729,623.94</b>	<b>55,450,303,711.51</b>
<b>Total Liabilities and Owners' Equity</b>	<b>486,844,033,389.03</b>	<b>486,351,767,107.55</b>

Legal representative: Ge Honglin

Chief accountant: Liu Caiming

Person in charge of accounting body: Wang Jun

## Consolidated Income Statement

Company: Aluminum Corporation of China

Year 2015

Currency: RMB

Item	Amount for the current period	Amount for the prior period
<b>I. Total operating income</b>	238,779,112,282.84	273,019,076,904.57
Including: Operating income	238,556,914,592.88	272,865,748,844.42
Interest income	199,550,095.81	127,916,365.23
Premiums earned		
Fee and commission income	22,647,594.15	25,411,694.92
<b>II. Total operating costs</b>	253,959,254,379.62	298,591,673,149.76
Including: Operating costs	226,173,782,194.36	263,542,890,278.46
Interest expenses	27,952,301.69	2,668,202.09
Fee and commission expenses	2,010,211.82	1,324,008.31
Surrenders		
Claims and policyholder benefits (net of amounts recoverable from reinsurers' share)		
Changes in insurance contract reserves (net of reinsurers' share)		
Insurance policyholder dividends		
Expenses for reinsurance accepted		
Business taxes and levies	978,645,244.60	917,838,086.11
Selling expenses	3,180,884,272.39	3,057,497,755.65
Administrative expenses	5,934,461,399.42	9,331,208,543.65
Financial expenses	15,190,945,605.51	13,298,646,981.96
Impairment losses of assets	2,470,573,149.83	8,439,599,293.53
Add: Gains from changes in fair values (Losses are indicated by "-")	-157,102,941.34	115,609,557.28
Investment income (Loss is indicated by "-")	7,327,471,329.82	4,046,752,033.31
Including: Income from investments in associates and joint ventures	483,557,750.62	921,182,280.84
Foreign exchange gains (Losses are indicated by "-")	390,388.61	
<b>III. Operating profit (Loss is indicated by "-")</b>	-8,009,383,319.69	-21,410,234,654.60
Add: Non-operating income	4,506,588,847.96	2,032,039,007.91
Less: Non-operating expenses	924,497,897.01	227,713,383.52
Including: Losses from disposal of non-current assets	459,549,873.46	91,765,294.24
<b>IV. Total profit (Total Loss is indicated by "")</b>	-4,427,292,368.74	-19,605,909,030.21
Less: Income tax expenses	922,051,794.00	1,495,701,310.08
<b>V. Net profit (Net loss is indicated by "")</b>	-5,349,344,162.74	-21,101,610,340.29
Net profit attributable to owners of the Company	-5,345,968,703.63	-10,731,329,545.18
Profit or loss attributable to minority interests	-3,375,459.11	-10,370,280,795.11
<b>VI. Earnings per share</b>		
(I) Basic earnings per share		
(II) Diluted earnings per share		
<b>VII. Other comprehensive income</b>	3,803,489,343.31	857,031,728.69
<b>VIII. Total comprehensive income</b>	-1,545,854,819.43	-20,244,578,611.60
Total comprehensive income attributable to owners of the Company	-2,000,085,950.13	-9,964,261,125.45
Total comprehensive income attributable to minority interests	454,231,130.70	-10,280,317,486.15

Legal representative: Ge Honglin

Chief accountant: Liu Caiming

Person in charge of accounting body: Wang Jun

## Consolidated Cash Flow Statement

Company: Aluminum Corporation of China	Year 2015	Currency: RMB
Item	Amount for the current period	Amount for the prior period
<b>I. Cash Flows from Operating Activities:</b>		
Cash receipts from the sale of goods and the rendering of services	281,532,219,639.19	341,281,943,726.36
Net increase in customer deposits and deposits from banks and other financial institutions	2,524,925.24	7,709,169.06
Net increase in loans from the central bank		
Net increase in taking from banks and other financial institutions		
Cash receipts from premiums under direct insurance contracts		
Net cash receipts from reinsurance business		
Net cash receipts from policyholders' deposits and investment contract liabilities		
Net cash receipts from disposal of financial assets held for trading		329,819.08
Cash receipts from interest, fees and commissions	225,421,024.76	158,007,212.40
Net increase in taking from banks		
Net increase in financial assets sold under repurchase arrangements	138,000,000.00	
Receipts of tax refunds	895,734,546.50	599,231,371.84
Other cash receipts relating to operating activities	9,325,635,070.14	16,797,214,572.44
<b>Sub-total of cash inflows from operating activities</b>	292,119,535,205.83	358,844,435,871.18
Cash payments for goods purchased and services received	249,546,863,519.58	300,670,860,325.81
Net increase in loans and advances to customers	18,625,188.63	
Net increase in balance with the central bank and due from banks and other financial institutions	-244,194,297.19	332,647,761.98
Cash payments for claims and policyholders' benefits under direct insurance contracts		
Cash payments for interest, fees and commissions	26,513,033.17	3,391,976.45
Cash payments for insurance policyholder dividends		
Cash payments to and on behalf of employees	14,536,646,272.15	14,423,128,705.23
Payments of various types of taxes	8,052,561,651.31	7,479,735,559.00
Other cash payments relating to operating activities	11,361,984,328.82	21,367,396,836.18
<b>Sub-total of cash outflows from operating activities</b>	283,298,999,696.47	344,277,161,164.65
<b>Net Cash Flow from Operating Activities</b>	8,820,535,509.36	14,567,274,706.53
<b>II. Cash Flows from Investing Activities:</b>		
Cash receipts from disposals and recovery of investments	13,491,877,536.71	8,198,992,756.51
Cash receipts from investment income	4,025,255,794.19	3,140,208,627.00
Net cash receipts from disposals of fixed assets, intangible assets and other long-term assets	2,612,097,508.92	536,094,118.48
Net cash receipts from disposals of subsidiaries and other business units	1,818,474,057.07	29,807,486.96
Other cash receipts relating to investing activities	10,823,130,058.35	5,419,833,483.98
<b>Sub-total of cash inflows from investing activities</b>	32,770,834,955.24	17,324,936,472.93
Cash payments to acquire or construct fixed assets, intangible assets and other long-term assets	14,530,128,112.18	14,953,578,785.49
Cash payments to acquire investments	8,903,996,060.07	12,661,432,179.58
Net increase in pledged loans receivables		
Net cash payments for acquisitions of subsidiaries and other business units	144,983,573.51	45,839,951.88
Other cash payments relating to investing activities	7,677,137,289.67	9,651,721,662.83
<b>Sub-total of cash outflows from investing activities</b>	31,256,245,035.43	37,312,572,579.78
<b>Net Cash Flow from Investing Activities</b>	1,514,589,919.81	-19,987,636,106.85
<b>III. Cash Flows from Financing Activities:</b>		
Cash receipts from capital contributions	21,021,229,165.82	10,962,957,252.81
Including: cash receipts from capital contributions from minority owners of subsidiaries	10,801,981,330.39	4,997,462,068.00
Cash receipts from borrowings	189,530,062,017.04	214,086,527,360.41
Cash receipts from issue of bonds		
Other cash receipts relating to financing activities	6,518,164,811.49	5,232,913,119.29
<b>Sub-total of cash inflows from financing activities</b>	217,069,455,994.35	230,282,397,732.51
Cash repayments of borrowings	207,093,750,886.37	199,862,367,883.16
Cash payments for distribution of dividends or profits or settlement of interest expenses	15,341,682,709.09	14,242,395,199.53
Including: payments for distribution of dividends or profits to minority owners of subsidiaries	85,715,376.68	19,273,050.16
Other cash payments relating to financing activities	1,695,762,002.50	1,499,467,038.48
<b>Sub-total of cash outflows from financing activities</b>	224,131,195,597.96	215,604,230,121.17
<b>Net Cash Flow from Financing Activities</b>	-7,061,739,603.61	14,678,167,611.34
<b>IV. Effect of Foreign Exchange Rate Changes on Cash and Cash Equivalents</b>	814,768,978.05	-46,413,057.34
<b>V. Net Increase in Cash and Cash Equivalents</b>	4,088,154,803.61	9,211,393,153.68
Add: Opening balance of cash and cash equivalents	42,960,431,265.10	33,749,038,111.42
<b>VI. Closing Balance of Cash and Cash Equivalents</b>	47,048,586,068.71	42,960,431,265.10

Legal representative: Ge Honglin

Chief accountant: Liu Caiming

Person in charge of accounting body: Wang Jun

### Consolidated Statement of Changes in Owners' Equity

Company: Aluminum Corporation of China

Year 2015

ITEM	Amount for the current period								
	Attributable to owners of the Company								
	Paid-in capital/ Share capital	Other equity instruments	Capital reserves	Less: Treasury shares	Other comprehensive income	Special reserves	Surplus reserves	General risk reserves	Retained earnings
I. Closing balance of the preceding year	22,822,372,980.67	4,933,819,444.44	9,302,617,105.95	-	-6,446,356,882.26	139,642,264.15	1,419,398,973.78	172,237,306.91	-25,036,045,046.00
Add: Changes in accounting policies									
Corrections of prior period errors									
Others									
II. Opening balance of the current year	22,822,372,980.67	4,933,819,444.44	9,302,617,105.95	-	-6,446,356,882.26	139,642,264.15	1,419,398,973.78	172,237,306.91	-25,036,045,046.00
III. Changes for the year (Decrease is indicated by "-")	3,369,730,000.00	3,092,414,722.21	5,962,401,045.12	-	3,345,882,753.50	-27,415,519.60	-	54,044,582.99	-10,005,677,840.00
(I) Total comprehensive income					3,345,882,753.50				-5,345,968,703.00
(II) Owners' contributions and reduction in capital	2,900,000,000.00	2,958,330,000.00	6,432,131,045.12	-	-	-	-	-	-3,749,163,889.00
1. Capital contribution from owners	2,900,000,000.00								
2. Capital contribution from owners of Other equity instruments		2,958,330,000.00							
3. Share-based payment recognised in owners' equity									
4. Others			6,432,131,045.12						-3,749,163,889.00
(III) Special reserves						-27,415,519.60			
1. Transfer to special reserves in the period						342,976,968.18			
2. Amount utilised in the period						-370,392,487.78			
(IV) Profit distribution	-	134,084,722.21	-	-	-	-	-	54,044,582.99	-910,545,247.00
1. Transfer to surplus reserves									
2. Transfer to general reserves								54,044,582.99	-54,044,582.99
3. Distributions to [owners/shareholders]									
4. Others		134,084,722.21							-856,500,664.00
(V) Transfers within owners' equity	469,730,000.00		-469,730,000.00						
1. Capitalisation of capital reserves	469,730,000.00		-469,730,000.00						
2. Capitalisation of surplus reserves									
3. Loss offset by surplus reserves									
4. Others									
IV. Closing balance of the current year	26,192,102,980.67	8,026,234,166.65	15,265,018,151.07	-	-3,100,474,128.76	112,226,744.55	1,419,398,973.78	226,281,889.90	-35,041,722,886.00

Legal representative: Ge Honglin

Chief accountant: Liu Caiming

Person in charge of accounting body: Wang Jun

## Consolidated Statement of Changes in Owners' Equity (Continued)

Company: Aluminum Corporation of China

Year 2015

ITEM	Amount for the prior period								
	Attributable to owners of the Company								
	Paid-in capital (Share capital)	Other equity instruments	Capital reserves	Less: Treasury shares	Other comprehensive income	Special reserves	Surplus reserves	General risk reserves	Retained earnings
I. Closing balance of the preceding year	20,037,812,980.67		9,396,708,019.00		-7,105,521,674.12	126,639,253.16	1,419,398,973.78	130,199,961.37	-8,864,233,567.19
Add: Changes in accounting policies									
Corrections of prior period errors			105,523,045.97		-107,903,627.87	111,828.83			-132,224,367.51
Others									-2,079,106,102.99
II. Opening balance of the current year	20,037,812,980.67	-	9,502,231,064.97	-	-7,213,425,301.99	126,751,081.99	1,419,398,973.78	130,199,961.37	-11,075,564,037.69
III. Changes for the year (Decrease is indicated by "-")	2,784,560,000.00	4,933,819,444.44	-199,613,959.02	-	767,068,419.73	12,891,182.16	-	42,037,345.54	-13,960,481,008.44
(I) Total comprehensive income					767,068,419.73				-10,731,329,545.18
(II) Owners' contributions and reduction in capital	2,600,000,000.00	4,925,000,000.00	-15,053,959.02	-	-	-	-	-	-3,178,294,673.28
1. Capital contribution from owners	2,600,000,000.00		506,770,609.22						
2. Capital contribution from owners of Other equity instruments		4,925,000,000.00							
3. Share-based payment recognised in owners' equity									
4. Others			-521,824,568.24						-3,178,294,673.28
(VI) Special reserves						12,891,182.16			
1. Transfer to special reserves in the period						404,549,922.27			
2. Amount utilised in the period						-391,658,740.11			
(III) Profit distribution		8,819,444.44						42,037,345.54	-50,856,789.98
1. Transfer to surplus reserves									
2. Transfer to general reserves								42,037,345.54	-42,037,345.54
3. Distributions to [owners/shareholders]									
4. Others		8,819,444.44							-8,819,444.44
(V) Transfers within owners' equity	184,560,000.00		-184,560,000.00						
1. Capitalisation of capital reserves	184,560,000.00		-184,560,000.00						
2. Capitalisation of surplus reserves									
3. Loss offset by surplus reserves									
4. Others									
IV. Closing balance of the current year	22,822,372,980.67	4,933,819,444.44	9,302,617,105.95	-	-6,446,356,882.26	139,642,264.15	1,419,398,973.78	172,237,306.91	-25,036,045,046.13

### Consolidated Statement of Provision for Impairment of Assets

Company: Aluminum Corporation of China

31 December 2015

ITEM	Opening balance	Increase in the current period				Decrease in the current period				Closing balance	
		Accrual amount in the current period	Increase due to new subjects involved in consolidation scope	Increase due to other reasons	Total	Reversal due to asset value recovery	Write-off	Decrease due to new subjects involved in consolidation scope	Decrease due to other reasons		
Total amounts of bad debts provided	4,520,004,434.66	210,803,289.28	739,952,475.66	1,518,132,058.65	2,468,887,823.59		18,945,253.18		64,044.56	19,009,297.74	6,969,882,960
Total amounts of inventory write-down provided	2,855,934,977.05	2,197,496,506.56		685,969,456.89	2,883,465,963.45		1,728,579,754.31	1,532,058.68	326,981,041.58	2,057,092,854.57	3,682,308,085
Provision for impairment of available-for-sale assets	345,623,230.98	22,681,196.59		45,302,669.00	67,983,865.59		1,000,000.00			1,000,000.00	412,607,096
Provision for impairment of held-to-maturity investments					-						-
Provision for impairment of long-term equity investments	69,662,000.00				-	-			22,400,000.00	22,400,000.00	47,262,000
Provision for impairment of Investment properties	4,605,173.05			252,156.46	252,156.46	-					4,857,329
Provision for impairment of fixed assets	8,510,816,021.08	15,467,100.26		2,889,900,149.31	2,905,367,249.57	-	1,205,156,144.52	647,812,616.90	576,023,140.07	2,428,991,901.49	8,987,191,369
Provision for impairment of materials for construction of fixed assets	55,607.00			11,215,115.63	11,215,115.63	-					11,270,722
Provision for impairment of construction in progress	1,374,246,315.21	35,544,316.44		1,160,433,225.58	1,195,977,542.02	-	2,769,961.14		1,666,616,696.41	1,669,386,657.55	900,837,199
Provision for impairment of bearer biological assets					-	-					-
Provision for impairment of oil and gas assets					-	-					-
Provision for impairment of intangible assets	318,244,243.90			24,426,772.50	24,426,772.50	-			84,679,677.01	84,679,677.01	257,991,339
Provision for impairment of goodwill	3,777,878.22				-	-					3,777,878
Other provision for impairment	119,361,566.00	49,192,511.84	257,162,190.00	39,704,093.81	346,058,795.65	60,611,771.14			615,104.36	61,226,875.50	404,193,486
<b>Total</b>	<b>18,122,331,447.15</b>	<b>2,531,184,920.97</b>	<b>997,114,665.66</b>	<b>6,375,335,697.83</b>	<b>9,903,635,284.46</b>	<b>60,611,771.14</b>	<b>2,956,451,113.15</b>	<b>649,344,675.58</b>	<b>2,677,379,703.99</b>	<b>6,343,787,263.86</b>	<b>21,682,179,467</b>

Legal representative: Ge Honglin

Chief accountant : Liu Caiming

Person in charge of accounting body:Wang Jun

## Balance Sheet

Company: Aluminum Corporation of China	31 December 2015	Currency: RMB
Item	Closing balance	Opening balance
<b>Current Assets:</b>		
Cash and bank balances	13,515,851,790.29	11,469,525,510.87
Balances with clearing agencies		
Placements with banks and other financial institutions		
Financial assets measure by fair value through profit or loss		
Derivative financial assets		
Notes receivable		
Accounts receivable		
Prepayments	3,671,250.00	2,768,990.00
Premiums receivable		
Accounts receivable under reinsurance contracts		
Reinsurer's share of insurance contract reserves		
Interest receivable		
Dividends receivable	44,200,331.86	40,514,801.75
Other receivables	12,930,366,218.88	10,135,581,802.34
Financial assets purchased under resale agreements		
Inventories		
Divided into holding assets for sale		
Non-current assets due within one year		
Other current assets	10,244,280,138.31	7,054,524,339.42
<b>Total Current Assets</b>	<b>36,738,369,729.34</b>	<b>28,702,915,444.38</b>
<b>Non-current Assets:</b>		
Loans and advances to customers		
Available-for-sale financial assets	2,624,174,027.00	2,638,174,013.00
Held-to-maturity investments	500,000,000.07	1,000,000,000.07
Long-term receivables		
Long-term equity investments	79,251,012,586.94	77,336,326,950.31
Investment properties		
Fixed assets	6,078,206.68	5,996,695.92
Construction in progress		
Materials for construction of fixed assets		
Disposal of fixed assets		
Bearer biological assets	187,276.71	187,276.71
Oil and gas assets		
Intangible assets	50,718,401.05	52,521,540.34
Development expenditure		
Goodwill		
Long-term prepaid expenses		
Deferred tax assets		
Other non-current assets		
<b>Total Non-current Assets</b>	<b>82,432,170,498.45</b>	<b>81,033,206,476.35</b>
<b>Total Assets</b>	<b>119,170,540,227.79</b>	<b>109,736,121,920.73</b>

Legal representative: Ge Honglin

Chief accountant: Liu Caiming

Person in charge of accounting body: Wang Jun

## Balance Sheet (Continued)

Company: Aluminum Corporation of China	31 December 2015	Currency: RMB
Item	Closing balance	Opening balance
<b>Current Liabilities:</b>		
Short-term borrowings	9,866,322,200.00	12,191,508,971.00
Loans from the central bank		
Customer deposits and deposits from banks and other financial institution		
Taking from banks and other financial institution		
Financial liabilities measure by fair value through profit or loss		
Derivative financial liabilities		
Notes payable		
Accounts payable		
Receipts in advance	30,800,000.00	800,000.00
Financial assets sold under repurchase agreements		
Fees and commissions payable		
Employee benefits payable	8,348,448.29	7,629,276.29
Taxes payable	3,059,750.26	2,082,606.46
Interest payable	1,133,907,557.29	1,502,821,860.15
Dividends payable		
Other payable	7,143,106,985.93	4,311,566,580.57
Amounts payable under reinsurance contracts		
Insurance contract reserves		
Funds from securities trading agency		
Funds from underwriting securities agency		
Divided into holding liabilities for sale		
Non-current liabilities due within one year	2,721,697,478.58	622,938,000.00
Other current liabilities	27,000,000,000.00	25,004,150,000.00
<b>Total Current Liabilities</b>	<b>47,907,242,420.35</b>	<b>43,643,497,294.47</b>
<b>Non-current Liabilities:</b>		
Long-term borrowings	36,882,338,043.25	33,436,978,279.78
Bonds payable	19,000,000,000.00	20,940,448,484.58
Long-term payables	702,388,280.00	1,053,582,420.00
Long-term employee benefits payable		
Special payables		
Provisions		
Deferred income		
Deferred tax liabilities		
Other non-current liabilities	64,004,601.39	96,530,223.26
<b>Total Non-current Liabilities</b>	<b>56,648,730,924.64</b>	<b>55,527,539,407.62</b>
<b>Total Liabilities</b>	<b>104,555,973,344.99</b>	<b>99,171,036,702.09</b>
<b>Owners' equity:</b>		
Paid-in capital (share capital)	26,192,102,980.67	22,822,372,980.67
Other equity instruments	8,026,234,166.65	4,933,819,444.44
Capital reserves	449,059,796.72	905,822,525.90
Less: Treasury shares		
Other comprehensive income	989,934,531.61	320,832,995.74
Including: Exchange fluctuation reserve		
Special reserves	333,830.58	333,830.58
Surplus reserves	1,419,398,973.78	1,419,398,973.78
General risk reserves		
Retained earnings	-22,462,497,397.21	-19,837,495,532.47
<b>Total Owners' Equity Attributable To the Company</b>	<b>14,614,566,882.80</b>	<b>10,565,085,218.64</b>
Minority interests		
<b>Total Owners' Equity</b>	<b>14,614,566,882.80</b>	<b>10,565,085,218.64</b>
<b>Total Liabilities and Owners' Equity</b>	<b>119,170,540,227.79</b>	<b>109,736,121,920.73</b>

Legal representative: Ge Honglin

Chief accountant: Liu Caiming

Person in charge of accounting body: Wang Jun

## Income Statement

Company: Aluminum Corporation of China

Year 2015

Currency: RMB

Item	Amount for the current period	Amount for the prior period
<b>I. Total operating income</b>	2,000,000.00	2,800,000.00
Including: Operating income	2,000,000.00	2,800,000.00
Interest income		
Premiums earned		
Fee and commission income		
<b>II. Total operating costs</b>	6,035,314,441.98	4,676,031,819.84
Including: Operating costs		
Interest expenses		
Fee and commission expenses		
Surrenders		
Claims and policyholder benefits (net of amounts recoverable from reinsurers' share)		
Changes in insurance contract reserves (net of reinsurers' share)		
Insurance policyholder dividends		
Expenses for reinsurance accepted		
Business taxes and levies	346,640.00	156,800.00
Selling expenses		
Administrative expenses	169,223,821.18	169,789,427.42
Financial expenses	5,865,743,980.80	4,438,840,261.21
Impairment losses of assets		67,245,331.21
Add: Gains from changes in fair values (Losses are indicated by "-")		
Investment income (Loss is indicated by "-")	3,942,264,347.81	274,080,853.39
Including: Income from investments in associates and joint ventures	-101,369,784.23	-234,594,231.70
Foreign exchange gains (Losses are indicated by "-")		
<b>III. Operating profit (Loss is indicated by "-")</b>	-2,091,050,094.17	-4,399,150,966.45
Add: Non-operating income	2,736,971.39	40,953.00
Less: Non-operating expenses	51,764,354.51	26,488,149.00
Including: Losses from disposal of non-current assets		
<b>IV. Total profit (Total Loss is indicated by "-")</b>	-2,140,077,477.29	-4,425,598,162.45
Less: Income tax expenses		
<b>V. Net profit (Net loss is indicated by "-")</b>	-2,140,077,477.29	-4,425,598,162.45
Net profit attributable to owners of the Company		
Profit or loss attributable to minority interests		
<b>VI. Earnings per share</b>		
(I) Basic earnings per share		
(II) Diluted earnings per share		
<b>VII. Other comprehensive income</b>	669,101,535.87	126,172,191.10
<b>VIII. Total comprehensive income</b>	-1,470,975,941.42	-4,299,425,971.35
Total comprehensive income attributable to owners of the Company		
Total comprehensive income attributable to minority interests		

Legal representative: Ge Honglin

Chief accountant: Liu Caiming

Person in charge of accounting body: Wang Jun

## Cash Flow Statement

Company: Aluminum Corporation of China	Year 2015	Currency: RMB
Item	Amount for the current period	Amount for the prior period
<b>I. Cash Flows from Operating Activities:</b>		
Cash receipts from the sale of goods and the rendering of services	2,000,000.00	2,800,000.00
Net increase in customer deposits and deposits from banks and other financial institutions		
Net increase in loans from the central bank		
Net increase in taking from banks and other financial institutions		
Cash receipts from premiums under direct insurance contracts		
Net cash receipts from reinsurance business		
Net cash receipts from policyholders' deposits and investment contract liabilities		
Net cash receipts from disposal of financial assets held for trading		
Cash receipts from interest, fees and commissions		
Net increase in taking from banks		
Net increase in financial assets sold under repurchase arrangements		
Receipts of tax refunds		
Other cash receipts relating to operating activities	4,862,557,542.47	7,131,468,463.26
<b>Sub-total of cash inflows from operating activities</b>	<b>4,864,557,542.47</b>	<b>7,134,268,463.26</b>
Cash payments for goods purchased and services received		
Net increase in loans and advances to customers		
Net increase in balance with the central bank and due from banks and other financial institutions		
Cash payments for claims and policyholders' benefits under direct insurance contracts		
Cash payments for interest, fees and commissions		
Cash payments for insurance policyholder dividends		
Cash payments to and on behalf of employees	79,355,430.53	89,083,962.94
Payments of various types of taxes	4,537,631.12	2,051,322.70
Other cash payments relating to operating activities	5,194,647,641.68	14,341,030,712.47
<b>Sub-total of cash outflows from operating activities</b>	<b>5,278,540,703.33</b>	<b>14,432,165,998.11</b>
<b>Net Cash Flow from Operating Activities</b>	<b>-413,983,160.86</b>	<b>-7,297,897,534.85</b>
<b>II. Cash Flows from Investing Activities:</b>		
Cash receipts from disposals and recovery of investments	7,399,223,685.00	59,999,999.93
Cash receipts from investment income	3,333,851,384.49	494,876,770.53
Net cash receipts from disposals of fixed assets, intangible assets and other long-term assets		
Net cash receipts from disposals of subsidiaries and other business units		
Other cash receipts relating to investing activities	30,000,000.00	
<b>Sub-total of cash inflows from investing activities</b>	<b>10,763,075,069.49</b>	<b>554,876,770.46</b>
Cash payments to acquire or construct fixed assets, intangible assets and other long-term assets	4,105,872.50	6,067,854.00
Cash payments to acquire investments	10,547,250,351.99	1,235,770,000.00
Net increase in pledged loans receivables		
Net cash payments for acquisitions of subsidiaries and other business units		
Other cash payments relating to investing activities		
<b>Sub-total of cash outflows from investing activities</b>	<b>10,551,356,224.49</b>	<b>1,241,837,854.00</b>
<b>Net Cash Flow from Investing Activities</b>	<b>211,718,845.00</b>	<b>-686,961,083.54</b>
<b>III. Cash Flows from Financing Activities:</b>		
Cash receipts from capital contributions	5,900,000,000.00	7,600,000,000.00
Including: cash receipts from capital contributions from minority owners of subsidiaries		
Cash receipts from borrowings	54,816,322,200.00	59,594,513,971.00
Cash receipts from issue of bonds		
Other cash receipts relating to financing activities		
<b>Sub-total of cash inflows from financing activities</b>	<b>60,716,322,200.00</b>	<b>67,194,513,971.00</b>
Cash repayments of borrowings	53,954,083,367.61	51,539,719,320.00
Cash payments for distribution of dividends or profits or settlement of interest expenses	4,693,786,786.71	3,178,955,314.88
Including: payments for distribution of dividends or profits to minority owners of subsidiaries		
Other cash payments relating to financing activities	460,784,350.00	169,040,000.00
<b>Sub-total of cash outflows from financing activities</b>	<b>59,108,654,504.32</b>	<b>54,887,714,634.88</b>
<b>Net Cash Flow from Financing Activities</b>	<b>1,607,667,695.68</b>	<b>12,306,799,336.12</b>
<b>IV. Effect of Foreign Exchange Rate Changes on Cash and Cash Equivalents</b>	<b>285,223,549.60</b>	<b>3,171,945.55</b>
<b>V. Net Increase in Cash and Cash Equivalents</b>	<b>1,690,626,929.42</b>	<b>4,325,112,663.28</b>
Add: Opening balance of cash and cash equivalents	10,890,476,760.87	6,565,364,097.59
<b>VI. Closing Balance of Cash and Cash Equivalents</b>	<b>12,581,103,690.29</b>	<b>10,890,476,760.87</b>

Legal representative: Ge Honglin

Chief accountant: Liu Caiming

Person in charge of accounting body: Wang Jun

## Statement of Changes in Owners' Equity

Company: Aluminum Corporation of China

Year 2015

ITEM	Amount for the current period								
	Attributable to owners of the Company								
	Paid-in capital/ Share capital	Other equity instruments	Capital reserves	Less: Treasury shares	Other comprehensive income	Special reserves	Surplus reserves	General risk reserves	Retain earnings
I. Closing balance of the preceding year	22,822,372,980.67	4,933,819,444.44	905,822,525.90	-	320,832,995.74	333,830.58	1,419,398,973.78	-	-19,83
Add: Changes in accounting policies									
Corrections of prior period errors									
Others									
II. Opening balance of the current year	22,822,372,980.67	4,933,819,444.44	905,822,525.90	-	320,832,995.74	333,830.58	1,419,398,973.78	-	-19,83
III. Changes for the year (Decrease is indicated by "-")	3,369,730,000.00	3,092,414,722.21	-456,762,729.18	-	669,101,535.87	-	-	-	-2,62
(I) Total comprehensive income					669,101,535.87				-2,14
(II) Owners' contributions and reduction in capital	2,900,000,000.00	2,958,330,000.00		-	-	-	-	-	-
1. Capital contribution from owners	2,900,000,000.00								
2. Capital contribution from owners of Other equity instruments		2,958,330,000.00							
3. Share-based payment recognised in owners' equity									
4. Others									
(III) Special reserves							-		
1. Transfer to special reserves in the period									
2. Amount utilised in the period									
(IV) Profit distribution	-	134,084,722.21	12,967,270.82	-	-	-	-	-	-48
1. Transfer to surplus reserves									
2. Transfer to general reserves									
3. Distributions to [owners/shareholders]									
4. Others		134,084,722.21	12,967,270.82						-48
(V) Transfers within owners' equity	469,730,000.00	-	-469,730,000.00	-	-	-	-	-	-
1. Capitalisation of capital reserves	469,730,000.00		-469,730,000.00						
2. Capitalisation of surplus reserves									
3. Loss offset by surplus reserves									
4. Others									
IV. Closing balance of the current year	26,192,102,980.67	8,026,234,166.65	449,059,796.72	-	989,934,531.61	333,830.58	1,419,398,973.78	-	-22,46

Legal representative: Ge Honglin

Chief accountant : Liu Caiming

Person in charge of accounting body: Wang Jun

### Consolidated Statement of Changes in Owners' Equity (Continued)

Company: Aluminum Corporation of China

Year 2015

ITEM	Amount for the prior period								
	Attributable to owners of the Company								
	Paid-in capital (Share capital)	Other equity instruments	Capital reserves	Less: Treasury shares	Other comprehensive income	Special reserves	Surplus reserves	General risk reserves	Retained earnings
I. Closing balance of the preceding year	20,037,812,980.67		1,090,382,525.90		194,660,804.64	333,830.58	1,419,398,973.78		-15,405,1
Add: Changes in accounting policies									
Corrections of prior period errors									
Others									
II. Opening balance of the current year	20,037,812,980.67	-	1,090,382,525.90	-	194,660,804.64	333,830.58	1,419,398,973.78	-	-15,405,1
III. Changes for the year (Decrease is indicated by "-")	2,784,560,000.00	4,933,819,444.44	-184,560,000.00	-	126,172,191.10	-	-	-	-4,431,5
(I) Total comprehensive income					126,172,191.10				-4,431,5
(II) Owners' contributions and reduction in capital	2,600,000,000.00	4,925,000,000.00		-	-	-	-	-	2,0
1. Capital contribution from owners	2,600,000,000.00								
2. Capital contribution from owners of Other equity instruments		4,925,000,000.00							
3. Share-based payment recognised in owners' equity									
4. Others									2,0
(VII) Special reserves	-	-	-	-	-	-	-	-	-
1. Transfer to special reserves in the period									
2. Amount utilised in the period									
(III) Profit distribution	-	8,819,444.44		-	-	-	-	-	-8,0
1. Transfer to surplus reserves									
2. Transfer to general reserves									
3. Distributions to [owners/shareholders]									
4. Others		8,819,444.44							-8,0
(V) Transfers within owners' equity	184,560,000.00	-	-184,560,000.00	-	-	-	-	-	-
1. Capitalisation of capital reserves	184,560,000.00		-184,560,000.00						
2. Capitalisation of surplus reserves									
3. Loss offset by surplus reserves									
4. Others									
IV. Closing balance of the current year	22,822,372,980.67	4,933,819,444.44	905,822,525.90	-	320,832,995.74	333,830.58	1,419,398,973.78	-	-19,837,1

Legal representative: Ge Honglin

Chief accountant : Liu Caiming

Person in charge of accounting body: Wang Jun

### Statement of Provision for Impairment of Assets

Company: Aluminum Corporation of China

31 December 2015

ITEM	Opening balance	Increase in the current period				Decrease in the current period				Closing balance
		Accrual amount in the current period	Increase due to new subjects involved in consolidation scope	Increase due to other reasons	Total	Reversal due to asset value recovery	Write-off	Decrease due to new subjects involved in consolidation scope	Decrease due to other reasons	
Total amounts of bad debts provided	94,659,610.86				-					-
Total amounts of inventory write-down provided					-					-
Provision for impairment of available-for-sale assets	67,245,331.21				-					-
Provision for impairment of held-to-maturity investments					-					-
Provision for impairment of long-term equity investments	1.00				-					-
Provision for impairment of Investment properties					-					-
Provision for impairment of fixed assets					-					-
Provision for impairment of materials for construction of fixed assets					-					-
Provision for impairment of construction in progress					-					-
Provision for impairment of bearer biological assets					-					-
Provision for impairment of oil and gas assets					-					-
Provision for impairment of intangible assets					-					-
Provision for impairment of goodwill					-					-
Other provision for impairment					-					-
<b>Total</b>	<b>161,904,943.07</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>161,904,943.07</b>

**Aluminum Corporation of China  
NOTES TO THE FINANCIAL STATEMENTS  
FOR THE YEAR ENDED 31 DECEMBER, 2015**

(All amounts denominated in RMB unless otherwise stated)

**I. BASIC INFORMATION ABOUT THE COMPANY**

Aluminum Corporation of China ("Chinalco" or "the Group") is a state-owned enterprise established in Beijing in 2001, approved by "The Approval on Related Issues about the Formation of Aluminum Corporation of China by the State Council"(Guo Han [2001] No.12) and "Notice on Issuance of 'Aluminum Corporation of China Formation Plan' and 'Aluminum Corporation of China Regulation'" (Guo Jing Qi Gai [2001] No.146), and obtained business license of No.100000000035025.

The Group is set up on the basis of several state-owned aluminum enterprises. The establishment of the Company mainly included 8 aluminum enterprises (Shandong Aluminum Company, China Great Wall Aluminum Co., Ltd., Aluminum Corporation of China Guizhou Aluminum Plant, Aluminum Corporation of China Shanxi Aluminum Plant, Pingguo Aluminum Company, China Great Wall Aluminum Co., Ltd., Zhongzhou Aluminum Plant, Qinghai Aluminum Industry Co., Ltd. and Shanxi Carbon Factory), 2 construction companies (The Sixth Metallurgical Construction Company of China National Nonferrous Metals Industry and the Twelfth Metallurgical Construction Company of China National Nonferrous Metals Industry) and 2 R&D units (Zhengzhou Light Metal Research Institute and Luoyang Nonferrous Metals Fabrication Design and Research Institute).

The Group's registered address is No. 62 Xizhimen North Street, Haidian District, Beijing, China, and its registered capital is RMB 22,301,051,000.00 and the legal representative is Ge Honglin.

The Group's business scope includes:

Licensed business items: bauxite mining (the mining of Chinalco Guizhou Maochang Bauxite, valid until December 30, 2038 ); dispatch labor to undertake foreign projects suitable for its strength, scale and performance.

General licensed business items: the operating and management of state-owned assets and state-owned equity; aluminum, copper, rare earth and related nonferrous metal mine products, smelting products, processing products and carbon products production and sale; production, exploration design, engineer construction EPC and construction and installation; equipment manufacture; technology development and technology service; import and export business.

The Group's investor and the ultimate controlling party is State-owned Assets Supervision and Administration Commission (SASAC).

## **II. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES**

### **1. Accounting year**

The accounting year of the Group is from 1 January to 31 December of each calendar year.

### **2. Functional currency**

The reporting currency of domestic companies is Renminbi ("RMB").

### **3. Accounting basis and valuation principle**

The Group adopts historical cost, replacement cost, net realizable value, present value or fair value as its measurement attribution.

### **4. Business combinations**

#### **4.1 Business combinations involving enterprises under common control**

Assets and liabilities obtained shall be measured according to the share of combining entities' owners' equity in the carrying amount of the ultimate holding company's owners' equity. The difference between the carrying amount of the net assets obtained and the carrying amount of the consideration paid for the combination is adjusted to the share premium in capital reserves. If the share premium is not sufficient to absorb the difference, any excess shall be adjusted against retained earnings.

#### **4.2 Business combinations not involving enterprises under common control**

The acquiree's identifiable assets, liabilities and contingent liabilities, acquired by the acquirer in a business combination, that meet the recognition criteria shall be measured at fair value at the acquisition date. Where the cost of combination exceeds the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is treated as an asset and recognized as goodwill, which is measured at cost on initial recognition. Where the cost of combination is less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the acquirer firstly reassesses the measurement of the fair values of the acquiree's identifiable assets, liabilities and contingent liabilities and measurement of the cost of combination. If after that reassessment, the cost of combination is still less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the acquirer recognizes the remaining difference immediately in profit or loss for the current period.

### **5. Preparation of consolidated financial statements**

The Group will take all the subsidiaries under control into combination scope of consolidated financial statements. Consolidated financial statements have been prepared on the basis of the Group and subsidiaries' financial statements, according to other related information, and in accordance with "Enterprise Accounting Standards No. 33 – Consolidated Financial Statements".

## **6. The determine criteria of cash and cash equivalents**

Cash comprises cash on hand and deposits that can be readily withdrawn on demand. Cash equivalents are short-term (usually due within 3 months from the acquisition date), highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

## **7. Translation of transactions and financial statements denominated in foreign currencies**

### **7.1 Translation of transactions denominated in foreign currencies**

On initial recognition of transactions denominated in foreign currencies, foreign currency amount is translated into Renminbi amount by applying the spot exchange rate on the date of the transaction. At the balance sheet date, foreign currency monetary items shall be translated by applying the spot exchange rate at the balance sheet date. The difference between the translated functional currency amount and the original functional currency amount (changes of exchange rate) is recognized in profit and loss, except the exchange rate changes of principal and interest of foreign specific borrowed loan for production activities and construction of assets eligible for capitalization. Foreign currency non-monetary items measured at historical cost are still translated at the spot exchange rate on the date of the transaction without changing their Renminbi amounts. Foreign currency non-monetary items measured at fair value are translated at the spot exchange rate on the date the fair value is determined, and the difference is recognized in profit and loss or capital reserves.

### **7.2 Translation of financial statements denominated in foreign currencies**

For the purpose of preparing the consolidated financial statements, financial statements of a foreign operation are translated from the foreign currency into RMB using the following method: assets and liabilities on the balance sheet are translated at the spot exchange rate prevailing at the balance sheet date; shareholders' equity items except for retained earnings are translated at the spot exchange rates at the dates on which such items arose; all items in the income statement as well as items reflecting the distribution of profits are translated at the spot exchange rates on the dates of the transactions. The difference between the translated assets and the aggregate of liabilities and shareholders' equity items is separately presented as the exchange differences arising on translation of financial statements denominated in foreign currencies under the shareholders' equity in the balance sheet.

## **8. Financial instruments**

### **8.1 Classification of financial assets and financial liabilities**

At initial recognition, financial assets are classified as financial assets at Fair Value through Profit or Loss ("FVTPL") including trading financial assets and financial assets designated as at FVTPL, held-to-maturity investments, loans, receivables and available-for-sale financial assets.

At initial recognition, financial liabilities are classified as financial liabilities at FVTPL including trading financial liabilities and financial liabilities designated as at FVTPL and other financial liabilities.

## 8.2 The recognition caution, measurement methods and derecognition condition of financial assets and financial liabilities

Financial assets and financial liabilities are recognized when company becomes a party to the contractual provisions of the instruments. Financial assets and financial liabilities are initially measured at fair value; for the financial assets and financial liabilities at FVTPL, related transaction cost is recognized in profit and loss; for the other financial assets and financial liabilities, related transaction cost is recognized in initially measured amount.

Financial assets are subsequently measured at fair value, and transaction cost in future disposal will not be deducted, except following conditions: (1)held-to-maturity investments, loans and receivables adopt the contractual calculation and measured at amortized cost; or(2) equity instrument investment without price and of which fair value can't be measured reliably in active market, and the derivative financial assets which are linked to the above equity instrument investment and settled by delivering the equity instrument investment, are measured at cost.

Financial liabilities adopt contractual calculation that are subsequently measured at amortized cost, except following conditions: (1) financial liabilities at FVTPL are measured at fair value, and transaction cost in future settlement of financial liabilities will not be deducted; or (2) equity instrument investment without price and of which fair value can't be measured reliably in active market, and the derivative financial liabilities which are linked to the above equity instrument investment and settled by delivering the equity instrument investment, are measured at cost; or (3) financial guarantee contract not belong to financial liabilities designated as at FVTPL, or loan commitment of the loan not designated as at FVTPL of which the interest below market rates, are subsequently measured at the higher amount: 1) the amount recognized in accordance with "Enterprise Accounting Standards No. 13 – Contingency" ; or 2) the amount that initially recognized amount deducting the accumulative amortization amount recognized in accordance with "Enterprise Accounting Standards No. 14 – Revenue".

As for the financial assets and financial liabilities, the profit and loss due to changes in fair value except for the hedging related financial assets and liabilities are dealt by the methods below: (1)the profit and loss of financial assets and financial liabilities at FVTPL due to changes in fair value is recognized in fair value; the interest and cash dividends acquired during the assets holding period are recognized as investment income; the difference between the fair value on disposal and initial recognition amount shall be recognized to investment income, then adjust the profit and loss arising from fair value changes at the same time.(2)the changes in fair value of available-for-sale financial assets are recognized in capital reserve; the interest under the contractual calculation within the asset holding period is recognized in income from investment; the cash dividends of available-for-sale equity instruments are recognized in income from investment when investee declare to pay dividends; the balance of the actual received amount and book value deducting accumulated changes in fair value is recognized in investment income.

The Group derecognizes a financial asset when the contractual right of obtaining the cash flow of a financial asset is derecognized or substantially all the risk and reward of a financial asset's ownership is

transferred; the Group derecognizes a financial liability (or part of it) only when the underlying present obligation (or part of it) is discharged.

#### 8.3 The recognition basis and measurement methods of financial assets transfer

Company derecognizes a financial asset when substantially all the risk and reward of a financial asset's ownership is transferred; company continues confirming transferred financial asset and confirms the consideration received as a financial liability, when substantially all the risk and reward of a financial asset's ownership is retained. When company neither transfers nor retains substantially all the risk and reward of a financial asset's ownership, the financial asset transfer is dealt by the methods below: (1) when company gives up control of a financial asset, it derecognizes the financial asset; or (2) when company doesn't give up control of a financial asset, it continues to confirm related financial asset according to the degree of involvement in the transferred financial asset and confirms related liabilities. For the financial assets which meet holistic transfer conditions, the difference between following two amounts shall be recognized in the profit and loss: (1) the carrying amount of financial assets transferred; and (2) the sum of consideration received from transfer and the amount originally directly recognized in accumulated variation due to fair value change of owner's equity. When financial asset satisfies the condition of derecognition, we should share the holistic carrying amount of the financial assets transferred according to the respective fair value of the derecognized part and the non-derecognized part, and the difference between following two amounts shall be recognized in the profit and loss: (1) the carrying amount of the derecognized part; and (2) the sum of the consideration received of the derecognized part and the related derecognized amount originally directly recognized in accumulated variation due to fair value change of owner's equity.

#### 8.4 The determination method of fair value of financial assets and financial liability

For financial assets and financial liabilities in active market, the fair value is the price in active market; for financial assets and financial liabilities not in active market, we should determine their fair value by valuation technique (including referring to the price in recent market transaction among parties who are familiar with market situation and willing to transaction, referring to recent fair value of other essentially similar financial instruments, discounted cash flow, option price models and others); for financial assets initially obtained and financial liabilities initially born, we should determine their fair value on the basis of market transaction price.

#### 8.5 The impairment testing and measurement method of the financial assets

The Group should check the impairment carrying amount of the financial assets apart from financial assets at FVTPL, if there is objective evidence indicating that the financial asset has impairments, we should test the impairment of this financial asset and measure the impairment.

The Group should separately test the impairment of financial assets of individually significant amount; for financial assets of no significant amount specifically, we should test the impairment individually or

test impairment of the financial portfolio with similar credit risk characteristics. For the financial asset with recognized impairment not including the financial portfolio with similar credit risk characteristics, we also should test the impairment.

For financial assets measured at amortized cost, if there is objective evidence indicating that the financial asset has impairments at the end of the period, we determine impairment loss according to the difference between carrying amount and the present value of estimated future cash flow. For equity instrument investment without price and of which fair value can't be measured reliably in active market, and the derivative financial assets which are linked to the above equity instrument investment and settled by delivering the equity instrument investment, when they have impairment, we determine the difference between carrying amount of equity instrument investment and derivative financial assets and the present value of estimated future cash flow according to the similar financial assets' market rate of return as impairment loss. When the fair value of available-for-sale financial assets has sharp fall, or when we confirm that this downward trend is not temporary after a consideration of all relevant factors, we should determine the impairment loss and roll out the accumulated losses recognized in owners' equity because of the decrease of the fair value, and then recognize them in current profit and loss.

8.6 The reasons for change of holding intention and ability as well as reclassifying held-to-maturity investments which has not yet expired to the available-for-sale financial assets:

8.6.1 There isn't financial resource supporting the financial asset investment to make it held to maturity;

8.6.2 The management doesn't have intent to hold to maturity;

8.6.3 The difficulty of the Group to hold the financial asset to maturity due to the limit of laws and regulations or other reasons;

8.6.4 Other situation indicating the Group doesn't have the ability to hold the financial asset to maturity.

Any substantial reclassification of held-to-maturity investments to available-for-sale needs to be examined and approved by the board of directors.

## **9. Hedging instruments**

9.1 Hedging activities of the Company include fair value hedges, cash flow hedges and hedges of net investment in foreign operations.

9.2 for the hedging instruments meeting following conditions, the Company processes them in hedging accounting method: (1) At the inception of a hedge, company records the hedging relationship between the hedging instrument and hedged item, and prepares official written documents about hedging relationship, risk management objective and strategy for undertaking various hedging transactions; and (2) the hedge is assessed of high effectiveness, and meets risk management strategy initially determined for hedging relationship; (3) for cash flow hedges with forecast transaction, forecast transaction easily happens and must make company be faced with cash flow variation risk influencing the profit and loss at last; (4) the effectiveness of the hedge can be measured reliably; (5) the hedge effectiveness is assessed by the Company on an ongoing basis so as to determine whether the hedge

is highly effective throughout the accounting periods for which the hedging relationship was designated. When the hedge meets following conditions at the same time, the Company affirms it highly effective: (1) At the inception and in subsequent periods of the hedge, the hedge is estimated to highly effectively offset the variation of fair value or cash flow due to hedging risk in indicated hedge period; and (2) actual offset results of the hedge is in the range of 80% to 125%.

### 9.3 The hedging accounting treatment

#### 9.3.1 Fair value hedges

A gain or loss arising from a change in the fair value of a derivative that is designated and qualifies as a fair value hedge is recognized in profit or loss. A gain or loss on the hedged item attributable to the hedged risk is recognized in profit or loss, with a corresponding adjustment to the carrying amount of the hedged item.

Hedge accounting is discontinued when the Company revokes the hedging relationship, the hedging instrument expires or is sold, terminated, or exercised, or no longer qualifies for hedge accounting.

#### 9.3.2 Cash flow hedges

9.3.2.1 The effective portion of profit and loss of hedge instrument is directly recognized in owners' equity, ineffective portion is recognized in current profit and loss.

9.3.2.2 If a hedge of a forecast transaction subsequently results in the recognition of a financial asset or a financial liability, the amounts previously recognized in owners' equity are reclassified to profit or loss in the same periods which the financial asset or financial liability affects profit or loss, the hedge is recognized in current profits and loss; if company confirms a non-financial asset or non-financial liability due to the forecast transaction, the related profit and loss previously recognized in owners' equity are reclassified in initially confirmed amount of this non-financial asset and non-financial liability. And if company confirms an asset or a liability, the related profit and loss previously recognized in owners' equity are reclassified to profit or loss in the same periods during which the financial asset or financial liability affects profit or loss of company.

Except as stated above, the profits and loss previously recognized in owners' equity are reclassified to profit or loss in the same periods which the hedged forecast transaction affects profit or loss.

#### 9.3.3 Hedges of net investments in foreign operations

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognized in owners' equity and is reclassified to profit or loss on disposal of the foreign operation; the gain or loss relating to the ineffective portion is recognized immediately in profit or loss.

### 9.4 The Group assesses the hedge effectiveness in ratio analysis method.

## 10. Receivables

10.1 Accounts receivable that are individually significant and for which bad debt provision is individually assessed:

Basis or monetary criteria for determining an individually significant receivable	A receivable that exceeds RMB 5.00 million is deemed as an individually significant receivable by the Company
Method of determining provision for receivable that are individually significant and for which bad debt provision is individually assessed	Individual impairment test according to the net amount when the current value of future cash flow is lower than the book value

10.2 Receivables for which bad debt provision is collectively assessed on a portfolio basis

10.2.1 Basis for determining a portfolio and the method ensuring the bad debt provision

Basis for determining a portfolio	
Aging analysis portfolio	
Bad debt provision assessing on a portfolio basis	
Aging analysis portfolio	Portfolios that aging analysis is used for bad debt provision

10.2.2 Portfolios that aging analysis is used for bad debt provision:

Aging	Provision as a proportion of accounts receivable (%)	Provision as a proportion of other receivables (%)
Within 1 year		
More than 1 year but not exceeding 2 years	10.00	10.00
More than 2 years but not exceeding 3 years	20.00	20.00
More than 3 years but not exceeding 4 years	30.00	30.00
More than 4 years but not exceeding 5 years	50.00	50.00
More than 5 years	100.00	100.00

Besides, one subsidiary named Yunnan Copper Group ("Yunnan Copper") uses different aging analysis for bad debt provision as followed:

Aging	Provision as a proportion of accounts receivable (%)	Provision as a proportion of other receivables (%)
Within 1 year (inclusive)	5.00	5.00
More than 1 year but not exceeding 2 years	6.00	6.00
More than 2 years but not exceeding 3 years	8.00	8.00
More than 3 years but not exceeding 4 years	10.00	10.00
More than 4 years but not exceeding 5 years	50.00	50.00
More than 5 years	100.00	100.00

10.3 Receivable that are not individually significant but for which bad debt provision is individually assessed:

Reasons for making individual bad debt provision	Uncertainty of the amount reclaimable
Bad debt provision method	Individual impairment test according to the net amount when the current value of future cash flow is lower than the book value

The bad debt recognized when the current value of future cash flow is lower than the book value for notes receivable, prepayment, interest receivable, long-term receivable and other receivables.

## **11. Inventories**

### 11.1 Categories of inventories

The Company's inventories mainly include materials in transit, raw materials, work in progress, finished goods, etc.

### 11.2 Valuation method of inventories upon delivery

The actual cost of inventories upon delivery is calculated using the monthly weighted average method.

### 11.3 Basis for determining net realizable value of inventories and provision methods for decline in value of inventories

At the balance sheet date, inventories are measured at the lower of cost and net realizable value, and inventory falling price reserves are measured as the difference between cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion, the estimated costs necessary to make the sale and relevant taxes. At the balance sheet date, if part of inventory has contract price and others not, then impairment tests should be carried out for both parts. The net realizable value should be compared with the cost and the difference is the inventory falling price reserve.

### 11.4 Inventory count system

The perpetual inventory system is maintained for stock system.

### 11.5 Amortization method for low cost and short-lived consumable items and packaging materials

#### 11.5.1 Low cost and short-lived consumable items

Low cost and short-lived consumable items are amortized using the several time write-off according to number of use or immediate write-off.

#### 11.5.2 Packaging materials

Packaging materials are amortized using the several time write-off according to number of use or immediate write-off.

## **12. Long-term equity investments**

#### 12.1 Determination of investment cost

12.1.1 For a long-term equity investment acquired through a business combination involving enterprises under common control, when merger parties make the amount of paying cash, transferring non-cash assets, assumption of debt and issue of equity securities as merger consideration, the investment cost of the long-term equity investment is the attributable share of the carrying amount of the shareholders' equity of the acquiree at the date of combination. Company uses the difference between the initial cost of long-term equity investment and the carrying amount of the merger consideration or the book value of shares issued to adjust capital reserve; if capital reserve isn't enough to reduce, the retained earnings should be adjusted.

12.1.2 For a long-term equity investment acquired through business combination not involving enterprises under common control, the investment cost of the long-term equity investment is the fair value of the merger consideration paid at the acquisition date.

12.1.3 In addition to a business combination: for acquisition by paying cash, the initial investment cost is the price actually paid; for acquisition by issuing equity securities, the initial investment cost is the fair value of the equity securities; for acquisition by investment, the initial investment cost is the promissory value in investment contract or agreement (except the price in investment contract or agreement is not fair).

#### 12.2 Subsequent measurement and recognition of profit or loss

For long-term equity investments that the Company can control the invested entity, company uses Cost method, and adjust in Equity method when preparing consolidated financial statements; for long-term equity investments that the Company has joint control or significant influence on the invested entity, the Company uses Entity method.

#### 12.3 Basis for determining joint control and significant influence over investee

Joint control is the contractually agreed sharing of control over an economic activity, and exists only when the strategic financial and operating policy decisions relating to the activity require the unanimous consent of the parties sharing control. Significant influence is the power to participate in the financial and operational policy decisions of the investee but does not control or jointly control those policy decisions.

#### 12.4 Methods of impairment assessment and determining the provision for impairment loss

The Company reviews the long-term equity investments at each balance sheet date to determine whether there is any indication that they have suffered an impairment loss. If there is any indication that assets may be impaired, the recoverable amounts are estimated for such assets. If the recoverable amount is less than its carrying amount, the deficit is accounted for as an impairment loss and is recognized in profit or loss for the period.

### 13. Investment properties

13.1 Investment property includes a land use right that is leased out; a land use right held for transfer upon capital appreciation; and a building that is leased out.

13.2 An investment property is measured initially at cost. Company uses the cost model for subsequent measurement of investment property, and adopts a depreciation or amortization policy like the fixed assets and intangible assets for the investment property which is consistent with that for buildings or land use rights. The Company reviews the investment properties at each balance sheet date to determine whether there is any indication that they have suffered an impairment loss. If there is any indication that such assets may be impaired, the recoverable amounts are estimated for such assets. If the recoverable amount is less than its carrying amount, the deficit is accounted for as an impairment loss and is recognized in profit or loss for the period.

#### **14. Fixed assets**

14.1 Recognition criteria, valuation and depreciation method for fixed assets

Fixed assets are tangible assets that are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes, and have useful lives of more than one accounting year.

Fixed assets are initially measured at cost and recognized the depreciation from the next month since acquired.

The subsidiary Group named Aluminum Corporation of China Limited ("Aluminum Corporation Limited") and some other subsidiaries depreciate the professional Aluminum processing equipment with the units of production method and recognize from the acquiring month. The subsidiary Company named Chinalco Luoyang Copper Co., Ltd. ("Luoyang Copper") and some other subsidiaries depreciate the professional Aluminum processing equipment with the units of production method from the next month after the acquiring date.

14.2 Depreciation of each category of fixed assets

Category	Depreciation period (years)	Residual value rate (%)	Annual depreciation rate (%)
Buildings	8-45	5.00	2.11-11.88
Machinery and equipment	8-30	5.00	3.17-11.88
Transportation vehicles	8-10	5.00	9.50-11.88
Electronic equipment	5	5.00	19.00
Office equipment	5-10	5.00	9.50-19.00
Hotel furniture	5-20	5.00	4.75-19.00
Other	5-20	5.00	4.75-19.00

14.3 Methods of impairment assessment and determining the provision for impairment losses of fixed

assets

The Company assesses at each balance sheet date whether there is any indication that the fixed assets may be impaired. If the recoverable amount of an asset is less than its carrying amount, the deficit is accounted for as an impairment loss and is recognized in profit or loss for the period.

#### 14.4 Identification basis and valuation methods for fixed assets acquired under finance leases

The Company adopts a depreciation policy for a fixed asset held under a finance lease which is consistent with that for its owned fixed asset. The finance lease will be recorded if: (1) there is reasonable certainty that the Company will obtain ownership of the leased asset at the end of the lease term, (2) the tenant has the option to purchase the leased asset and the purchase price is far less than the fair value at that point. The option can be assured since the lease period begins, (3) the leased period (more than 75% of the useful life) takes up the greater part of the useful life of the leased asset, even though the Company cannot obtain the ownership, (4) the lessee's minimum lease payment (more than 90% of the fair value) takes up the greater part of the fair value of the lease asset, (5) the leased asset is rather special that only the tenant can use it without material adjustments.

A company recognizes the leased asset with the lower amount of the lessee's minimum lease payment and the fair value and depreciates the leased asset as the self-owned fixed assets.

### 15. Construction in progress

15.1 Construction in progress is transferred to fixed asset when it is ready for intended use. If a construction in progress has reached the working condition for its intended use but the final project accounts have not been completed and approved, the asset should be transferred to fixed assets at an estimated value based on project budget, contracted construction price or actual project costs. Depreciation should also be accrued in accordance with relevant requirements of the Company. After the project accounts have been approved, the estimated values should be adjusted according to actual costs without adjusting depreciation recognized.

15.2 The company assesses at each balance sheet date whether there is any indication that construction in progress may be impaired. If the recoverable amount of an asset is less than its carrying amount, the deficit is accounted for as an impairment loss and is recognized in profit or loss for the period.

### 16. Borrowing cost

#### 16.1 Capitalization of borrowing costs

Capitalization of borrowing costs ceases when the qualifying asset being acquired, constructed or produced becomes ready for its intended use or for sale. Other borrowing costs are recognized as an expense in the period in which they are incurred.

#### 16.2 Capitalization period of borrowing costs:

(1) When the borrowing cost satisfies the following criteria, it should be capitalized: 1) the qualifying asset expenditure happens, 2) the borrowing funds happens, 3) the necessary constructing and production activities for the asset intended use and sale have incurred.

(2) Capitalization of borrowing costs is suspended during periods in which the acquisition, construction or production of a qualifying asset is suspended abnormally and when the suspension is for a continuous period of more than 3 months. Capitalization is suspended until the acquisition, construction or production of the asset is resumed. During the suspending period, the borrowing cost should be as an expense.

(3) When the qualifying asset reached its intended use or sale, the capitalization halt.

### 16.3 Capitalization amount of borrowing costs:

Where funds are borrowed under a specific-purpose borrowing, the amount of interest to be capitalized is the actual interest expense incurred on that borrowing for the period less any bank interest earned from depositing the borrowed funds before being used on the asset or any investment income on the temporary investment of those funds. Where funds are borrowed under general-purpose borrowings, the Company determines the amount of interest to be capitalized on such borrowings by applying a capitalization rate to the weighted average of the excess of cumulative expenditures on the asset over the amounts of specific-purpose borrowings. The capitalization rate is the weighted average of the interest rates applicable to the general-purpose borrowings.

## 17. Intangible assets

17.1 Intangible assets include land use right, patent right, nonpatented technology and so on, and are initially recorded at cost.

17.2 For an intangible asset with a finite useful life, the Company systematically and reasonably amortizes it in accordance with the expected realization approaches of the economic interest related to the intangible asset, for an intangible asset of which realization approaches cannot be expected, the Company amortizes it in straight-line method. Specific fixed number of year is as follows:

Item	Amortize fixed number of year (year)
Incl. Software	3-10
Land use right	The short one between actual useful year and 50
Patent right	Actual income year
Non-patented technology	3-10
Trademark right	3-20
Copyright	3-10
Concession	3-30
Mining right	3-30

Generation right	3-30
Exploration right	3-30
Others	3-30

Specific circumstance of the subsidiary company named Yunnan Copper (Group) Co., Ltdas follows:

Exploration right	Exploration right isn't amortized, and calculated in "construction in process", and Company make impairment test in the end of term. After exploration, if mining right forms, the exploration right is transferred to cost and amortized; if mining right doesn't form, the exploration right is transferred to current profit and loss.
Mining right	Mining right is amortized in output method, in accordance with share of consumption of mineral resources in explored reserve (Based on the approval of land and resources department, if there isn't approval, based on appraisal result by the third party. If reserve changes, company can adjust amortization basis in accordance with amount put on records by land and resources department s).

For intangible asset with an indefinite useful life is not amortized, the Company reviews the useful life method at the end of the period. The criterions of intangible asset with an indefinite useful life are: (1) from contractual rights or other legal rights, but there is no usable life set in the contract or by the law; (2) the Company cannot judge the deadline that the intangible asset brings economic profit in accordance with the same industry situation and related experts argument.

Intangible assets with indefinite useful life and intangible assets not yet available for use are tested for impairment from bottom to top by related department using intangible assets annually, and related department assesses if the criterions of intangible asset with an indefinite useful life change.

17.3 For intangible assets with definite useful life, if there is any indication that intangible asset may be impaired, the Company recognizes the difference between carrying amount and recoverable amount as the provision for impairment; for intangible assets with indefinite useful life which don't reach serviceable condition, regardless of whether there is any indication that intangible asset may be impaired, company should make impairment test every year.

17.4 Expenditure during development phase that does not meet the following conditions is recognized in profit or loss for the period. Expenditure during the development phase that meets all of the following conditions simultaneously is recognized as intangible asset: (1) It is technically feasible to complete the intangible asset so that it will be available for use or sale; (2) The Company has the intention to complete the intangible asset and use or sell it; (3) The Company can demonstrate the ways in which the intangible asset will generate economic benefits, including the evidence of the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset; (4) The availability of adequate technical, financial and other

resources to complete the development and the ability to use or sell the intangible asset; and (5) The expenditure attributable to the intangible asset during its development phase can be reliably measured. The specific criterion for dividing expenditure during research phase and expenditure during development phase:

Expenditure during development phase that does not meet the following conditions is recognized in profit or loss for the period. Expenditure during the development phase that meets all of the following conditions simultaneously is recognized as intangible asset: (1) It is technically feasible to complete the intangible asset so that it will be available for use or sale; (2) The Company has the intention to complete the intangible asset and use or sell it; (3) The Company can demonstrate the ways in which the intangible asset will generate economic benefits, including the evidence of the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset; (4) The availability of adequate technical, financial and other resources to complete the development and the ability to use or sell the intangible asset; and (5) The expenditure attributable to the intangible asset during its development phase can be reliably measured. The specific criterion for dividing research phase and development phase: research phase to obtain new skills and knowledge, which has program and exploratory characteristics; development phase is before commercial production or usage, and during this phase company applies research result and other knowledge to a plan or design of producing new materials, devices, products with substantial improvement, and this phase has of targeted characteristic and characteristic that outcome easily forming.

#### **18. Long-term prepaid expenses**

Long-term prepaid expenses are recorded as actual amount and amortized over the expected periods in which benefits are derived. If long-term prepaid expenses cannot bring benefit in the later period, all of the part not yet amortized will be transferred to current profit and loss.

#### **19. Employee benefits**

19.1 Employee benefits: Employee benefits are all forms of consideration given by an entity in exchange for service rendered by employees or for the termination of employment, including short-term employee benefits, post-employment benefits, "three kinds of people" benefits, termination benefits and other long-term employee benefits. It also includes the welfare of spouse, children, parents, the deceased employees' families and other beneficiaries of employee in the companies.

19.2 When an employee has rendered service to an entity during an accounting period, the entity shall recognize the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service:(a) as a liability (accrued expense), after deducting any amount already paid; or (b) as an expense, unless another CAS requires or permits the inclusion of the benefits in the cost of an asset.

19.3 Employee benefits should be accounted with the actual cost of the related assets or in the current

profits and losses. Non-monetary-welfare should be accounted with fair value measurement.

#### 19.4 post-employment benefits

19.4.1 Accounting for defined contribution plans: The Company should pay pension insurance and unemployment insurance in accordance with the relevant provisions of the local government for the workers. When an employee has rendered service to an entity during an accounting period, the entity shall recognize the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service as a liability and an expense or cost of an asset. When contributions to a defined contribution plan are not expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related service, they shall be discounted using the reasonable discount rate. The rate used to discount post-employment benefit obligations shall be determined by reference to market yields at the end of the reporting period on high quality corporate bonds. In countries where there is no deep market in such bonds, the market yields on government bonds shall be used.

19.4.2 Defined benefit plans: According to the expected cumulative welfare unit method formula, the company will recognize the welfare benefit plan duty into period when employee provides services, and the cost of the related assets or in the current profits and losses. The present value of defined benefit plan obligations minus the fair value of plan assets formed by the deficit or surplus in recognition of a defined benefit plan is net debt or net assets. If defined benefit plan is surplus, companies should compare with defined benefit plan assets and earnings limit, and the lower is defined benefit plan value. When contributions to a defined contribution plan are not expected to be settled wholly within twelve months after the end of the annual reporting period in which the employees render the related service, they shall be discounted using the reasonable discount rate. The rate used to discount post-employment benefit obligations shall be determined by reference to market yields at the end of the reporting period on high quality corporate bonds.

Determining the measurement of the net defined benefit liability/asset to be recognized in other comprehensive income, comprising:

Actuarial gains and losses return on plan assets, excluding amounts included in net interest on the net defined benefit liability/asset and any change in the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability/asset.

In the defined benefit plan settlement, comprising defined benefit plans obligations on the settlement date and the present value of the settlement price, and confirm the gains or losses on the settlement date.

#### 19.5 Termination benefits

Termination benefits are employee benefits payable as a result of either an entity decision to terminate an employee employment before the normal retirement date or an employees' decision to accept an offer of benefits in exchange for the termination of employment. An entity is required to recognize

termination benefits at the earlier of when the entity can no longer withdraw an offer of those benefits and when it recognizes any related restructuring costs.

19.5.1 The company has made a formal plan on the cancellation of labor relationship or put forward a proposal on voluntary layoff, and formal dismissal plan or proposal has been approved. The suggestions include: to be labor relations or reduction of the staff's Department, position and quantity, the amount of compensation according to the relevant provisions, and the time of terminating the labor relationship or reduction.

19.5.2 An entity should not cancel or revise the plan amendment or a curtailment of other employee benefits unilaterally.

In accordance with the provisions of the terms of the dismissal plan reasonably expected, the company confirms the termination benefits of employee compensation payable. The confirmation of the expected benefits will finish within twelve months after the full payment of the relevant provisions, regarded as short-term compensation, or applying the relevant provisions of other long-term employee benefits.

#### 19.6 Benefits of three kinds of employee restriction

On the restructuring of three kinds of employee, in addition to the arrangements to participation in a unified social security system, the company should abide by the relevant national policies, providing services experience and other factors to provide overall for its living allowance with monthly payment. The restructuring of the three kinds of employee includes retirement and laid off workers and survivors. Undertaking the obligation for compensation in the period of the provided services for the three kinds of employee above belongs to the defined benefit plan. At the balance sheet date, the company commissions an independent actuary actuarial valuation, and determines the welfare cost by the expected cumulative welfare unit method.

Of which belonging to the laid off workers, before its official retirement, the workers did not terminate the labor relationship with the company, but this part of the employee cannot bring economic benefits to the enterprise, the company is committed to providing substantially compensation for termination benefits. The compensation plan with benefits conditions confirms the estimated liabilities, going with termination benefits processing, or leaving welfare treatment.

#### 19.7 Other long-term employee benefits

The Group implements the internal retirement plan. The workers did not terminate the labor relationship with the company, but this part of the employee cannot bring economic benefits to the enterprise, the Company is committed to providing substantially compensation for termination benefits. The compensation in accordance with the conditions of deposit plan, accounting period to provide services for the Company, with local regulations and the proportion should pay the amount of calculation, is recognized as a liability, and recognized the cost of the related assets or in the current profits and losses. The compensation is not in accordance with the conditions of deposit plan, as a defined benefit plan is determined according to the expected cumulative welfare unit formula during the welfare

obligations, and the cost of the related assets or in the current profits and losses.

## **20. Bonds payable**

Bonds payable is recorded as the actual amount received, and bond interest cost is calculated in accordance with amortized cost and actual rate at balance sheet date. When there is little difference between actual rate and coupon rate, bond interest cost is calculated in accordance with coupon rate.

## **21. Provisions**

21.1 Provisions are recognized when the Company has a present obligation related to a contingency such as products quality assurance, onerous contract, restructuring, it is probable that an outflow of economic benefits will be required to settle the obligation, and the amount of the obligation can be measured reliably.

21.2 The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account factors pertaining to a contingency such as the risks, uncertainties and time value of money.

## **22. Revenue**

### **22.1 Revenue from sale of goods**

Revenue from sale of goods is recognized when (1) the Company has transferred to the buyer the significant risks and rewards of ownership of the goods; (2) the Company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold; (3) the amount of revenue can be measured reliably; (4) it is probable that the associated economic benefits will flow to the Company; and (5) the associated costs incurred or to be incurred can be measured reliably.

### **22.2 Revenue from rendering of services**

Revenue from rendering of services is recognized when (1) the amount of revenue can be measured reliably; (2) it is probable that the associated economic benefits will flow to the enterprise; (3) the stage of completion of the transaction can be determined reliably; and (4) the associated costs incurred or to be incurred can be measured reliably. Revenue from rendering of services is recognized using the percentage of completion method at the balance sheet date. When the outcome of the transaction involving the rendering of services cannot be estimated reliably, revenue is recognized only to the extent of the costs incurred that will be recoverable, and the costs incurred are recognized as expenses for the period. When it is not probable that the costs incurred will be recovered, revenue is not recognized.

### **22.3 Revenue from alienating of right to use assets**

When the economic benefit will probably flow into the Company and the revenue can be measured

reliably, the amount of revenue from alienating of right to use assets shall be recognized. Revenue of interest shall be confirmed by the time and actual interest of the assets that have been used and the revenue of charge for use shall be confirmed by the agreed time and methods in the contract.

### **23. Construction contracts**

23.1 Where the outcome of a construction contract can be estimated reliably, contract revenue and costs are recognized using the percentage of completion method at the balance sheet date. The stage of completion of a contract is determined using the proportion that actual contract costs incurred to date bears to the estimated total contract costs.

23.2 Where the outcome of a construction contract cannot be estimated reliably, (1) if contract costs are expected to be recoverable, contract revenue is recognized to the extent of contract costs that are expected to be recoverable; and contract costs are recognized as expenses in the period in which they are incurred; (2) if contract costs are not expected to be recoverable, they are recognized as expenses immediately when incurred and contract revenue is not recognized. When the uncertainties that prevented the outcome of the construction contract from being estimated reliably no longer exist, revenue and expenses associated with the construction contract are recognized using the percentage of completion method.

23.3 If the estimated total contract costs exceed total contract revenue, the expected loss is recognized immediately as an expense for the period.

23.4 The cumulative costs incurred and cumulative gross profits (or losses) recognized for contracts in progress and the progress billings are offset and the net amount is presented in the balance sheet. Where the aggregate of cumulative costs incurred and cumulative gross profits (or losses) recognized exceed the progress billings for contracts in progress, the surplus is shown as inventory. Where the progress billings for contracts exceed the aggregate of cumulative costs incurred and cumulative gross in progress profits (or losses) recognized, and the surplus is shown as receipts in advance.

### **24. Government grants**

24.1 Government grants include government grant related to an asset and government grant related to income.

24.2 If a government grant is in the form of a transfer of a monetary asset, it is measured at the amount received or receivable. If a government grant is in the form of a non-monetary asset, it is measured at fair value. If the fair value cannot be reliably determined, it is measured at a nominal amount. A government grant measured at a nominal amount is recognized immediately in profit or loss for the period.

24.3 A government grant related to an asset is recognized as deferred income, and evenly amortized to profit or loss over the useful life of the related asset. For a government grant related to income, if the grant is a compensation for related expenses or losses to be incurred in subsequent periods, the grant is recognized as deferred income, and recognized in profit or loss over the periods in which the related costs are recognized. If the grant is a compensation for related expenses or losses already incurred, the grant is recognized immediately in profit or loss for the period.

## **25. Deferred tax assets/ deferred tax liabilities**

25.1 For temporary differences between the carrying amounts of certain assets or liabilities and their tax base, or between the nil carrying amount of those items that are not recognized as assets or liabilities and their tax base that can be determined according to tax laws, deferred tax assets and liabilities are recognized using the balance sheet liability method.

25.2. Deferred tax is generally recognized for all temporary differences. Deferred tax assets for deductible temporary differences are recognized to the extent that it is probable that taxable profits will be available against which the deductible temporary differences can be utilized. For deductible losses and tax credits that can be carried forward, deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which the deductible losses and tax credits can be utilized.

25.3 At the balance sheet date, deferred tax assets and liabilities are measured at the tax rates, according to tax laws, that are expected to apply in the period in which the asset is realized or the liability is settled.

25.4 Current and deferred tax expenses or income are recognized in profit or loss for the period, except when they arise from transactions or events that are directly recognized in other comprehensive income or in shareholders' equity and when they arise from business combinations.

## **26. Leases**

### **26.1 Operating leases**

26.1.1 When the Company is the lessee, operating lease payments are recognized on a straight-line basis over the term of the relevant lease, and are either included in the cost of related asset or charged to profit or loss for the period. Initial direct costs incurred are charged to profit or loss for the period. Contingent rents are charged to profit or loss in the period in which they are actually incurred.

26.1.2 When the Company is the lessor, rental income from operating leases is recognized in profit or loss on a straight-line basis over the term of the relevant lease. Initial direct costs with more than an insignificant amount are capitalized when incurred, and are recognized in profit or loss on the same

basis as rental income over the lease term. Other initial direct costs with an insignificant amount are charged to profit or loss in the period in which they are incurred. Contingent rents are charged to profit or loss in the period in which they actually arise.

#### **26.2 finance leases**

26.2.1 When the Company is the lessee, at the commencement of the lease term, the Company records the leased asset at an amount equal to the lower of the fair value of the leased asset and the present value of the minimum lease payments at the inception of the lease, and recognizes a long-term payable at an amount equal to the minimum lease payments. The difference between the recorded amounts is accounted for as unrecognized finance charge. Besides, initial direct costs that are attributable to the leased item incurred during the process of negotiating and securing the lease agreement are also added to the amount recognized for the leased asset. Unrecognized finance charges are recognized as finance charge for the period using the effective interest method over the lease term. Contingent rents are credited to profit or loss in the period in which they are actually incurred. The net amount of minimum lease payments less unrecognized finance charges is separated into long-term liabilities and the portion of long-term liabilities due within one year for presentation.

26.2.2 When company is lessor, at the commencement of the lease term, the aggregate of the minimum lease receivable at the inception of the lease and the initial direct costs is recognized as a finance lease receivable, and the unguaranteed residual value is recorded at the same time. The difference between the aggregate of the minimum lease receivable, the initial direct costs and the unguaranteed residual value, and the aggregate of their present values is recognized as unearned finance income. Unrealized finance income is recognized as finance income for the period using the effective interest method over the lease term. Contingent rents are credited to profit or loss in the period in which they are actually incurred. The net amount of financial lease receivables less unearned finance income is separated into long-term debts receivable and the portion of long-term debts receivable due within one year for presentation.

#### **27. Non-current assets held for sale**

Non-current assets held for sale can be recognized when the Company has determined to dispose of and has entered into an irrevocable transfer agreement with the transferee and it is highly probable that the transfer will be completed within one year, are accounted for as non-current assets held for sale.

Non-current assets held for sale are not depreciated or amortized, and are measured at the lower of carrying amount and fair value less costs to sell.

### **III. CHANGES IN SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES**

#### **1. Changes in accounting policy**

The Group has no changes in accounting policy this year.

#### **2. Changes in accounting estimates**

The Group has no changes in accounting estimates this year.

#### **3. The significant corrections of prior period accounting error**

The impact on the consolidated balance sheet of the Group due to significant corrections of prior period accounting error:

3.1 The significant corrections of prior period accounting error this year of the Group's subsidiary China Aluminum International Engineering Co., Ltd. (hereinafter referred to as "Chinalco International") as follows:

#### 3.1.1 Accounting error correction about equity Investment

The Group's subsidiary Chinalco International has appointed a director to the investee Zhuzhou Tianqiao Crane Co., Ltd. (hereinafter referred to as "Tianqiao Crane"), then has significant influence on Tianqiao Crane. So, Chinalco International reclassifies long-term equity investments to Tianqiao Crane recognized in prior years from available-for-sale financial asset into the investment of associate. The impact on the opening balance of the Group's consolidated financial statements of year 2015 due to the event as follows:

RMB 42,818,523.96 reduction of the closing balance of the net assets, including RMB 148,797,529.03 reduction of the opening balance of available-for-sale financial assets, RMB 77,901,282.59 increase of the opening balance of long-term equity investments and RMB 28,077,722.48 increase of the opening balance of deferred tax assets. RMB 42,818,523.96 reduction of the closing balance of the owner's equity, including RMB 61,004,281.40 increase of the opening balance of capital reserves of year 2014, RMB 25,801,834.49 reduction of the changing amount of capital reserves of year 2014, RMB 107,903,627.87 reduction of the opening balance of other comprehensive income of year 2014, RMB 22,536,983.33 increase of other comprehensive income attributed to owners of company, RMB 21,950,639.39 of the opening balance of retained profits of year 2014, and RMB 8,182,187.17 reduction of the changing amount of net profits attributed to owners of company of year 2014. RMB 4,402,713.01 reduction of the opening balance of minority equity of year 2014, and RMB 2,020,065.54 reduction of the changing amount of minority equity of year 2014.

#### 3.1.2 Accounting error correction about trade service

Chinalco International made assessment of the revenue of its trade service in gross method or net method, confirming that the assessing revenue of part of trade service in net method is better due to the character that Chinalco International can obtain return through transaction. In accordance with ASBE, Chinalco International made adjustments of operating income and operating costs of year 2014. The impact on the Group's consolidated financial statements of year 2015 due to this event as follows:

RMB 6,420,702,235.00 reduction of operating income of year 2014, and RMB 6,420,702,235.00 reduction of operating costs of year 2014.

#### 3.1.3 Reclassification adjustments of receivables and payables events

The impact on the opening balance of the Group's consolidated financial statements of year 2015 due to the adjusting event as follows:

RMB 18,337,808.00 increase of the opening balance of accounts receivable, RMB 66,179,400.00 reduction of the opening balance of notes receivable, RMB 1,003,150,759.00 increase of the opening balance of other receivables, and RMB 955,309,167.00 reduction of the opening balance of other current assets.

3.2 The significant corrections of prior period accounting error this year of the Group's subsidiary Chinalco Rare Earth Corporation Limited (hereinafter referred to as "Rare Earth") and the impact on the opening balance of the Group's consolidated financial statements of year 2015 due to the significant adjustments as follows:

RMB 109,411,785.81 reduction of the closing balance of net assets includes RMB 54,069,073.38 reduction of the opening balance of total assets, and RMB 55,342,712.43 increase of the opening balance of total liabilities. RMB 109,411,785.81 reduction of the closing balance of owner's equity, including RMB 44,518,764.57 increase of the opening balance of capital reserves of year 2014, RMB 111,828.83 increase of the opening balance of special reserves of year 2014, and RMB 154,175,006.90 reduction of the opening balance of retained earnings of year 2014. RMB 109,630,506.64 increase of the retained earnings attributable to the parent company for year 2014. RMB 200,951,092.15 reduction of the opening balance of minority equity of year 2014 and RMB 91,453,213.20 increase of the changing amount of minority equity of year 2014.

Rare Earth's adjusted asset, liability and equity conditions of year 2014 as follows:

Asset	Adjust amount	Liability	Adjust amount
Current assets	-691,167,393.94	Current liabilities	59,695,997.53
Non-current assets	637,098,320.56	Non-current liabilities	-4,353,285.10
<u>Total liabilities</u>			<u>55,342,712.43</u>
Owners' equity attributable to the Company			86,093.14
Minority equity			-109,497,878.95
<u>Total owner's equity</u>			<u>-109,411,785.81</u>
<u>Total assets</u>	<u>-54,069,073.38</u>	<u>Total liabilities and owner's equity</u>	<u>-54,069,073.38</u>

3.3 The Group's subsidiary Chinalco Finance Company Limited (hereinafter referred to as "Finance Company") made assessments of reclassification method due to the change from finance company financial statements to enterprise financial statements, and made reclassification of some accounts. The impact on the opening balance of the Group's consolidated financial statements of year 2015 due to the adjust events as follows:

3.3.1 Other current liabilities were reclassified to other payables. RMB 28,176,704.03 reduction of the opening balance of non-current liabilities due within one year, and RMB 28,176,704.03 increase of the opening balance of other payables.

3.3.2 RMB 1,020,813.81 reduction of the opening balance of other current assets, RMB 989,863.28 increase of the opening balance of prepayments, and RMB 30,950.53 increase of the opening balance of other receivables.

#### IV. TAXES

##### 1. Major categories of taxes and tax rates

###### 1.1 Taxes and tax rates except for corporate income tax

Category of tax	Tax Basis	Tax rate
VAT(Value added tax)	Taxable VAT ( Calculated according to the balance that taxable amount times applicable tax rate and deducts input VAT)	3%, 4%, 6%, 11%, 13%, 17%, 18%
Consumption tax	Taxable sales, Taxable sale quantity	5%, RMB1.00 /L
Business tax	Taxable turnover, Property sale and lease, service business income	3%, 5%
City maintenance and construction tax	Calculated according to amount of business tax, VAT and Consumption tax actually paid	1%, 5%, 7%
Property tax	Residual value of the property or rental income	Residual value*1.20% / Rent * 6% (12%)
Resource tax	For self-produced mineral, calculated according to pre-owned quantity; for purchased mineral without tax, tax is withheld and remitted according to purchased quantity.	Varies according to local taxation bureau

###### 1.2 Corporate income tax rate

Full name of Company	Tax Rate in 2015(%)	Note
The Group and subordinate companies in addition to the below listed	25.00	—
Chinalco Ruimin Co., Ltd (hereinafter referred to as "Chinalco Ruimin")	15.00	Note1
Chinalco-swa Cold Rolling Co., Ltd. (hereinafter referred to as "Cold Rolling Company")	15.00	Note2
Chongqing Southwest Aluminum Industrial Company (hereinafter referred to as "Swa Industrial Company")	15.00	Note3
China Aluminum International Technological Development Co., Ltd.(hereinafter referred to as "Chinalco Technology")	15.00	Note4
China Nonferrous Metals Processing Technology Co., Ltd. (hereinafter referred to as "China Nonferrous Metals Technology")	15.00	Note4
Suzhou Institute For Nonferrous Metal Research	15.00	Note4
Guiyang Aluminum Magnesium Design & Research Institute Co., Ltd.	15.00	Note4
Guiyang Zhenxing Al-Mg Science &Technology Industry Development Corp., Ltd	15.00	Note4
Changsha Engineering & Research Institute Ltd. of Nonferrous Metallurgy	15.00	Note4
Shenyang Aluminum & Magnesium Engineering & Research Institute	15.00	Note4
Shenyang Boyu Technology Co., Ltd.	15.00	Note4

Full name of Company	Tax Rate in 2015(%)	Note
Shenyang Aluminum Magnesium Technology Co., Ltd.	15.00	Note4
Shenyang Gina Advanced Materials Co., Ltd.	15.00	Note4
Beijing Huayu Tiankong Sience and Technology Co., Ltd	15.00	Note4
Duyun Development Zone Tongda Construction Co., Ltd. (hereinafter referred to as "Duyun Company")	15.00	Note4
China Ferrous Metal Changsha Exploration Design Institute Co., Ltd	15.00	Note4
Southwest Aluminum (Group) Co., Ltd. (hereinafter referred to as "Southwest Aluminum")	15.00	Note5
Chongqing Southwest Aluminum Pipe Factory	15.00	Note5
Chongqing Southwest Aluminum Easy-Pull Top Factory	15.00	Note5
Chongqing Southwest Aluminum Alloy Processing Institute	15.00	Note5
Chongqing Southwest Aluminum Transport Company	15.00	Note5
Chinalco-swa Hot Tandem Rolling Co., Ltd.	15.00	Note6
Northwest Aluminum Processing Plant	15.00	Note7
Some companies of Yunnan Copper (Group) Co., Ltd	15.00、16.50、20.00	Note8
Guangxi Chinalco Management and Consulting Co., Ltd	20.00	Note9
Chinalco Lubricant Technology Co., Ltd.	15.00	Note9
Pingguo Aluminum Construction Supervision Co., Ltd.	15.00	Note9
Henan the Great Wall Information Technology Co., Ltd.	15.00	Note9
Henan Chinalco Measurement Technique Co., Ltd.	20.00	Note9
Zhengzhou Branch of Aluminum & Magnesium Engineering & Research Institute	20.00	Note9
Beijing China Nonferrous Jinding New material Co., Ltd.	20.00	Note9
Northeast Light Alloy Co., Ltd. (hereinafter referred to as "Northeast Light Alloy")	15.00	Note10
Harbin East Light Special Materials Co., Ltd.	15.00	Note10
Company affiliated to Aluminum Corporation of China Limited	15.00	Note11
Company affiliated to Aluminum Corporation of China Limited	Remission	Note12

Note: Chinalco Hong Kong Co., Ltd., Chinalco Hong Kong Southeast Asia Investment Co., Ltd., Blue Sky Resources (Indonesia) Co., Ltd. and Chalco Iron Ore Holdings Limited, affiliated to the Company, pay corporate income tax in Hong Kong, China, with tax rate of 16.5%. Chinalco Australia Holdings Co., Ltd. and Chinalco Australia Co., Ltd., pay corporate income tax in Queensland, Australia with tax rate of 30%. Chinalco Singapore Co., Ltd. was incorporated in Singapore, and adopted 17% corporate income tax rate. PT. Nusapati Prima (hereinafter referred to as "PTNP"), was incorporated in Indonesia, and adopted 25% corporate income tax rate. Chinalco Hong Kong Investment Co., Ltd was incorporated in British Virgin Island; the corporate income tax should be exempted.

Laos Mining Service Co., Ltd. (hereinafter referred to as "Laos Mining") incorporated in Laos on 12 July, 2011, according to tax law on profits of Laos, income tax fully exempted during the first three years from the establishment date of a company, and half exempted during the fourth to fifth year with reduced income tax rate of 17.5%, and the income tax imposing with tax rate of 35% after that. Reinvestment net profit should be exempted from corporate income tax in the following year. Now, the Laos Mining is during the tax-free period.

## **2. Tax preference policy and related approval documents**

2.1 Corporate income tax preference policy and related approval document

Note1: The Group's subsidiary, Chinalco Ruimin obtained "High-tech Enterprise Certificate" (Certificate number: GR20123500038) on 31 July, 2012. In accordance with the "Enterprise Income Tax Law" and its "Implementing Regulations" and relevant tax regulations, Chinalco Ruimin can enjoy the preferential tax policies for high-tech enterprise, and pay the corporate income tax at reduced rate of 15.00%.

Note2: The Group's subsidiary Cold Rolling Company can enjoy the western development preferential tax policies according to the "Notice on Preferential Tax Policies Issues about Further Implementation of the Western Development Strategy by Ministry of Finance and General Administration of Customs and State Administration of Taxation" (Cai Shui [2011] No. 58). The provision of article II of the document is that since 1 January, 2011 to 31 December, 2020 encouraged industry enterprises located in the western region can pay corporate income tax at reduced rate of 15%. The encouraged industry enterprises above are the enterprises of which main business is industrial projects provided by the "Western Region Encouraged Industries Catalog", and main business income accounts for more than 70% of the total business income. "Western Region Encouraged Industries Catalog" is published separately. Despite the above-mentioned "Western Region Encouraged Industries Catalog" has not yet introduced, but management layer of Cold Rolling Company believes that its main business is industrial project provided by the "Guiding Catalogue of Industrial Structure Adjustment"(2005), and it meets the conditions to enjoy the western development preferential tax policies, so it pays the corporate income tax at the preferential rate.

Note3: The Group's subsidiary Southwest Aluminum Minsheng Company, whose engaged industry is in line with the provision of the logistics socialization service the No.8 item of other services which is the 25 category of courage category of "Guiding Catalog of Industrial Structure Adjustment (2005)" (NDRC No.40). The domestic enterprises in encouraged industries can pay the corporate income tax at reduced tax rate of 15% from 2008 to 2020.

Note 4: China Aluminum International Technological Development Co., Ltd, affiliated to the Group , obtained "High-tech Enterprise Certificate" (Certificate Number: GF201411001040, valid for 3 years),

and it is in line with the provision of Article 93 of the "People's Republic of China Income Tax Law Implementation Regulations", that high-tech enterprises needing national major support, can enjoy the preferential corporate income tax rate 15% in 2014.

China Nonferrous Metals Processing Technology Co., Ltd., affiliated to the Group, obtained "High-tech Enterprise Certificate" (Certificate Number: GF201441000321, valid for 3 years) on 23 October, 2014, and it is in line with the provision of Article 93 of the "People's Republic of China Income Tax Law Implementation Regulations", that high-tech enterprises needing national major support, can enjoy the preferential corporate income tax rate 15% from 2014 to 2016.

Suzhou Non-ferrous Metal Institute, affiliated to the Group, obtained "High-tech Enterprise Certificate" (Certificate Number: GF201432001636, valid for 3 years) on 2 September, 2014, and it is in line with the provision of Article 93 of the "People's Republic of China Income Tax Law Implementation Regulations", that high-tech enterprises needing national major support, can enjoy the preferential corporate income tax rate 15% in 2014.

Guizhou Aluminum Magnesium Design & Research Institute Co., Ltd., affiliated to the Group, obtained "High-tech Enterprise Certificate" (Certificate number: GF201352000003, valid for 3 years) on 26 July, 2013, and it is in line with the provision of Article 93 of the "People's Republic of China Income Tax Law Implementation Regulations", that high-tech enterprises needing national major support, can enjoy the preferential corporate income tax rate 15% in 2014.

Guizhou Zhenxing Al-Mg Science & Technology Industry Development Corp., Ltd., affiliated to the Group, obtained "High-tech Enterprise Certificate" (Certificate number: GF201452000029, valid for 3 years) on 11 September, 2014, and it is in line with the provision of Article 93 of the "People's Republic of China Income Tax Law Implementation Regulations", that high-tech enterprises needing national major support, can enjoy the preferential corporate income tax rate 15% in 2014.

Changsha Engineering & Research Institute Ltd. of Nonferrous Metallurgy, affiliated to the Group, obtained "High-tech Enterprise Certificate" (Certificate number: GR201543000504, valid for 3 years) on 28 October, 2015, and it is in line with the provision of Article 93 of the "People's Republic of China Income Tax Law Implementation Regulations", that high-tech enterprises needing national major support, can enjoy the preferential corporate income tax rate 15% from 2015 to 2017.

Shenyang Aluminum & Magnesium Engineering & Research Institute, affiliated to the Group, obtained "High-tech Enterprise Certificate" (Certificate number: GF201421000044, valid for 3 years) on 22 October, 2014, and it is in line with the provision of Article 93 of the "People's Republic of China Income Tax Law Implementation Regulations", that high-tech enterprises needing national major support, can enjoy the preferential corporate income tax rate 15% in 2014.

Shenyang Boyu Technology Co., Ltd., affiliated to the Group, obtained "High-tech Enterprise Certificate" (Certificate number: GR201221000020, valid for 3 years) on 13 June, 2012, and it is in line with the provision of Article 93 of the "People's Republic of China Income Tax Law Implementation Regulations",

that high-tech enterprises needing national major support, can enjoy the preferential corporate income tax rate 15% in 2014.

Shenyang Aluminum Magnesium Technology Co., Ltd., affiliated to the Group, obtained "High-tech Enterprise Certificate" (Certificate number: GR201421000072, valid for 3 years) on 6 August, 2014, and it is in line with the provision of Article 93 of the "People's Republic of China Income Tax Law Implementation Regulations", that high-tech enterprises needing national major support, can enjoy the preferential corporate income tax rate 15% in 2014.

Shenyang Gina Advanced Materials Co., Ltd., affiliated to the Group, obtained "High-tech Enterprise Certificate" (Certificate number: GF201521000062, valid for 3 years) on 12 June, 2015, and it is in line with the provision of Article 93 of the "People's Republic of China Income Tax Law Implementation Regulations", that high-tech enterprises needing national major support, can enjoy the preferential corporate income tax rate 15% from 2015 to 2017.

Beijing Huayu Tiankong Science and Technology Co., Ltd., affiliated to the Group, obtained "High-tech Enterprise Certificate" (Certificate number: GR201311000711, valid for 3 years) on 5 December, 2013, and it is in line with the provision of Article 93 of the "People's Republic of China Income Tax Law Implementation Regulations", that high-tech enterprises needing national major support, can enjoy the preferential corporate income tax rate 15% from 2013 to 2015.

Changsha Engineering & Research Institute Ltd. of Nonferrous Metallurgy, affiliated to the Group, obtained "High-tech Enterprise Certificate" (Certificate number: GR201543000087, valid for 3 years) on 28 October, 2015, and it is in line with the provision of Article 93 of the "People's Republic of China Income Tax Law Implementation Regulations", that high-tech enterprises needing national major support, can enjoy the preferential corporate income tax rate 15% from 2015 to 2017.

According to Qian Di Shui [2012] No.3 "Notice of Tax Relief File by Qiannan Local Taxation Bureau of Duyun Economic Development Zone", Duyun Development Zone Tongda Construction Co., Ltd., affiliated to the Group, is in line with the provision of Cai Shui [2011] No. 58 and No. 12 document of the State Administration of Taxation Announcement in 2012 "Announcement on Related Corporate Income Tax Issues about Further Implementation of the Western Development Strategy". Since 15 April, 2014, there is file management for Duyun Development Zone Tongda Construction Co., Ltd.'s corporate income tax relief, and it pays the tax at the reduced rate 15.00%.

Note5: The industry of the Group's subsidiary Southwest Aluminum (Group) Co., Ltd. engaged is in line with the provision of production of nonferrous metals material in transportation, high-end manufacture and other fields the first 5 (fifth) of nonferrous metals which is the 9 (ninth) category of courage category of "Guiding Catalog of Industrial Structure Adjustment (2011)" (NDRC No. 9). According to the [Nei] courage category [2014] No.87 national courage industries confirmation by Chongqing Economic Commission, Southwest Aluminum (Group) Co., Ltd. is domestic enterprise engaged in national courage industries, and pays corporate income tax at reduced rate 15.00%.

Southwest Aluminum Pipe Factory, Chongqing Southwest Aluminum Easy-Pull Top Factory, Chongqing Southwest Aluminum Alloy Processing Institute and Chongqing Southwest Aluminum Transport Company, affiliated to the Group, enjoy the western development preferential tax policies, and pay the tax at reduced rate 15.00%.

Note6: The Group's subsidiary Chinalco-swa Hot Tandem Rolling Co., Ltd. enjoys the western development preferential tax policies according to the "Notice on Preferential Tax Policies Issues about Further Implementation of the Western Development Strategy by Ministry of Finance, General Administration of Customs and State Administration of Taxation" (Cai Shui [2011] No. 58). The provision of article II of the document is valid from 1 January, 2011 to 31 December, 2020, which reward these industry enterprises set up location in the western region with the reduced corporate income tax of 15%. The encouraged industry enterprises need to fit their main business is with the "Western Region Encouraged Industries Catalog", and the main business income should account for more than 70% of the total business income. Management layer of Chinalco-swa Hot Tandem Rolling Co., Ltd. believes that it meets the condition to enjoy the western development preferential tax policies, because its tax has not been put on record yet, it pays the tax at western development preferential rate 15% this period.

Note7: The Group's subsidiary Northwest Aluminum Processing Plant enjoys the preferential corporate income tax rate 15% according to the "Notice on Enterprise Income Tax Problems about Further Implementation of the Western Development Strategy".

Note8: Yunnan Copper Group's subsidiary Dayao Guihua Copper Smelting Co., Ltd. and Dayao Liuju Electrolytic Copper Co., Ltd. enjoy the corporate income tax rate 15% in accordance with "Notice on Preferential Tax Policies Issues about Further Implementation of the Western Development Strategy by State Administration of Taxation" (Guo Shui [2012] No. 12). "Notice on Recording and Verification Issue about Further Implementation of the Western Development Strategy by International tax bureau in yunnan province of preferential tax policies"(Notice [2012] No. 10) and "Notice on Preferential Tax Policies Issues about Further Implementation of the Western Development Strategy by The Ministry of Finance of Customs of the State Administration of Taxation of Yunnan Province Local Taxation Bureau of the State Tax Bureau of Yunnan Province"( Yunnan Cai Shui [2011] No. 129).

Yunnan Copper Group's subsidiary Yunnan Copper Technology Development Co., Ltd. and Yunnan Copper Die-casting Technology Co., Ltd. are high-tech enterprises in high-tech industrial development zone, by the permission of Science and Technology Department of Yunnan province, Yunnan Provincial Finance Department , State tax Bureau of Yunnan province, local Taxation Bureau of Yunnan province, the tax rate is 15.00% , valid from 5 August, 2014 until 5 August, 2017 for Yunnan Copper Technology Development Co., Ltd. and valid from 27 August, 2013 until 27 August, 2016 for Yunnan Copper

Die-casting Technology Co., Ltd.

Yunnan Copper Science & Technology Hazardous Waste Disposal (Center) Co., Ltd., affiliated to the Yunnan Copper Group, is small low-profit enterprise. In accordance with "Notice about scale-up of small low-profit enterprises' corporate income tax preferential policies by state administration of taxation of ministry of finance" (Caishui [2015] No. 99), half of its taxable profits is used to calculate, and its tax rate is 20%.

Yunnan Copper Group's subsidiary Yunnan Copper Industry (Group) Zinc Industry Co., Ltd. enjoy the preferential tax policies, and pay the corporate income tax at reduced rate of 15.00 %. (Yun Di Shui Zhi Zheng Shui [2010] No.150).

Huili Country Minerals Development Co., Ltd., Huidong Country Xinlian Mining Co., Ltd., Huili Country Maanping Comprehensive Utilization of Mining Waste Rock Co., Ltd., Huili Country Wulong Fumin Mining Co., Ltd., Huili Country Wantong Mining Co., Ltd., affiliated with Yunnan Copper Group, enjoys the preferential tax police about the Western Development, paying the tax at rate 15.00% in this year.

Some companies whose income taxes are accounted by 15.00%, affiliated to Yunnan Copper (Group) Co., Ltd., including Chuxiong Dianzhong Non-ferrous Metal Co., Ltd., Kunming West Industry &Trade Co., Ltd., Yunnan Copper Guhe Electrical Co., Ltd., Yuxi Mining Co., Ltd., Yuxi feiya Mining Development Management Co., Ltd., Yuxi Yunnan Copper Real Estate Development Co., Ltd., Yuanjiang province Yujiang mining Co., Ltd., Yunnan Chuxiong Mining and Metallurgy Co., Ltd. While, some companies whose income taxes are accounted by 16.50%, affiliated to Yunnan Copper (Group) Co., Ltd., including Yunnan Copper Co., Ltd. in Hong Kong.

During 2012, "Guiding Catalog of Industrial Structure Adjustment (2011)" has been issued, in accordance with "Notice on Preferential Tax Policies Issues about Further Implementation of the Western Development Strategy by State Administration of Taxation" issued by the state administration of taxation of Yunnan and local taxation on 29 June, 2012, and the notice has provided "In the first year, the application of Preferential Tax Policy needs be audited and confirmed by the municipal taxation authority; in the second year and future, the policy needs be recorded and managed by county-level tax authorities." Now, Tax Bureau of Yunnan Province is checking the income tax check list of Yunnan Copper (Group) Co., Ltd and its subsidiaries. In accordance with Caishui [2011] No. 58 and "Industry Structure Adjustment Guide Catalogue (2011)", Yunnan Copper (Group) Co., Ltd. and its subsidiaris can enjoy the preferential tax policy of western development. After communications, these enterprises can enjoy income tax with rate of 15.00%.

Note9: Pingguo Aluminum Construction Supervision Co., Ltd., affiliated to the Group, is engaged in project bidding agency, engineer cost consulting, engineer design and other services, these services belong to engineer consulting service provided by "Industrial Structure Adjustment Catalog (2011)" first category encouraged category Article 32, paragraph 3. According to "Notice on the Issuance of Several Provisions about the Implementation of the Western Development Policy Measures by the State Council

by People's Government of Guangxi Zhuang Autonomous Region" (Gui Zheng Fa [2001] No. 100), Pingguo Local Taxation Bureau decides to register and file since 18 June, 2012, and agrees that Pingguo Aluminum Construction Supervision Co., Ltd. can enjoy preferential policies of national courage catalog from 1 January, 2011 to 31 December, 2020, and pay corporate income tax at reduced rate 15%.

Guangxi Chinalco Management and Consulting Co., Ltd, affiliated to the Group, is a small low-profit enterprise. In accordance with "Small low-profit enterprises' corporate income tax preferential policies" (Caishui [2015] No. 34, half of its taxable profits is used to calculate, and its tax rate is 20%.

Chinalco Lubricant Technology Co., Ltd., affiliated to the Group, obtained "High-tech Enterprise Certificate" (Certificate number: GF201411000594) by Beijing Science and Technology Commission, Beijing Finance Bureau, Beijing State Administration of Taxation and Beijing Local Taxation Bureau on 22 October, 2014. According to "High-tech Enterprise Recognition Management Approach" and "People's Republic of China Enterprise Income Tax Law", Chinalco Lubricant Technology Co., Ltd. can pay corporate income tax at 15.00% in three years after becoming high-tech enterprise namely the period from 2014 to 2016.

Henan the Great Wall Information Technology Co., Ltd., affiliated to the Group, was identified as high-tech enterprise (Yu Gaoqi [2014] No.16) by Henan High-tech Enterprise Recognition Work Lead team. According to "People's Republic of China Income Tax Law" and implementation regulations, it enjoys the preferential tax policies for high-tech enterprises to pay tax at reduced rate 15.00%.

Henan Chinalco Measurement Technique Co., Ltd., affiliated to the Group, is a small low-profit enterprise. According to "People's Republic of China Income Tax Law" and implementation regulations, it enjoys the preferential tax policies to pay tax at reduced rate 20.00%.

Shenyang Aluminum Magnesium Design and Research Institute Zhengzhou branch Co., Ltd, affiliated to the Group, in accordance with the No. 23 notice by State Bureau of Taxation, the company should self-enjoy the preferential tax policies for small enterprises with low profits, no need to approve by tax authority, but when the enterprise submits an enterprise income tax return, they should put on file the situation of total assets and jobholders in the same time. (Cai Shui [2014] No.34) provided, for small enterprises with low profits, if their annual taxable income is not exceeding RMB100, 000.00, their income tax can be halved and their final payable income tax will be 20% of the rest.

Beijing Zhongse Jinding New Material Co., Ltd., affiliated to the Group, is a small low-profit enterprise. In accordance with "Small low-profit enterprises' corporate income tax preferential policies" (Caishui [2015] No. 34, half of its taxable profits is used to calculate, and its tax rate is 20%.

Note10: Northeast Light Alloy Co., Ltd, affiliated to the Group, is a high-tech enterprise, and its income tax rate is 15.00%. Harbin East Light Special Materials Co., Ltd., affiliated to the Group, is a high-tech enterprise, and the applicable corporate income tax rate is 15.00%.

Note 11: The company can enjoy the western development preferential tax policies according to the "Notice on Preferential Tax Policies Issues about Further Implementation of the Western Development Strategy by Ministry of Finance, General Administration of Customs and State Administration of Taxation" (Cai Shui [2011] No. 58). The provision of article II of the document is valid from 1 January, 2011 to 31 December, 2020, which these encouraged industry enterprises set up located in the western region with the reduced corporate income tax of 15%. The encouraged industry enterprises need to fit their main business with the "Western Region Encouraged Industries Catalog", and the main business income should account for more than 70% of the total business income.

According to "Notice on Preferential Tax Policies Issues about Further Implementation of the Western Development Strategy" issued by State Administration of Taxation. The provision of article II of the document is valid from 1 January, 2011 to 31 December, 2020, which these encouraged industry enterprises set up located in the western region can enjoy the reduced corporate income tax of 15%. The encouraged industry enterprises need to fit their main business with the "Western Region Encouraged Industries Catalog", and the main business income should account for more than 70% of the total business income. The enterprise should submit a written application and attach to the related information to competent tax authorities before annual income tax report. In the first year, the application of Preferential Tax Policy needs to be audited and confirmed by the municipal taxation authority; in the second year and future, the policy needs to be recorded and managed by county-level tax authorities.. Before the notice of "Western Region Encouraged Industries Catalog" issued, if the company is in line with the provision of category of "Guiding Catalog of Industrial Structure Adjustment (2005)", "Guiding Catalog of Industrial Structure Adjustment (2011)" and "Guiding Catalog of Industrial Structure Adjustment by Foreign Investment (2007 revision)", they can pay the corporate income tax at a rate of 15.00%. After the "Western Region Encouraged Industries Catalog" being issued, if these companies don't reach the requirement of the first rule of this notice, they can calculate and declare again.

"Western Region Encouraged Industries Catalog" was officially released on 20 August, 2014.

The part of the western subsidiary of Aluminum Corporation of China Limited can enjoy the preferential corporate income tax rate of 15%, these subsidiary including Guangxi Branch, Chongqing Branch, Guizhou Branch of China Aluminum Co., and Zunyi alumina co., Ltd, Ningxia Wangkuui Coal Co., Ltd, Ningxia Yinyi Wind Power Co., Ltd.

Note 12: According to the documents of Cai Shui [2008] No. 46, [2008] No. 116, wind power plants, photovoltaic plants enjoy the former three-year income tax exemptions and later six-year halve.

Inner Mongolia Alashan Yinxing Wind Power Co., Ltd. in line with the provision of Article 27 of the "Corporate Income Tax", the 87<sup>th</sup> of the "Corporate Income Tax and Implementation Rules" and "Notice on Preferential Tax Policies Issues about Execution of Public Infrastructure Projects" (Cai Shui [2008] No.46), "Notice on Preferential Tax Policies Issues about Execution of Public Infrastructure Projects by

Bureau of finance, state administration of taxation, the national development and reform commission(2008) " (Cai Shui [2008] No. 116), enjoys the preferential corporate income tax that exemption corporate income tax in past three years, from the fourth year to the sixth year levied in half .

Part of the subsidiary or items of Ningxia Energy Co., Ltd, according to "Notice on Preferential Tax Policies Issues about Execution of Public Infrastructure Projects" by Bureau of finance, state administration of taxation (Cai Shui [2008] No.46), the Public Infrastructure Projects have approved after 1 January, 2008, their income derived from investment and management should be enjoys the preferential corporate income tax that exemption corporate income tax in past three years, from the fourth year to the sixth year levied in half .

Item	Exemption period	Half the time	The rate in half the time
Inner Mongolia Alashan Yinxing Wind Power Co., Ltd.	2012-2014	2015-2017	12.50%
Zhongwei Yongkang Rural Photovoltaic (pv) Power Generation Co., Ltd.	2010-2012	2013-2015	12.50%
Ningxia Yinxing Energy Co., Ltd.	2010-2012	2013-2015	12.50%
Ningxia Yinyi Wind Power Co., Ltd.	2012-2014	2015-2017	12.50%
Ningxia Yike Solar Power Co., Ltd.	2010-2012	2013-2015	12.50%
Sun Mountain Wind Power First Stage	2008-2010	2011-2013	12.50%
Sun Mountain Wind Power Second Stage	2009-2011	2012-2014	12.50%
Sun Mountain Wind Power Third and Fourth Stage	2012-2014	2015-2017	12.50%
Sun Mountain Wind Power Ningdong Power Plant	2010-2012	2013-2015	12.50%
Helan Mountain Wind Power fifth Stage	2013-2015	2016-2018	12.50%
Hongsibu photovoltaic Plant	2012-2014	2015-2017	12.50%
Sun Mountain photovoltaic Plant First Stage	2010-2012	2013-2015	12.50%
Sun Mountain photovoltaic Plant Second Stage	2012-2014	2015-2017	12.50%
Sun Mountain photovoltaic Plant Third Stage	2013-2015	2016-2018	12.50%
Gu Yuan photovoltaic Plant	2012-2014	2015-2017	12.50%

## 2.2 VAT (Value Added Tax) preference policy and related approval document

Chinalco Mining Corporation International, affiliated to the Group, is overseas company. Its VAT rate is 18.00%

According to "Notice about Value Added Tax Policy Issues on Software" (Cai Shui [2011] No. 100) by the Ministry of Finance, State Administration of Taxation and General Administration of Customs,

Zhenxing Company, affiliated to the Group, enjoys the preferential tax policy that VAT will be returned after collected for the part of tax that is more than 3% of revenue from sale of own software.

The Company's subsidiary Southwest Aluminum (Group) Co., Ltd. makes related treatment process of industrial waste water, to meet requirements of reclaimed water quality, and sales reclaimed water products. The production equipment and process are in line with requirements of national industrial policy and the provisions of the second category 6 subclass of "Comprehensive Utilization of Resources Catalog" and the first category 1 subclass of Cai Shui [2008] No.156 by the Ministry of Finance. Southwest Aluminum (Group) Co., Ltd. obtained certificate of comprehensive utilization of resource in Chongqing (Chongqing-funded certificate comprehensive [2012] No.12), valid from January 2012 to December 2013, and it can sale reclaimed water with VAT free in the period of validity. There are disabled persons accounted for 42.00% of the total number of employees in Chongqing West Aluminum Precision Casting Co., Ltd. affiliated to the Company, so Chongqing West Aluminum Precision Casting Co., Ltd. obtained welfare enterprise qualification certificate. According to the "Notice about Preferential Tax Policies to Promote the Employment of Disabled Persons by Ministry of Finance and State Administration of Taxation" (Cai Shui [2007] No. 92) and other documents, the company enjoys the preferential policy that VAT will be returned after collected.

For Yunnan Copper Industry Limited by Share Ltd., affiliated to the Group, according to "Notice about Policy Issues on Tax of Gold Transaction by the Ministry of Finance and State Administration of Taxation "(Cai Shui Zi [2002] No. 142), for the gold sold through gold exchange, the company exempts from VAT when delivery settlement did not occur, when delivery settlement occurred, the company carries out the policy that VAT will be returned after collected and exempts from city maintenance and construction tax and extra charges of education fund; According to "Notice about VAT Policy Catalogue on Comprehensive Utilization of Resource or Products and Service"(Cai Shui [2015] No.78) by the Ministry of Finance and State Administration of Taxation, reviewed by the Yunnan Economic Commission, part of its products belong to the national encouraged products of which utilization of resources is comprehensive, and the company enjoys the policy that VAT will be returned 50.00% or 30.00% after collected. According to the provisions of Guo Shui Fa [2007] No. 67 and Cai Shu [2007] No. 92, Yunnan Copper Non-ferrous Metal Co., Ltd., affiliated to the Company, enjoys the preferential tax policies to promote the employment of disabled persons. The company can enjoy the policy that VAT will be returned with limit amount after collected, and the highest amount is 35,000 per person per year. According to Cai Shui letter [2011] No. 118 "Notice about Continuing Implementation of Preferential VAT, Property Tax and Land Use Tax Policy by Heat-supply Enterprise", Chifeng Jinfeng Heating Power Co., Ltd. doesn't pay the VAT for the acquired income from supplying heat to individual residents. According to "Regulations on policy of replacing the business tax with a value-added tax in transportation industry and part of modern service industry", Yunnan Copper Die-casting Technology Co., Ltd., affiliated to the Group, doesn't pay the VAT for the acquired income from technological development industry, and valid period is from 27 August, 2013 to 27 August, 2016.

According to Cai Shui [2001] No. 198, Cai Shui [2006] No. 44 and Cai Shui [2009] No. 26 passed by Tax Rebate Commission of Shanxi Hejin State Administration of Taxation, Aluminum Corporation of China Shanxi Aluminum Cement Plant, affiliated to the Group, enjoys the preferential tax policy that the VAT will be returned after collected. According to "Notice about the Preferential Tax Policy to Promote the Employment of Disabled Persons by Ministry of Finance and State Administration of Taxation" Article 5 and "Notice about Collection and Management of the Preferential Tax Policy to Promote the Employment of Disabled Persons by State Administration of Taxation and Ministry of Civil Affairs China Disabled Persons Federation", approved by Hejin State Tax Bureau, Shanxi Aluminum Plant Filter Cloth Mills affiliated to the Company, enjoys the preferential tax policy that the VAT will be returned after collected and the company can plus the deduction of corporate income tax payroll. According to "The Interim Regulations of VAT of People's Republic of China," Article 15, the first item, approved by Hejin State Tax Bureau, Shanxi Aluminum Plant Landscaping Engineering Co., Ltd., affiliated to the Company doesn't pay VAT directly since the date of production and sales. According to "Notice about Preferential VAT Policy on Adjusting and Improving the Products and Services with Comprehensive Utilization of Resources" (Cai Shui [2011] No. 115) by Ministry of Finance and State Administration of Taxation, Hejin Hongtai Coal Ash Development Co., Ltd., affiliated to the Company, enjoys the preferential policy that it doesn't pay the tax directly.

According to Lu Jing Xin Xun Zi [2013] No. 406 "Notice about the Publicity of the List of the First Batch of Provincial Identified Products (unit) with Comprehensive Utilization of Resource" and resource comprehensive utilization certificate (Lu Zong certificate 2013 No. 1146), for the VAT due to sales of electricity produced by industrial waste heat of Shandong Aluminum Company, affiliated to the Group, Shandong Aluminum Company can enjoy the preferential policy that the VAT will be returned after collected. According to Lu Jing Xin Xun Zi [2013] No. 406 "Notice about the Publish of the List of the First Batch of Provincial Identified Products (unit) with Comprehensive Utilization of Resource" and resource comprehensive utilization certificate (Lu Zong certificate 2013 No.1066) for the VAT due to sales of composite Portland cement 42.5, 32.5R and 32.5, the company can enjoy the preferential policy that the VAT will be returned after collected.

According to "Notice on replacing the business tax with a value-added tax in railway transportation industry and mail business by Ministry of Finance and State Administration of Taxation"(Caishui [2013] No.106), China Aluminum International Engineering Co., Ltd., Chinalco Technology and China Nonferrous Metals Processing Technology Co., Ltd. don't pay VAT for the acquired income from technological transfer and development .

### 2.3 BT (Business Tax) preference policy and related approval document

According to the "Notice about Business Tax Exemption Policies Notice on Personal Financial Products" (Cai Shui [2009] No. 111), released by Ministry of Finance of the People's Republic of China and State Administration of Taxation, the firms and individuals in the People's Republic of China who provide labor service of construction industry outside the People's Republic of China should be exempted business

tax temporarily. China Aluminum Great Wall Construction Co., Ltd., Tianjin Jinlv Construction Co., Ltd., China Aluminum International Shandong construction co., Ltd., China Sixth Metallurgical Construction Co., Ltd., The Twelfth Metallurgical Construction Corporation of China National Nonferrous Metals Industry, affiliated to the Company, enjoy the above business tax preference.

2.4 Property tax preference policy and urban land use tax preference policy and related approval document

Chongqing West Aluminum Precision Casting Co., Ltd., affiliated to the Group, hired numbers of the blind, the deaf, the dumb and the physical disabled which account for 42% of the total employees and received the welfare enterprise qualification certificate. According to the provision of "Notice on Preference Tax Policy about Promotion of the Disabled Employment by Ministry of Finance of the People's Republic of China and State Administration of Taxation" (Cai Shui [2007] No. 92), it enjoys the property tax preference policy of refund after collected.

According to the provision of "Notice on the Continuing Implementation of Value Added Tax, Property Tax and Urban Land Use Tax Preference Tax Policy to Heating Supplying Enterprises" (Cai Shui [2011] No. 118), Chifeng Jinfeng Heating Power Co., Ltd. affiliated to the Group, enjoys the tax preference of that the plant and land used for heating to resident can be exempted from property tax and urban land use tax.

## V. BUSINESS COMBINATIONS AND CONSOLIDATED FINANCIAL STATEMENTS

### 1. The basic situation of the subsidiaries involved in consolidated statements scope

In 2014, the companies involved in consolidated statements scope summed to 437, and the companies involved in consolidated statement increase of 34 and a reduction of 35.

No	Full name of the subsidiary	Level	Type	Place of incorporation	Nature of business	Registered capital (million)	Proportion	
							of ownership	interest (%)
1	Aluminum Corporation of China Limited	2	1	Beijing	Aluminum smelting	1,490,379.82	34.49	
2	Yunnan Copper (Group) Co., Ltd.	2	1	Kunming, Yungnan	Copper ore selection	196,078.43	58.00	
3	China Aluminum International Engineering Co., Ltd.	2	1	Beijing	Engineering Survey and Design	266,316.00	85.00	
4	Chinalco Asset Management Company	2	1	Beijing	Other service industry	15,000.00	100.00	
5	Southwest Aluminum(Group) Co., Ltd.	2	1	Chongqing	Aluminum rolling process	367,920.24	49.96	
6	Baotou Aluminum (Group) Co., Ltd.	2	1	Baotou, Inner Mongolia	Aluminum smelting	42,688.41	80.00	
7	Aluminum Corporation of China Overseas Holdings Limited	2	3	Hong Kong	Other common ferrous metal ore selection	50,058.30	100.00	
8	Chinalco Resources Corporation	2	1	Beijing	Other common ferrous metal ore selection	66,265.00	89.33	
9	Chinalco Luoyang Copper Co., Ltd.	2	1	Luoyang, Henan	Other ferrous metal rolling processing	140,634.30	88.71	

No	Full name of the subsidiary	Level	Type	Place of incorporation	Nature of business	Proportion	
						Registered capital (million)	of ownership interest (%)
10	Chinalco Rio Tinto Exploration Company	2	1	Beijing	Copper ore selection	33,000.00	51.00
11	Northeast Light Alloy Co., Ltd.	2	1	Harbin, Heilongjiang	Aluminum rolling process	160,000.00	75.00
12	Chinalco Huazhong Copper Co., Ltd.	2	1	Huangshi, Hubei	Copper rolling processing	79,347.11	92.60
13	Chinalco Shanghai Copper Co., Ltd.	2	1	Shanghai	Copper rolling processing	152,334.00	55.15
14	Chinalco Rare Earth Corporation Limited	2	1	Beijing	Metal and metal ore wholesaling	42,849.39	58.01
15	CHALCO Qingdao Light Metals Co., Ltd.	2	1	Qingdao, Shandong	Aluminum smelting	41,800.00	100.00
16	CHINALCO Henan Aluminum Co., Ltd.	2	1	Luoyang, Henan	Aluminum rolling process	113,246.00	86.84
17	Chinalco Metals Trading Company Limited	2	1	Beijing	Other wholesaling unlisted	10,000.00	100.00
18	China Copper Company Limited	2	1	Beijing	Copper rolling processing	8,000.00	100.00
19	Chinalco Capital Holding Limited	2	1	Beijing	Finance lease, insurance broker and agency service	63,062.53	100.00
20	Finance company	2	1	Beijing	Finance company	150,000.00	100.00
21	CHINALCO Ruimin Aluminum Plate and Strip Co., Ltd.	2	1	Fuzhou, Fujian	Aluminum rolling process	169,556.86	88.23
22	Chinalco Shenyang Non-ferrous Metals Processing Co.,	2	1	Shenyang,	Rare-earth metals rolling	61,235.00	100.00

No	Full name of the subsidiary	Level	Type	Place of incorporation	Nature of business	Registered capital (million)	Proportion	
							of ownership	interest (%)
	Ltd.			Liaoning	processing			
23	CHINALCO Southwest Aluminum Plate and Strip Co., Ltd.	2	1	Chongqing	Aluminum rolling process	54,000.00	79.98	
24	Huaxi Aluminum Co., Ltd.	2	1	Chengdu, Sichuan	Aluminum rolling process	58,823.27	100.00	
25	Aluminum Kunming Copper Co., Ltd.	2	1	Kunming, Yunnan	Copper rolling processing	29,386.00	100.00	
26	Southwest Aluminum Minsheng Company (Note 2)	2	1	Chongqing	Other service industry	9,122.37		
27	Northwest Aluminum Processing Plant	2	1	Dingxi, Gansu	Other nonferrous metals rolling processing	104,807.49	100.00	
28	Chinalco Aluminum Foil Co., Ltd.	2	1	Chengdu, Sichuan	Aluminum Processing	2,000.00	100.00	
29	Chalco-swa Cold Rolling Co., Ltd.	2	1	Chongqing	Aluminum rolling process	62,419.00	100.00	

Note1: Enterprises type: 1. domestic non-finance subsidiary enterprises, 2. domestic finance subsidiary enterprises, 3. overseas subsidiary and 5. infrastructure unit.

Access Method: 1. investment, 2. business combination under the common control, 3. business combination not under the common control,

Note2: For the details, see XII 2

**2. The Company owns less than half voting rights but is capable of forming the control of the investee**

No	Name	Proportion of ownership interest (%)	Proportion of voting power (%)	Registered capital(million)	Investment amount(million)	Level	The reason for involved in combination
1	Aluminum Corporation of China Limited	34.49	34.49	1,490,379.82	749,426.11	2	Note 1
2	Shandong Shanlv Cement Co., Ltd.	32.71	32.71	15,724.34	7,029.50	4	Note 2
3	Henan Zhongxin The Great Wall Industry Co., Ltd.	45.00	45.00	1,000.00	450.00	4	Note 3
4	Chongqing West Aluminum Precision Casting Co., Ltd.	42.08	42.08	100.00	0.69	3	Note 4
5	Yunnan Copper Industry Limited by Share Ltd.	43.18	43.18	141,639.88	137,824.85	3	Note 5

Note1: Aluminum Corporation of China and its subordinate company is the largest shareholder, while the proportion of the other shareholders is dispersed, who cannot alliance their voting power easily, and the company has the substantial control over the key management.

Note2: The Group's subsidiary Shandong Aluminum Company is the largest shareholder, and has the majority of voting right in board of directors, and can make decision on its operation and finance, so Shandong Aluminum Company has the substancial control.

Note3: The Group's subsidiary China Great Wall Aluminum Co., Ltd is the largest shareholder, and has the majority of seats in board of directors, and can make decision on its operation and finance, so China Great Wall Aluminum Co., Ltd has the substancial control.

Note4: The Group's subsidiary Southwest Aluminum (Group) Co., Ltd. is the largest shareholder, and can make decision on its operation and finance, so Shandong Aluminum Company has the substancial control.

Note5: The Group's subsidiary Yunnan Copper (Group) Co., Ltd is its largest shareholder, and the proportion of the other shareholders is dispersed, not enough to affect the status of the major shareholders of Yunnan Copper (Group) Co., Ltd. In the composition of its board of directors, 7 of 11 are sent by Yunnan Copper Group; in addition, key management team sent by it have control right for its operation and finance, retains substantial control.

**3. The parent company owns more than half voting rights directly or indirectly through other subsidiaries but isn't capable of control of the investee**

No	Name	Proportion			Investment (million)	Level	The reason for not involved in combination
		of ownership interest	Proportion of voting power (%)	Registered capital (million)			
		(%)					
1	Jiangxijiang Tungsten Cobalt Nickel New Materials Co., Ltd.	51.00	51.00	30,000.00	5,204.17	2	No actual operation, without substantial control right
2	The South China Sea GuiHong Aluminum Group Company	65.00	65.00	9,190.00	5,973.50	3	Note1
3	China (Yunnan Copper) Thai Investment Development Co., Ltd.	90.00	90.00	2,652.45	2,387.20	4	Note2
4	Kunming Ruisili Technology Co., Ltd.	100.00	100.00	1,200.00	1,200.00	4	Note3
5	Dongchuan Aluminum Industry Co., Ltd.	68.63	68.63	8,946.60	1,239.24	4	Note4
6	Dongqing Valley Company	67.00	67.00	555.10	302.55	3	In liquidation
7	Shanghai Changcheng Real Estate Development Company	100.00	100.00	500.00	500.00	3	Note5
8	Ningxia Yinxing Energy Co., Ltd	51.00	51.00	80,000.00	1,632,000.00	3	Note6

Note1: Due to Jiangxijiang Tungsten Cobalt Nickel New Materials Co., Ltd. involved into the RMB279 million state assets loss case, it had been fully liquidated in the year of 2000, all the documents and its credit had been handed over to Gansu Province SASAC, and for the investment of Company's subsidiary Lanzhou Liancheng Aluminum Co., Ltd. had made full provision for impairment.

Note2: This Company is the overseas subsidiary company established by the Group's subsidiary Yunnan Copper Group Co., Ltd., and control is limited, without substantial control.

Note3: Due to other shareholders alleged fraudulent, all of the company's books and vouchers have been destroyed. There is no financial data, and it cannot be included in the scope of consolidation.

Note4: This company's business was in trusteeship from 2004 to 2005, was in contract management from January 2006 to December 2010, and with poor operating performance. It had been discontinued since 2010 but not handed over to the Group's subsidiary Yunnan Copper because of contractual management accounting had not been settled.

Note5: This company was established as a real estate company by the Great Wall Aluminum Co., Ltd. and Shanghai Zoren Chemical Plant, affiliated to the Company by monetary fund of RMB 5,000,000.00 and land of 9,318.00 square meters respectively. The registered capital was RMB 5,000,000.00, established for operating the "Great Wall Aluminum Building" construction project, and while the profit agreed to allocate between Great Wall Aluminum Co., Ltd. and Shanghai Zoren Chemical Plant by

55.00% and 45.00% respectively. Due to historical reasons and poor management, "Great Wall Aluminum Building" project stopped. In 2003, this company signed the "Equity Transfer Agreement" with the Shanghai Shengzu Real Estate Development Operation Co., Ltd. ("Shengzu Company"), and transferred the operation right and benefit right to Shengzu Company. Shengzu Company paid RMB 14,000,000 to Great Wall Aluminum from the revenue of developing this project, and became actual project operator. Therefore, Great Wall Aluminum Co., Ltd. lost the actual control of Changsheng Company. Great Wall Aluminum Co., Ltd. made full provision for impairment of Changsheng Company's long-term equity investment from 2005.

Note6: Regulations of articles of Ningxia Yinxing Energy Co., Ltd: a. Board of Shareholders is the highest authority, in addition that "the election of non-employee directors, approval of the Supervisory Board report, and approval of the Board of Directors Report" matters can pass by a majority of the voting rights, and the rest matters require more than two-thirds of voting rights; b. The Board of Directors is responsible to Board of Shareholders. China Aluminum Ningxia Energy Group can nominate 4 of 7 directors, in addition that "Developing the company's basic management system, election and replacement of the chairman, vice chairman" matters can pass by a majority of the voting rights, and the rest matters require more than two-thirds of voting rights. According to the articles above, Aluminum Corporation of China Limited considers that China Aluminum Ningxia Energy Group cannot achieve control of Ningxia Yinxing Energy Co., Ltd.

#### 4. Important non wholly-owned subsidiary

##### 4.1 Minority shareholders

No	Name	Proportion of ownership interest of minority shareholders (%)	Minority interest income this period	Dividends paid to	
				minority shareholders	Final total minority equity
1	Aluminum Corporation of China Limited	65.51	125,104,901.86		16,332,280,236.68
2	Yunnan Copper Group	42.00	-248,820,664.11		4,511,374,625.08
3	China Aluminum International Engineering Co., Ltd.	15.00	80,780,258.61	39,947,400.00	1,242,080,874.53
4	Southwest Aluminum(Group) Co., Ltd.	50.04	40,081,714.60		810,437,141.99
5	Baotou Aluminum Group	20.00	81,868,108.39		274,478,111.41
6	Chinalco Luoyang Copper Co., Ltd.	11.29	-60,452,637.52		-171,908,170.47
7	Northeast Light Alloy Co., Ltd.	25.00	-63,448.60		60,646,084.90

No	Name	Proportion of ownership interest of minority shareholders (%)	Minority interest income this period	Dividends paid to minority shareholders		Final total minority equity
				minority shareholders		
8	Chinalco Shanghai Copper Co., Ltd.	44.85	-73,089,585.35			449,698,022.71
9	CHINALCO Henan Aluminum Co., Ltd.	13.16	-35,761,340.45			-449,726,737.88
10	CHINALCO Ruimin Aluminum Plate and Strip Co., Ltd.	11.77	363,969.42			200,223,407.58
11	Chinalco Rare Earth Corporation Limited	41.99	30,128,973.84			845,529,189.05

#### 4.2 Main financial information

Item	Amount at current period			Amount at previous period		
	Aluminum Corporation of China Limited	Yunnan Copper Group	China Aluminum International Engineering Co., Ltd.	Aluminum Corporation of China Limited	Yunnan Copper Group	China Aluminum International Engineering Co., Ltd.
Current Assets	64,169,178,353.46	16,205,334,130.74	24,723,951,021.18	63,474,384,216.98	18,247,314,552.12	27,944,408,160.92
Non-current Assets	125,100,072,051.38	25,726,744,295.57	6,113,144,806.05	129,157,588,664.69	23,950,878,160.66	4,995,333,576.65
Total Assets	189,269,250,404.84	41,932,078,426.31	30,837,095,827.23	192,631,972,881.67	42,198,192,712.78	32,939,741,737.57
Current Liabilities	80,937,331,015.65	20,294,315,726.30	19,288,367,715.22	104,235,566,996.40	20,721,433,856.31	21,838,842,547.68
Non-current Liabilities	58,034,482,506.05	4,749,691,984.22	2,378,144,937.31	48,767,564,220.04	5,773,283,456.33	2,370,178,583.64
Total Liabilities	138,971,813,521.70	25,044,007,710.52	21,666,512,652.53	153,003,131,216.44	26,494,717,312.64	24,209,021,131.32
Total operating income	123,445,872,136.40	60,412,668,182.94	19,449,529,207.72	141,772,291,605.26	75,456,009,313.60	25,305,669,653.37
Net profit	423,712,573.92	-573,704,643.90	670,389,451.51	-17,049,432,173.07	-292,844.42	842,391,911.44
Total comprehensive income	986,148,357.90	-805,484,225.90	693,643,023.00	-16,985,330,350.98	32,250,229.13	803,487,509.19

Item	Amount at current period			Amount at previous period		
	Aluminum Corporation of China Limited	Yunnan Copper Group	China Aluminum International Engineering Co., Ltd.	Aluminum Corporation of China Limited	Yunnan Copper Group	China Aluminum International Engineering Co., Ltd.
Cash Flows						
from Operating Activities	7,231,450,859.48	3,140,533,832.60	-475,068,445.09	13,773,048,745.56	3,624,978,281.22	-942,691,312.15
Continued,						
Item	Amount at current period			Amount at previous period		
	Southwest Aluminum(Grou p) Co., Ltd.	Chinalco-Rio Tinto Exploration Company	Chinalco Luoyang Copper Co., Ltd.	Southwest Aluminum(Group)	Chinalco-Rio Tinto Exploration Company	Chinalco Luoyang Copper Co., Ltd.
Current Assets	2,830,737,365.57	168,178,164.77	2,240,965,892.41	2,516,170,582.83	215,101,965.27	2,524,103,376.63
Non-current Assets	3,508,336,500.84	81,078,329.00	2,128,099,473.48	3,423,685,686.25	53,306,797.35	3,048,644,310.94
Total Assets	6,339,073,866.41	249,256,493.77	4,369,065,365.89	5,939,856,269.08	268,408,762.62	5,572,747,687.57
Current Liabilities	3,444,219,500.18	14,658,856.04	5,511,644,164.62	3,169,651,178.01	19,224,235.21	5,096,959,398.57
Non-current Liabilities	996,213,936.39	14,683.11	369,712,769.31	921,742,818.08	26,491.18	366,621,560.64
Total Liabilities	4,440,433,436.57	14,673,539.15	5,881,356,933.93	4,091,393,996.09	19,250,726.39	5,463,580,959.21
Total operating income	5,479,530,338.75		4,684,068,684.28	5,259,147,617.29		7,802,646,224.38
Net profit	81,437,075.91	-18,235,197.41	-535,902,530.04	-212,935,634.39	-28,632,667.25	-416,573,327.41
Total comprehensive income	79,973,314.65	-18,235,197.41	-546,195,940.64	-188,870,963.66	-28,632,667.25	-410,087,810.77
Cash Flows from Operating Activities						
	-166,211,187.14	-53,924,365.72	540,760,576.61	83,763,647.56	-57,979,161.82	265,607,846.60

Continued,

Item	Amount at current period			Amount at previous period		
	Chinalco Shanghai Copper Co., Ltd.	Northeast Alloy Co., Ltd.	CHINALCO Henan Aluminum Co., Ltd.	Chinalco Shanghai Copper Co., Ltd.	Northeast Alloy Co., Ltd.	CHINALCO Henan Aluminum Co., Ltd.
Current Assets	724,466,267.09	1,476,200,642.99	319,728,233.24	914,805,308.20	1,370,326,418.68	345,881,332.56
Non-current						
Assets	2,311,980,903.68	3,831,569,128.69	1,552,572,780.16	2,358,214,558.89	4,778,787,478.20	2,044,586,871.48
Total Assets	3,036,447,170.77	5,307,769,771.68	1,872,301,013.40	3,273,019,867.09	6,149,113,896.88	2,390,468,204.04
Current						
Liabilities	1,829,092,517.23	3,338,672,786.70	5,736,837,854.29	1,949,331,504.33	2,703,024,535.91	5,512,647,373.80
Non-current						
Liabilities	603,793,637.89	1,769,157,339.35	5,272,567.57	575,109,581.65	2,021,145,197.26	7,456,549.75
Total Liabilities	2,432,886,155.12	5,107,830,126.05	5,742,110,421.86	2,524,441,085.98	4,724,169,733.17	5,520,103,923.55
Total operating						
income	13,704,293,840.29	1,997,287,416.94	1,250,890,573.64	12,798,334,085.25	2,016,451,902.34	1,331,729,632.20
Net profit	-162,964,515.82	10,079,264.16	-274,164,546.23	182,326,613.10	-56,976,523.76	-369,874,812.05
Total						
comprehensive						
income	-159,961,916.69	9,560,847.90	-274,164,546.23	182,787,335.77	-56,095,723.84	-369,874,812.05
Cash Flows from						
Operating						
Activities	-33,863,777.25	193,913,909.84	-20,044,263.87	-95,815,309.44	7,617,717.15	-31,231,332.63

Continued,

Item	Amount at current period		Amount at previous period	
	CHINALCO Ruimin Aluminum Plate and Strip Co., Ltd.	Chinalco Rare Earth Corporation Limited	CHINALCO Ruimin Aluminum Plate and Strip Co., Ltd.	Chinalco Rare Earth Corporation Limited
Current Assets	1,562,690,660.24	2,702,899,229.98	1,247,954,078.48	3,376,997,617.20
Non-current Assets	3,766,022,658.50	1,927,806,160.30	3,793,613,687.73	1,167,979,685.66
Total Assets	5,328,713,318.74	4,630,705,390.28	5,041,567,766.21	4,544,977,302.86
Current Liabilities	3,313,231,344.07	1,169,220,152.20	2,607,311,376.43	1,638,130,996.44
Non-current Liabilities	314,348,520.30	247,382,335.42	883,577,098.65	182,551,168.38
Total Liabilities	3,627,579,864.37	1,416,602,487.62	3,490,888,475.08	1,820,682,164.82
Total operating income	3,121,141,068.77	2,123,594,803.92	3,109,530,302.39	2,641,987,514.38
Net profit	4,397,536.26	135,970,032.14	-162,678,623.21	65,647,870.40

Item	Amount at current period			Amount at previous period	
	CHINALCO Ruimin		Chinalco Rare Earth Corporation Limited	CHINALCO Ruimin	
	Aluminum Plate and Strip Co., Ltd.	Aluminum Plate and Strip Co., Ltd.		Chinalco Rare Earth Corporation Limited	
Total comprehensive income	4,397,536.26	182,829,418.63		-162,678,623.21	112,163,483.91
Cash Flows from Operating Activities	100,213,363.63	514,841,276.89		132,310,578.46	-193,728,972.11

## 5. Entities newly involved in consolidation scope during this period and Primary subsidiaries not involved in consolidation scope during this period

### 5.1 Entities newly involved in consolidation scope during this period

No	Full name of the subsidiary	Place of incorporation	Registered capital (million)	Nature of business	The closing net asset	Net profit during this period	Reason for increase
1	Longxi Northwest Aluminum Powder Material Co. Ltd.	Jiuding Longxi, Gansu	600.00	Metallurgy manufacture	5,162,807.29	-848,299.86	Newly established
2	Guangxi Chinalco Management and Consulting Co., Ltd	Pingguo, Guangxi	1,000.00	Management advisory service	1,066,260.52	66,260.52	Newly established
3	Henan Chinalco Carbon Co., Ltd.	Zhengzhou, Henan	500.00	Nonferrous Metal Smelting	5,069,068.24	69,068.24	Newly established
4	Guizhou Aluminum Technology Services LLC	Technology Guiyang, Guizhou	500.00	Technology service	5,278,950.21	278,950.21	Newly established
5	Chinalco Finance Lease Co., Ltd.	Beijing	80,000.00	Finance Lease	824,796,081.58	24,796,081.58	Newly established
6	Chinalco Capital Holding Limited	Beijing	63,062.53	Holdings platform	621,619,273.57	88,233.91	Newly established
7	Chinalco Guangxi Investment and Development Co., Ltd.	Baise, Guangxi	1,000.00	Aluminum smelting	10,046,686.29	46,686.29	Newly established
8	Chinalco International Trade (Shanghai FTA pilot area) Co., Ltd.	Pudong New Area, Shanghai	3,000.00	Wholesale trade	30,492,710.01	492,710.01	Newly established
9	Baotou Aluminum Industrial Services Ltd.	Baotou, Mongolia	1,987.08	Aluminum smelting	13,056,643.83	-6,814,145.39	Newly established
10	Inner Mongolia Huayun New Material Co., Ltd.	Baotou, Mongolia	7,000.00	Aluminum smelting	70,000,000.00		Newly established
11	Shanxi Chinalco China Resources Co., Ltd.	Lvliang, Shanxi	20,000.00	Aluminum smelting	200,000,000.00		Newly established

No	Full name of the subsidiary	Place of incorporation	Registered capital (million)	Nature of business	The closing net asset	Net profit during this period	Reason for increase
12	Chinalco Logistics Group Central International inland port Co., Ltd	Zhengzhou, Henan	22,141.72	Transportation agency	222,581,412.55	1,164,240.60	Newly established
13	Chinalco Logistics Group Northwest International inland port Co., Ltd	Xining, Qinghai	2,466.58	Road freight transport	26,350,486.77	1,684,670.75	Newly established
14	Chinalco Logistics Group Southwest Asia International inland port Co., Ltd	Pingguo, Guangxi	13,728.60	Freight transport agency	137,285,999.93		Newly established
15	Chinalco Zhongzhou Aluminum Co., Ltd.	Jiaozuo, Henan	320,000.00	Aluminum smelting	3,234,543,986.82	30,705,829.11	Newly established
16	Chinalco Guangxi Wuzhou Rare Earth Development Co., Ltd.	Wuzhou, Guangxi	1,000.00	Rare-earth metals ore selecting	10,026,993.28	26,993.28	Newly established
17	Shandong Aluminum Rare Earth Ltd.	Zibo, Shandong	4,550.00	Rare-earth metals ore selecting	45,797,920.93	297,920.93	established
18	Chinalco Rare Earth International Development Trade Co., Ltd.	district, Tianjin	5,000.00	Wholesale trade	50,069,300.86	69,300.86	Newly established
19	Tianjin powerhouse building services Ltd	Tianjin Airport Economic Zone	200.00	Other Construction and Installation Industry	2,000,339.40	339.40	Newly established
20	Henan Sixth Trade Co., Ltd.	Zhengzhou, Henan	500.00	Wholesale trade	5,468,170.61	468,170.61	Newly established
21	Henan Sixth Leasing Co., Ltd.	Zhengzhou, Henan	500.00	Equipment leasing	5,130,497.06	130,497.06	Newly established
22	Xian Haodong Real Estate LLC	Xian, Shanxi	300.00	Real estate building and development	3,006,819.84	6,819.84	established
23	Pan Contry Haohong Project Management Ltd.	Liupanshui, Guizhou		Construction and installation	-31,059.22	-31,059.22	Newly established
24	Chinalco International Logistic (Tianjin) Ltd	Tianjin Airport Economic Zone	3,500.00	Wholesale	41,200,129.39	6,200,129.39	Newly established
25	Shanghai Chinalco Fengyuan Equity Investment Fund Partnership (Limited Partnership)	Shanghai	45,930.58	Construction and installation	470,660,262.17	11,354,458.96	established
26	Chinalco International Investment Management (Shanghai) Ltd.	Shanghai	49,400.00	Construction and installation	498,257,262.91	4,257,262.91	Newly established

No	Full name of the subsidiary	Place of incorporation	Registered capital (million)	Nature of business	The closing net asset	Net profit during this period	Reason for increase
27	Chinalco Property Holdings Ltd	BVI	6,828.20	Real estate operating	-26,480,770.93	-26,487,599.13	Newly established
28	Chinalco Aluminum Foil Co., Ltd.	Chengdu, Sichuan	2,000.00	Aluminum rolling process	20,003,151.87	3,151.87	Newly established
29	Chinalco Ningxia Energy Group Comprehensive Service Ltd.	Yinchuan, Ningxia	100.00	Cleaning service	1,002,977.16	29,771.56	Newly established
30	Shanxi Fengsheng Energe Ltd	Yinchuan, Ningxia	4,100.00	Wind power	30,000,000.00		Newly established
31	Chinalco Zhengzhou Nonferrous Metal Research Institute Ltd.	Zhengzhou, Henan	20,000.00	Aluminum smelting	241,186,870.88	24,533,636.14	Newly established
32	Shanxi Aluminum Smelting Equipment Technology Ltd	Yuncheng, Shanxi	500.00	Professional technique service	1,337.08	1,337.08	Newly established
33	Shanxi Aluminum Mining Engineering Service Ltd	Hejin, Shanxi	1,000.00	Professional technique service	536.61	536.61	Newly established
34	Chinalco Shandong Ltd	Zibo, Shandong	250,000.00	Aluminum smelting	2,306,125,513.93	-330,182,947.25	Newly established

### 5.2 Primary subsidiaries not involved in consolidation scope during this period

No	Full name of the subsidiary	Place of incorporation	Registered capital (million)	Nature of business	Proportion of ownership	Proportion of voting power	Reason for not involved in combination
					interest (%)	(%)	
1	Shanghai HuiLong Non-ferrous Metal Products Co., Ltd.	Shanghai	300.00	Nonferrous Processing	100.00	100.00	Merger by absorption
2	Luoyang Tongbao Metallurgical Equipment Co., Ltd.	Luoyang, Henan	600.00	Cooper processing	65.00	65.00	Liquidation
3	Baotou Aluminum Group Jinshi Silicon LLC	Baotou	500.00	Smelting	100.00	100.00	Disposition
4	Chongqing Southwest Aluminum Equipment Manufacturing Co., Ltd.	Chongqing	1,500.00	Processing and manafuctueing	96.67	96.67	Logout
5	Deqin Yingke Mining Development Co., Ltd.	Deqin, Yunan	5,175.00	Hydrometallurgical process	100.00	100.00	Merger by absorption
6	Yuxi Mining Real Estate Development Co., Ltd.	Yuxi, Yunnan	6,600.00	Real estate	100.00	100.00	Merger by absorption

No	Full name of the subsidiary	Place of incorporation	Registered capital (million)	Nature of business	Proportion of ownership interest (%)		Reason for not involved in combination
					Proportion of voting power (%)		
7	Yunnan Copper Shengwei Chemical Co., Ltd.	Kunming	1,968.00	Mineral operating products	25.41	25.41	Losing control
8	Dali Hongzhizhu Mining Co., Ltd.	Dali	15,933.00	Nonferrous metal selecting	61.48	61.48	Liquidation
9	Guangdong Qingyuan Yunnan Copper Ferrous Metal LLC	Qingyuan	29,704.00	Copper smelting	79.80	79.80	Liquidation
10	Yunnan Copper Sanmu Mining Co., Ltd.	Kunming	2,590.75	Import and export	65.62	65.62	Liquidation
11	Yunnan Copper Wuduomusai Mining Sssole-funded Company	Oudomxay, Laos	440.31	Ore exploration	100.00	100.00	Liquidation
12	Yunnan Copper Fengshali Mining Co., Ltd.	Phongsaly, Laos	787.17	Ore exploration	100.00	100.00	Liquidation
13	Huili Country Hongshan Mining Co., Ltd.	Huili	1,000.00	Nonferrous selecting	70.00	70.00	Losing control
14	Huili Country Minerals Development Co., Ltd.	Huili	800.00	Nonferrous selecting	37.38	37.38	Losing control
15	Kunming Yunnan Copper Platinum Co., Ltd.	Kunming	500.00	Precious metal reserch development	51.00	51.00	Liquidation
16	Yungang Investment Co., Ltd.	Hong Kong	4,946.69	Investment development	60.00	60.00	Liquidation
17	Chinalco Sichuan Rare Earth Co., Ltd	Sichuan Liangshan Dechang	8,000.00	Rare earth ore selecting	33.50	33.50	Losing control
18	Chinalco Guangxi Nonferrous Chongzuo, Co., Ltd.	Guangxi	6,800.00	Rare earth ore selecting	60.00	60.00	Losing control
19	GuiLv Huamei Decoration Engineering Co., Ltd.	Guizhou Guiyang, Guizhou	1,000.00	Construction and installation industry	75.50	75.50	Logout
20	Guizhou GuiLv Huaguang Aluminum Co., Ltd.	Guizhou Guiyang,	1,600.00	Aluminum process	56.25	56.25	Liquidation
21	Shanxi Huaxing Aluminum Co., Ltd.	Xing, Shanxi	14,600.00	Aluminum manufacture	100.00	100.00	Losing control
22	Ningxia Ning Electric Silicon Industry Co., Ltd.	Lingwu, Ningxia	3,500.00	Polycrystalline Silicon manufacture	100.00	100.00	Liquidation

No	Full name of the subsidiary	Place of incorporation	Registered capital (million)	Nature of business	Proportion of ownership interest (%)	Proportion of voting power (%)	Reason for not involved in combination
23	Ningxia Ning Electric Photovoltaic Materials Co., Ltd.	Yinchuan, Ningxia	31,202.05	Photovoltaic materials manufacture	100.00	100.00	Liquidation
24	Ningxia Ning Electric Silicon Material Co., Ltd.	Yinchuan, Ningxia	27,800.00	Silicon material manufacture	100.00	100.00	Liquidation
25	Ningxia Yinxing Polycrystalline Silicon Co., Ltd.	Wuzhong, Ningxia	14,600.00	Silicon material manufacture	100.00	100.00	Liquidation
26	Chinalco Science and Technology Institute	Changping District, Beijing	5,000.00	Aluminum smelting	100.00	100.00	Losing control
27	Chinalco Chengdu Aluminum Co., Ltd.	Chengdu, Sichuan	5,000.00	Other nonferrous metals rolling processing	100.00	100.00	Losing control
28	Chinalco Qingyuan Rare Earth Corporation Limited	Qingyuan, Guangdong	1,595.00	Metal and metal ore wholesaling	93.73	93.73	Losing control
29	Nanning Kuangrun Investment Co., Ltd.	Nanning, Guangxi	100.00	Mining investment, merger and acquisition	100.00	100.00	Losing control
30	Luoyang Jinyan Non-ferrous Metal Processing Equipment Co., Ltd.	Luoyang, Henan	3,430.00	Aluminum process	63.45	63.45	Losing control
31	Guizhou Xinfeng Conveying Equipment co., LTD.	Pingba, Guizhou	100.00	Equipment manufacture	100.00	100.00	Merger by absorption
32	The Twelfth Metallurgical Construction Corporation of China Nonferrous Metals (Dalian) Industry	Dalin, Liaoning	800.00	Engineer construction	100.00	100.00	Revocation
33	Guizhou Tong Smelting Construction Development Co., Ltd.	Guiyang, Guizhou	10,000.00	Real estate Development	45.00	45.00	Losing control
34	Harbin Dongqing Metal Powder Industry Obligate Co., Ltd.	Harbin, Heilongjiang	1,000.00	Aluminum products sale	74.49	74.49	Merger by absorption
35	Harbin East Light Swan Aluminum Co., Ltd.	Harbin, Heilongjiang	1,000.00	Aluminum products sale	79.70	79.70	Merger by absorption

Disposed subsidiaries:

No	Name	Total asset amount	Total liability amount	Last period			Disposal date	To
				Total equity amount	Total asset amount	Total liability amount		
1	Shanghai HuiLong Non-ferrous Metal Products Co., Ltd.	9,774,943.98	6,253,234.37	3,521,709.61	3,379.15	1,903,129.88	-1,899,750.73	
2	Baotou Aluminum Group Jinshi Silicon LLC	18,814,312.00	83,118,618.36	-64,304,306.36				
3	Deqin Yingke Mining Development Co., Ltd.	110,023,856.88	122,046,314.38	-12,022,457.50	106,303,803.25	127,790,647.01	-21,486,843.76	
4	Yuxi Mining Real Estate Development Co., Ltd.	107,972,045.61	807,008.88	107,165,036.73	107,050,569.75	16,805.00	107,033,764.75	
5	Chinalco Science and Technology Institute	872,637,947.64	828,809,646.04	43,828,301.60	2,188,611,839.78	862,208,484.31	1,326,403,355.47	
6	Chinalco Qingyuan Rare Earth Corporation Limited	6,238,971.81	-2,549.99	6,241,521.80	2,601,846.06	-2,547.95	2,604,394.01	
7	GuiLv Huamei Decoration Engineering Co., Ltd.	2,922,380.57	5,469,474.18	-2,547,093.61	2,778,123.32	5,325,626.47	-2,547,503.15	
8	Guizhou GuiLv Huaguang Aluminum Co., Ltd.	12,960,213.99	32,362,044.96	-19,401,830.97	12,819,648.69	32,221,397.43	-19,401,748.74	

## VI. NOTES TO IMPORTANT ITEMS IN CONSOLIDATED FINANCIAL STATEMENTS

The data of financial statements disclosed as follow, excluding special indicators, "The opening of the year" means 1 January 2015, "The closing of the year" means 31 December 2015, "The current year" stands for 1 January 2015 to 31 December 2015, and "The prior year" stands for 1 January 2014 to 31 December 2014. In addition, unless otherwise specified, all amounts take Renminbi yuan as the monetary unit.

### 1. Cash and bank balances

Item	Closing balance	Opening balance
Cash	6,144,676.31	8,406,746.02
Bank balances	47,616,687,109.98	43,780,289,049.82
Other currency funds	4,910,637,726.71	3,844,267,857.71
<u>Total</u>	<u>52,533,469,513.00</u>	<u>47,632,963,653.55</u>
Incl. The total amount of money deposited overseas	844,691,809.76	2,287,396,706.34

Note: By the end of 31 December, 2015, the restricted money of the Group total was RMB 5,537,198,424.26, including bank deposits of RMB 5,537,198,424.26, other currency fund of RMB 4,709,616,855.80.

### 2. Held-for-trading financial assets

Items	Closing fair value	Opening fair value
1. Held-for-trading financial assets	80,050.00	83,850.00
Held-for-trading investments in equity instruments (Note1)	80,050.00	83,850.00
At initial recognition, financial assets are classified as financial assets at Fair Value through Profit or Loss ("FVTPL") (Note2)	180,729.11	6,926,662.06
Others	180,729.11	6,926,662.06
<u>Total</u>	<u>260,779.11</u>	<u>7,010,512.06</u>

Note1: The Held-for-trading investments in equity instruments is that the group's subsidiary Southwest Aluminum(Group) Co., Ltd. holds stock of China Tungsten and High-tech Materials CO.,LTD.

Note2: At initial recognition, financial assets are classified as financial assets at Fair Value through Profit or Loss ("FVTPL") is that the group's subsidiary Yunnan Copper (Group) Co., Ltd. holds hybrid funds of GF Grand Securities Investment Fund.

### 3. Notes receivable

Category	Closing balance	Opening balance
Bank acceptances	2,806,068,725.51	4,351,684,159.72
Commercial acceptances	883,428.32	209,670.00
<u>Total</u>	<u>2,806,952,153.83</u>	<u>4,351,893,829.72</u>

Note: The notes receivable of RMB 15,286,690,604.76, at the end of the term has been endorsed or discounted but has not yet expired

#### 4. Accounts receivable

Item	Closing balance			
	Carrying amount	Bad debt provision	Amount	Proportion (%)
	Amount	Proportion (%)	Amount	Proportion (%)
Accounts receivable that are individually significant and for which bad debt provision has been assessed individually	5,197,787,180.99	29.62	1,782,281,771.95	34.29
Accounts receivables for which bad debt provision has been assessed by portfolios	11,471,069,363.41	65.36	889,436,266.26	7.75
Accounts receivable that are not individually significant but for which bad debt provision has been assessed individually	881,935,863.99	5.03	199,166,012.28	22.58
<b>Total</b>	<b><u>17,550,792,408.39</u></b>	--	<b><u>2,870,884,050.49</u></b>	--

Continued,

Item	Opening balance			
	Carrying amount	Bad debt provision	Amount	Proportion (%)
	Amount	Proportion (%)	Amount	Proportion (%)
Accounts receivable that are individually significant and for which bad debt provision has been assessed individually	4,009,697,734.60	23.89	1,406,462,678.34	35.08
Accounts receivables for which bad debt provision has been assessed by portfolios	12,049,175,646.94	71.78	872,807,567.17	7.24
Accounts receivable that are not individually significant but for which bad debt provision has been assessed individually	726,219,036.39	4.33	262,026,294.11	36.08
<b>Total</b>	<b><u>16,785,092,417.93</u></b>	--	<b><u>2,541,296,539.62</u></b>	--

#### 5. Prepayments

	Amount	Proportion (%)	Bad debt provision	Amount	Proportion (%)	Bad debt provision
Within 1 year	3,798,561,241.12	51.99	1,120,428.72	5,060,289,206.47	73.18	1,114,048.19
More than 1 year but not	2,228,004,573.25	30.5	4,147,809.27	1,193,410,187.71	17.26	2,221,733.61

	Amount	Proportion (%)	Bad debt provision		Amount	Proportion (%)	Bad debt provision
exceeding 2 years							
More than 2 years but not exceeding 3 years	993,504,790.81	13.6	22,929,683.23	337,122,520.76	4.88	7,780,648.98	
More than 3 years	285,817,792.05	3.91	91,402,799.99	324,180,995.62	4.68	104,805,342.77	
<u>Total</u>	<u>7,305,888,397.23</u>	--	<u>119,600,721.21</u>	<u>6,915,002,910.56</u>	--	<u>115,921,773.55</u>	

## 6. Interest receivable

### 6.1 Categories of interest receivable

Item	Closing balance	Opening balance
Bond investment	43,140,447.11	41,590,842.60
Entrust loan	29,640,965.51	37,226,737.07
Time deposit	19,220,586.68	22,417,820.06
Others	49,625,453.00	37,376,030.39
<u>Total</u>	<u>141,627,452.30</u>	<u>138,611,430.12</u>

## 7. Dividends receivable

Item	Closing balance	Opening balance	Reasons for uncollected amounts	Whether the amount is impaired
<u>Dividends receivable aged Within 1</u>	<u>80,108,039.18</u>			
Including:(1)Kunming Yinmin Metallurgy Co., Ltd.	34,216,987.57		Financial difficulty	No
(2)Ningxia Zhongning Power Generation Co., Ltd.	18,500,000.00		Financial difficulty	No
(3)Kunming Lanniping Metallurgy Co., Ltd.	12,123,741.40		Financial difficulty	No
(4)Kunming Tangdan Metallurgy Co., Ltd.	11,862,419.53		Financial difficulty	No
(5)Xiamen Chinalco LuoTong Bailuda High and New Material Co., Ltd.	1,657,431.04		Financial difficulty	No
(6)Ningxia days net China Wind Power Ltd.	1,563,415.64		Financial difficulty	No
(7)Shenzhen Non-ferrous Financial Metal Co., Ltd.	184,044.00		Financial difficulty	No
<u>Dividends receivable aged more than 1 year:</u>	<u>177,508,776.54</u>	<u>222,091,881.54</u>	Financial difficulty	No
Including:(1)Zambia's modest than copper smelting Co., Ltd.	77,923,200.00	122,380,000.00	Financial difficulty	No
(2)Guangxi Huayin Aluminum Co., Ltd.	66,471,438.00	66,471,438.00	Financial difficulty	No

Item	Closing balance	Opening balance	Reasons for uncollected amounts	Whether the amount is impaired
(3) Suzhou Longray Thermal Technology Co., Ltd.	12,041,920.00	12,041,920.00	Financial difficulty	No
(4) Chinalco Guangxi Nonferrous Zongzuo Rare Earth Development Co., Ltd.	7,970,283.43	7,836,588.43	Financial difficulty	No
(5) Ningxia days net China Wind Power Ltd.	6,822,513.73	6,822,513.73	Financial difficulty	No
(6) Zhengzhou Faxiang Aluminum Manufacturer	3,356,737.55	3,356,737.55	Financial difficulty	No
(7) Beijing Jiya Semiconductor Material Co., Ltd	2,922,683.73	2,922,683.73	Financial difficulty	No
(8) Yunnan jinding zinc industry limited	0.1	0.1	Financial difficulty	No
(9) Zhuhai Xinfeng Mechanical and Electrical Equipment Co., Ltd.		260,000.00	Financial difficulty	No
<b>Total</b>	<b>257,616,815.72</b>	<b>222,091,881.54</b>	--	--

## 8. Other receivables

Item	Closing balance			
	Carrying amount		Bad debt provision	
	Amount	Proportion (%)	Amount	Proportion (%)
Other receivable that are individually significant and for which bad debt provision that has been assessed individually	9,120,759,224.01	67.44	3,123,447,002.28	34.25
Other receivables for which bad debt provision has been assessed by portfolios	3,521,987,686.12	26.04	605,155,806.36	17.18
Other receivable that are not individually significant but for which bad debt provision has been assessed individually	881,409,419.83	6.52	211,300,612.91	23.97
<b>Total</b>	<b>13,524,156,329.96</b>	--	<b>3,939,903,421.55</b>	--

Continued,

Item	Opening balance			
	Carrying amount		Bad debt provision	
	Amount	Proportion (%)	Amount	Proportion (%)
Other receivable that are individually significant and for which bad debt provision that has been assessed	3,751,109,386.12	39.85	1,092,113,725.95	29.11

Item	Opening balance			
	Carrying amount		Bad debt provision	
	Amount	Proportion (%)	Amount	Proportion (%)
individually				
Other receivables for which bad debt provision has been assessed by portfolios	5,047,528,955.78	53.62	534,506,162.43	10.59
Other receivable that are not individually significant but for which bad debt provision has been assessed individually	614,910,496.21	6.53	178,373,204.20	29.01
<b>Total</b>	<b>9,413,548,838.11</b>	--	<b>1,804,993,092.58</b>	--

Other receivable portfolios for which bad debt provision has been assessed using the aging analysis approach

Aging	Closing balance			Opening balance		
	Carrying amount		Bad debt provision	Carrying amount		Bad debt provision
	Amount	Proportion (%)		Amount	Proportion (%)	
Within 1 year	2,610,481,940.11	74.12	3,927,480.91	4,235,996,209.98	83.93	8,408,177.95
More than 1 year but not exceeding 2 years	181,855,561.61	5.16	17,266,846.80	139,990,079.25	2.77	12,638,750.70
More than 2 years but not exceeding 3 years	81,307,691.57	2.31	13,231,035.54	96,017,318.88	1.9	12,472,243.74
More than 3 years	648,342,492.83	18.41	570,730,443.11	575,525,347.67	11.4	500,986,990.04
<b>Total</b>	<b>3,521,987,686.12</b>	--	<b>605,155,806.36</b>	<b>5,047,528,955.78</b>	--	<b>534,506,162.43</b>

## 9. Inventories

### 9.1 Categories of inventories

Item	Closing balance			Opening balance		
	Gross carrying amount	Provision for decline in value of inventories	Net carrying amount	Gross carrying amount	Provision for decline in value of inventories	Net carrying amount
Raw materials	13,489,494,577.12	1,204,137,794.43	12,285,356,782.69	15,813,282,880.16	1,129,138,758.13	14,684,144,122.03
Work-in-progress	13,290,987,393.11	990,221,199.62	12,300,766,193.49	14,515,281,153.33	902,321,532.67	13,612,959,620.66
Merchandise	11,908,083,441.96	1,266,439,860.25	10,641,643,581.71	12,101,860,263.20	644,032,982.67	11,457,827,280.53
Packing materials,	317,185,186.18	53,555,213.92	263,629,972.26	349,600,432.79	34,244,738.85	315,355,693.94

Item	Gross carrying amount	Closing balance			Opening balance		
		Provision for decline in value of inventories	Net carrying amount	Gross carrying amount	Provision for decline in value of inventories	Net carrying amount	
low-value consumables							
Consumable biological assets							
Engineering construction(finished but not settlement)	4,184,035,702.03	7,399,447.41	4,176,636,254.62	6,941,830,976.43	35,485.87	6,941,795,490.56	
Others	3,248,568,699.36	160,554,570.30	3,088,014,129.06	3,940,394,844.33	146,161,478.86	3,794,233,365.47	
<u>Total</u>	<u>46,439,484,776.96</u>	<u>3,682,308,085.93</u>	<u>42,757,176,691.03</u>	<u>53,662,555,657.08</u>	<u>2,855,934,977.05</u>	<u>50,806,620,680.03</u>	

9.2 The completion of the construction contract at the end of the year has been completed and the settlement of assets.

Items	Closing balance
The aggregate amount of costs incurred	33,385,307,960.86
The aggregate gross profits	3,592,995,644.02
Less: Prospective damage	7,399,447.41
The amount of settlement	32,794,267,902.85
Completed outstanding assets under construction contract	4,176,636,254.62

## 10. Divided into holding assets for sale

Item	Closing balance	Closing fair value	Projected expenditure	scheduled time
Dali Hongzhizhu Mining Co., Ltd.	164,200,800.00	164,200,800.00		12/31/2016
Yungang Investment Co., Ltd.	29,680,118.30	29,680,118.30		12/31/2016
Yunnan Copper Sanmu Mining Co., Ltd.	20,000,000.00	20,000,000.00		12/31/2016
Hongxing in Yunnan Investment and Development Co., Ltd.	1,382,637.57	1,382,637.57		12/31/2016
Yunnan Copper precious silver industry company	1,000,000.00	1,000,000.00		12/31/2016
<u>Total</u>	<u>216,263,555.87</u>	<u>216,263,555.87</u>		

## 11. Available-for-sale financial assets

Item	Closing balance		
	Carrying amount	Provision of impairment losses	Carrying value
1 Available-for-sale debentures			
2.Available-for-sale equity investment	106,568,261,962.57	412,607,096.57	106,155,654,866.00
In the fair value measurement	1,458,708,287.81		1,458,708,287.81
Cost measurement	105,109,553,674.76	412,607,096.57	104,696,946,578.19
3.Others	13,400,000.00		13,400,000.00
<b>Total</b>	<b>106,581,661,962.57</b>	<b>412,607,096.57</b>	<b>106,169,054,866.00</b>

Continued,

Item	Opening balance		
	Carrying amount	Provision of impairment losses	Carrying value
1 Available-for-sale debentures			
2.Available-for-sale equity investment	101,216,516,796.66	345,623,230.98	100,870,893,565.68
In the fair value measurement	1,469,054,365.36		1,469,054,365.36
Cost measurement	99,747,462,431.30	345,623,230.98	99,401,839,200.32
3.Others			
<b>Total</b>	<b>101,216,516,796.66</b>	<b>345,623,230.98</b>	<b>100,870,893,565.68</b>

## 12. Held-to-maturity investments

Item	Closing balance			Opening balance		
	Carrying amount	Provision of impairment losses	Carrying value	Provision of		
				Carrying amount	impairment losses	Carrying value
Trust investment	630,411,369.93		630,411,369.93	1,130,000,000.07		1,130,000,000.07
Bond	48,742,024.14		48,742,024.14	46,006,486.42		46,006,486.42
Financial Products	10,000,000.00		10,000,000.00			
<b>Total</b>	<b>689,153,394.07</b>		<b>689,153,394.07</b>	<b>1,176,006,486.49</b>		<b>1,176,006,486.49</b>

## 13. Long-term receivables

Item	Closing balance		
	Carrying amount	Provision of impairment losses	Carrying value
Installment sales	205,610,083.23	37,134,410.54	168,475,672.69

Item	Closing balance		
	Carrying amount	Provision of impairment losses	Carrying value
Rendering of service settled by installments	2,243,295,192.58		2,243,295,192.58
Others	147,240,876.08		147,240,876.08
<u>Total</u>	<u>2,596,146,151.89</u>	<u>37,134,410.54</u>	<u>2,559,011,741.35</u>

Continued,

Item	Opening balance		
	Carrying amount	Provision of impairment losses	Carrying value
Installment sales	230,064,213.57	57,793,028.91	172,271,184.66
Rendering of service settled by installments	1,249,673,765.32		1,249,673,765.32
Others	119,820,117.52		119,820,117.52
<u>Total</u>	<u>1,599,558,096.41</u>	<u>57,793,028.91</u>	<u>1,541,765,067.50</u>

#### 14. Long-term equity investments

Item	Opening balance	Increase	Decrease	Closing balance
Investment in subsidiary				
Investment in joint ventures	2,761,500,471.95	3,290,231,459.11	9,911,895.00	6,041,820,036.06
Investment in associated enterprises	19,490,082,220.26	2,011,812,806.49	1,529,912,198.49	19,971,982,828.26
<u>Subtotal</u>	<u>22,251,582,692.21</u>	<u>5,302,044,265.60</u>	<u>1,539,824,093.49</u>	<u>26,013,802,864.32</u>
Minus: Depreciation reserves	69,662,000.00		22,400,000.00	47,262,000.00
<u>Total</u>	<u>22,181,920,692.21</u>	<u>5,302,044,265.60</u>	<u>1,517,424,093.49</u>	<u>25,966,540,864.32</u>

## 15. Investment properties

### Investment properties measured at cost

Item	Opening carrying amount	Increase in the current period	Decrease in the current period	Closing carrying amount
I. Total original carrying amount	1,179,134,305.52	2,310,145,139.69	329,434,132.87	3,159,845,312.34
1. Buildings	1,111,437,846.94	1,715,982,101.84	160,757,748.82	2,666,662,199.96
2. Land use rights	67,696,458.58	594,163,037.85	168,676,384.05	493,183,112.38
II. Total accumulated depreciation and amortization	361,253,928.19	582,160,258.98	74,824,506.89	868,589,680.28
1. Buildings	337,668,808.92	421,772,465.85	39,695,264.34	719,746,010.43
2. Land use rights	23,585,119.27	160,387,793.13	35,129,242.55	148,843,669.85
III. Total net book value for investment properties	817,880,377.33	—	—	2,291,255,632.06
1. Buildings	773,769,038.02	—	—	1,946,916,189.53
2. Land use rights	44,111,339.31	—	—	344,339,442.53
IV. Total accumulated provision for impairment losses of investment properties	4,605,173.05	252,156.46		4,857,329.51
1. Buildings	4,605,173.05	252,156.46		4,857,329.51
2. Land use rights				
V. Total net carrying amount of investment properties	813,275,204.28	—	—	2,286,398,302.55
1. Buildings	769,163,864.97	—	—	1,942,058,860.02
2. Land use rights	44,111,339.31	—	—	344,339,442.53

## 16. Fixed assets

### Disclosure by categories

Item	Opening carrying amount	Increase in the current period	Decrease in the current period	Closing carrying amount
		period	period	
I. Total original carrying amount	204,583,035,781.70	37,295,386,418.09	22,499,087,657.19	219,379,334,542.60
Including: Land	139,590,120.44	38,858.59		139,628,979.03
Buildings	66,120,963,449.21	11,418,305,658.97	6,402,975,175.59	71,136,293,932.59
Machinery and equipment	131,502,958,989.73	25,003,135,149.62	15,394,430,865.80	141,111,663,273.55
Transportation vehicles	4,340,817,462.50	184,459,755.17	123,381,914.88	4,401,895,302.79
Electronic equipment	389,849,137.09	24,035,293.67	32,508,812.76	381,375,618.00
Office equipment	1,149,776,631.80	81,051,727.43	470,556,584.42	760,271,774.81
Hotel furniture	1,729,853.40	203,150.00	20,200.00	1,912,803.40
Others	937,350,137.53	584,156,824.64	75,214,103.74	1,446,292,858.43
II. Total accumulated depreciation	76,356,064,525.53	9,886,895,670.07	6,398,849,054.48	79,844,111,141.12
Including: Land	—	—	—	—
Buildings	19,327,160,271.21	2,486,820,010.00	1,008,279,653.31	20,805,700,627.90

Item	Opening carrying amount	Increase in the current period	Decrease in the current period	Closing carrying amount
Machinery and equipment	52,872,634,080.77	6,873,605,993.91	5,070,713,244.66	54,675,526,830.02
Transportation vehicles	2,838,140,567.56	342,490,184.84	87,691,330.80	3,092,939,421.60
Electronic equipment	220,689,496.77	36,597,600.25	21,060,561.45	236,226,535.57
Office equipment	681,186,558.39	64,583,909.16	181,906,149.30	563,864,318.25
Hotel furniture	1,371,712.86	115,259.91	19,710.00	1,467,262.77
Others	414,881,837.97	82,682,712.00	29,178,404.96	468,386,145.01
III. Total net book value of fixed assets	128,226,971,256.17	—	—	139,535,223,401.48
Including: Land	139,590,120.44	—	—	139,628,979.03
Buildings	46,793,803,178.00	—	—	50,330,593,304.69
Machinery and equipment	78,630,324,908.96	—	—	86,436,136,443.53
Transportation vehicles	1,502,676,894.94	—	—	1,308,955,881.19
Electronic equipment	169,159,640.32	—	—	145,149,082.43
Office equipment	468,590,073.41	—	—	196,407,456.56
Hotel furniture	358,140.54	—	—	445,540.63
Others	522,468,299.56	—	—	977,906,713.42
IV. Total provision for impairment losses	8,510,816,021.08	2,905,367,249.57	2,428,991,901.49	8,987,191,369.16
Including: Land	—	—	—	—
Buildings	2,268,302,914.39	961,067,944.17	584,533,595.29	2,644,837,263.27
Machinery and equipment	6,180,787,919.29	1,940,036,840.61	1,842,214,174.70	6,278,610,585.20
Transportation vehicles	15,685,536.43	2,614,848.31	639,753.09	17,660,631.65
Electronic equipment	24,078,472.15	208,277.51	397,647.35	23,889,102.31
Office equipment	1,764,646.22	68,646.49	798,182.72	1,035,109.99
Hotel furniture				
Others	20,196,532.60	1,370,692.48	408,548.34	21,158,676.74
V. Total carrying amount of fixed assets	119,716,155,235.09	—	—	130,548,032,032.32
Including: Land	139,590,120.44	—	—	139,628,979.03
Buildings	44,525,500,263.61	—	—	47,685,756,041.42
Machinery and equipment	72,449,536,989.67	—	—	80,157,525,858.33
Transportation vehicles	1,486,991,358.51	—	—	1,291,295,249.54
Electronic equipment	145,081,168.17	—	—	121,259,980.12
Office equipment	466,825,427.19	—	—	195,372,346.57
Hotel furniture	358,140.54	—	—	445,540.63
Others	502,271,766.96	—	—	956,748,036.68

## 17. Construction in progress

Details of construction in progress are as follows (Top 10):

Item	Closing balance			Opening balance		
	Carrying amount	Provision of impairment	Carrying value	Carrying amount	Provision of impairment	Carrying value
1.Toromacho	6,297,275,945.70		6,297,275,945.70	24,882,036,397.07		24,882,036,397.07
2.A mining project of Pulang copper mine	2,171,248,143.66		2,171,248,143.66	1,487,993,344.02		1,487,993,344.02
3.Yindonggou coal mine expansion project of 3 million ton	2,120,087,427.92		2,120,087,427.92	1,718,597,347.12		1,718,597,347.12
4.Project of titanium and nickel processing	1,631,317,140.04		1,631,317,140.04	1,233,347,136.14		1,233,347,136.14
5.Yuanzhou to Wangwa railway project construction	1,462,187,082.04		1,462,187,082.04	1,088,028,438.51		1,088,028,438.51
6.30 thousand t/a of Dahongshan copper concentrate containing copper - ore section of Western Mining Engineering	1,056,037,639.38		1,056,037,639.38	888,323,328.68		888,323,328.68
7.Duancun-leigou Bauxite mining project	802,308,603.88		802,308,603.88	589,016,831.33		589,016,831.33
8.Wang Wa 6 million tons of coal mine expansion project	662,122,969.71		662,122,969.71	413,675,327.94		413,675,327.94
9.The underground mining engineering of 0-24 line in cat field mine	651,087,238.57		651,087,238.57	385,591,400.22		385,591,400.22
10.Qinghai Hong Xin prospecting	575,849,571.25		575,849,571.25			

## 18. Materials for construction of fixed assets

Item	Closing balance	Opening balance
Special-purpose materials	55,087,736.68	105,081,924.93
Special-purpose equipment	52,996,286.55	280,489,184.67
Others	1,753,718.99	2,671,121.41
<u>Total</u>	<u>109,837,742.22</u>	<u>388,242,231.01</u>

## 19. Intangible assets

### 19.1 Disclosure by categories

Item	Opening carrying amount	Increase in the current period	Decrease in the current period	Closing carrying amount
I. Total original carrying amount	35,603,194,666.87	7,527,030,518.69	4,463,590,123.70	38,666,635,061.86
Including: Software	756,856,671.43	25,087,623.16	82,950,610.14	698,993,684.45
Land use right	16,629,226,487.57	1,545,175,882.54	3,247,094,136.20	14,927,308,233.91
Patents	302,808,450.65	3,598,325.10	5,054,001.44	301,352,774.31
Non-patents	39,169,917.02	95,539.61		39,265,456.63
Trademark right	339,167.41	1,600.00		340,767.41
Copyright	2,078,241.14			2,078,241.14
Concession	7,040,648,414.10	5,778,535,745.54	575,919,571.25	12,243,264,588.39
Mining right	9,395,959,625.65	55,717,629.47	376,556,844.48	9,075,120,410.64
Exploration right	1,314,030,086.38	7,274,711.65	176,014,960.19	1,145,289,837.84
Others	122,077,605.52	111,543,461.62		233,621,067.14
II. Total accumulated amortization	4,773,900,504.50	870,600,703.77	246,188,341.12	5,398,312,867.15
Including: Software	376,543,186.70	67,517,346.58	9,833,937.62	434,226,595.66
Land use right	2,335,571,818.35	263,437,928.14	190,863,198.26	2,408,146,548.23
Patents	142,712,143.75	49,282,765.06	1,371,470.83	190,623,437.98
Non-patents	27,952,993.93	1,617,039.75		29,570,033.68
Trademark right	231,455.82	28,910.22		260,366.04
Copyright	2,047,291.82	30,949.32		2,078,241.14
Concession	681,991,639.33	209,123,307.78	12,974.36	891,101,972.75
Mining right	1,176,632,372.35	227,622,770.91	44,106,760.05	1,360,148,383.21
Exploration right				
Others	30,217,602.45	51,939,686.01		82,157,288.46
III. Total provision for impairment	318,244,243.90	24,426,772.50	84,679,677.01	257,991,339.39

Item	Opening carrying amount	Increase in the current period	Decrease in the current period	Closing carrying amount
Including: Software	78,002,219.16		73,003,802.30	4,998,416.86
Land use right	140,803,724.29			140,803,724.29
Patents				
Non-patents				
Trademark right				
Copyright				
Concession	64,018,250.85			64,018,250.85
Mining right	35,420,049.60	21,581,351.59	11,675,874.71	45,325,526.48
Exploration right				
Others		2,845,420.91		2,845,420.91
IV. Total carrying amount of Intangible assets	30,511,049,918.47	--	--	33,010,330,855.32
Including: Software	302,311,265.57	--	--	259,768,671.93
Land use right	14,152,850,944.93	--	--	12,378,357,961.39
Patents	160,096,306.90	--	--	110,729,336.33
Non-patents	11,216,923.09	--	--	9,695,422.95
Trademark right	107,711.59	--	--	80,401.37
Copyright	30,949.32	--	--	
Concession	6,294,638,523.92	--	--	11,288,144,364.79
Mining right	8,183,907,203.70	--	--	7,669,646,500.95
Exploration right	1,314,030,086.38	--	--	1,145,289,837.84
Others	91,860,003.07	--	--	148,618,357.77

## 19.2 Expenditure on research and development projects

Item	Opening balance	Increase in the current period		Decrease in the current period			Closing balance
		Expenditures for internal development	Others	Confirmed as intangible assets	recognized in profit or loss for the current period	Others	
Expense expenditure	231,025,337.23	1,614,363.87			232,639,701.10		
Capital expenditure	12,207,835.45	176,880,336.56	866,402.10	1,337,340.53	61,338,213.20	866,402.10	126,412,618.28
<u>total</u>	<u>12,207,835.45</u>	<u>407,905,673.79</u>	<u>2,480,765.97</u>	<u>1,337,340.53</u>	<u>293,977,914.30</u>	<u>866,402.10</u>	<u>126,412,618.28</u>

## 20. Long-term prepaid expenses

Item	Opening balance	Increase in the period	Amortization for the period	Other reductions	Closing balance	Reasons for other reductions
Infrastructure split	369,339,614.58	291,949.58	38,574,683.52		331,056,880.64	
Xiangmu road	170,400,787.43	1,995,034.00			172,395,821.43	
Exploration right expenditure	130,469,389.90				130,469,389.90	
Village moving fee	64,596,741.21	72,487,816.77	870,673.07		136,213,884.91	
Expropriation of land compensation fee	53,978,973.17	11,688,872.00	5,099,400.35		60,568,444.82	
Splitting fee	44,308,166.36	36,168,103.65	17,307,462.35		63,168,807.66	
Nanan-Daping road	42,892,441.95	8,659,268.80	2,307,531.08		49,244,179.67	
Mine usage fee	36,144,996.75	192,000.00	7,922,836.70		28,414,160.05	
Exploring fee	30,737,858.97		6,147,571.79		24,590,287.18	
Cooperate compensation fee( No.4 mine selection plant)	30,040,406.82	11,870,723.63	1,247,230.45	40,663,900.00		Transferred to intangible asset
Third stage construction fee of Tangdan mining	15,951,083.33	3,190,216.67		19,141,300.00		Transferred to intangible asset
Special tool	14,041,033.26	14,434,402.24	5,420,502.60		23,054,932.90	
Underground garage usage fee	10,999,022.24	62,650.00	250,093.78		10,811,578.46	
Cooperate compensation fee( No.4 mine selection plant)	10,927,108.84		898,118.53		10,028,990.31	
Prepaid long term lease rent	9,737,612.54	24,000.00	712,463.42		9,049,149.12	
Others	404,529,028.28	124,753,404.22	127,670,786.78	120,383,640.08	281,228,005.64	
<u>Total</u>	<u>1,439,094,265.63</u>	<u>285,818,441.56</u>	<u>214,429,354.42</u>	<u>180,188,840.08</u>	<u>1,330,294,512.69</u>	--

## 21. Short-term borrowings

Item	Closing balance	Opening balance
Secured loan	557,261,145.70	1,102,609,000.67
Mortgage loan	2,644,161,519.52	2,826,514,970.00
Guaranteed loan	10,693,482,936.83	9,194,249,000.00
Fiduciary loan	65,890,319,018.22	75,321,606,630.15
<u>Total</u>	<u>79,785,224,620.27</u>	<u>88,444,979,600.82</u>

**22. Financial liabilities measure by fair value through profit or loss**

Item	Closing fair value	Opening fair value
Held-for-trading financial liabilities	5,713,666.13	
Including: Traded bonds issued		
Financial liabilities measured by fair value reckoned in profit and loss of the current period	310,260,931.33	29,384,203.11
Others		
<u>Total</u>	<u>315,974,597.46</u>	<u>29,384,203.11</u>

**23. Notes payable**

Category	Closing balance	Opening balance
Commercial acceptances	12,738,927,607.00	10,712,698,511.59
Bank acceptances	791,000,000.00	45,000,000.00
<u>Total</u>	<u>13,529,927,607.00</u>	<u>10,757,698,511.59</u>

**24. Accounts payable**

Aging	Closing balance	Opening balance
Within 1 year (Including 1 year)	17,130,579,597.64	21,491,885,213.39
More than 1 year but not exceeding 2 years	2,210,270,592.01	2,364,215,521.00
More than 2 years but not exceeding 3 years	949,162,292.73	710,289,715.70
More than 3 years	916,352,558.70	857,222,747.30
<u>Total</u>	<u>21,206,365,041.08</u>	<u>25,423,613,197.39</u>

**25. Receipts in advance**

Item	Closing balance	Opening balance
Within 1 year (Including 1 year)	4,228,565,943.64	6,109,066,668.44
More than 1 year	1,056,486,082.62	1,676,956,425.65
<u>Total</u>	<u>5,285,052,026.26</u>	<u>7,786,023,094.09</u>

**26. Other payables**

Item	Closing balance	Opening balance
Current account	5,429,787,790.34	6,450,074,060.12
Guarantee	2,300,784,346.69	2,444,419,273.08
Project fund	1,405,649,184.21	2,078,360,588.62
Temporary receipts of payment on behalf of others	904,086,216.71	833,938,283.39
Accrued expenses	199,360,189.55	132,965,261.66

Item	Closing balance	Opening balance
Agency fee	191,912,371.81	238,870,343.90
Insurance	186,905,906.64	179,086,002.84
Service fee	145,173,322.93	137,588,604.11
Payment for goods	126,123,678.10	120,731,446.83
Rebuilding funds for shanty towns	125,759,806.04	365,343.60
Real estate spending	120,361,464.86	111,537,328.07
Equity investment fund	119,007,658.66	141,110,903.88
Logistics service/rent expenses	99,669,990.52	109,664,378.31
Allowances for repairing and maintenance	90,947,944.11	50,265,889.10
Financial allocation	64,301,818.17	65,340,218.17
Others	799,946,102.05	956,943,422.65
<u>Total</u>	<u>12,309,777,791.39</u>	<u>14,051,261,348.33</u>

## 27. Long-term borrowings

Item	Closing balance	Opening balance
Secured loan	32,470,417,948.04	32,994,786,700.00
Mortgage loan	1,797,221,407.00	1,670,946,821.00
Guaranteed loan	69,131,720,416.35	64,932,699,438.00
Fiduciary loan	58,229,461,680.37	53,962,175,176.29
<u>Total</u>	<u>161,628,821,451.76</u>	<u>153,560,608,135.29</u>

## 28. Paid-in capital (share capital)

Name of the Investor	Opening balance		Increase in the current period	Decrease in the current period	Closing balance	
	Investment amount	Proportion (%)			Investment amount	Proportion (%)
<u>Total</u>	<u>22,822,372,980.67</u>	<u>100.00</u>	<u>3,369,730,000.00</u>		<u>26,192,102,980.67</u>	<u>100.00</u>
State-owned Assets Supervision and Administration Commission of the State Council	22,822,372,980.67	100.00	3,369,730,000.00		26,192,102,980.67	100.00

### Notes:

- According to Cai Zi [2015] 34, the Group received the funds RMB 2,900,000,000.00 for state-owned capital operations by the Ministry of Finance on 27 August, 2015 in this period, increased the Group's paid-in capital.
- The Company transferred gains from capital reserves by state-owned capital operations from the

central government with the amount of RMB 469,730,000 to paid-in capital in 2011.

## 29. Capital reserves

Item	Opening balance	Increase in the period	Decrease in the period	Closing balance
I. Capital (equity) at a premium				
II. Other capital reserve	9,302,617,105.95	6,432,131,045.12	469,730,000.00	15,265,018,151.07
<u>Total</u>	<u>9,302,617,105.95</u>	<u>6,432,131,045.12</u>	<u>469,730,000.00</u>	<u>15,265,018,151.07</u>

\*State-owned is exclusive in capital reserves

Note: There was a net increase in capital reserves with the amount of RMB 5,962,401,045.12. The main reason for this change is that more transactions related to equity occurred in this period. The main changes are as follows:

1. The Group with related subsidiaries cut holdings of stocks of Aluminum Corporation of China Limited for 446,154,800 shares in the secondary market in 2015. In the level of group consolidating, it was processed as a disposal of part of equity without losing the control right, which increased the capital reserves by RMB 3,760,361,200.00.

Aluminum Corporation of China Limited directed additional 1,379,310,300 shares and therefore, the equity of the Group were diluted, which increased the capital reserves by RMB 2,185,917,800.00.

2. Yunnan Copper (Group) Co., Ltd., a subsidiary of the Group, cut holdings of stocks of Yunnan Copper (Group) Co., Ltd. in the secondary market. It was processed as a disposal of part of equity without losing the control right, which increased the capital reserves by RMB 502,557,600.00.

3. Chinalco Rare Earth Corporation Limited, a subsidiary of the Group, introduced new shareholders and therefore, the equity of the Group were diluted, which increased the capital reserves by RMB 40,628,200.00.

4. Chinalco Resources Corporation, a subsidiary of the Group, introduced new shareholders and therefore, the equity of the Group were diluted, which increased the capital reserves by RMB 105,020,200.00.

5. The Group acquired minority shareholders' equity of Huaxi Aluminum Co., Ltd., a holding subsidiary of the Group, which decreased the capital reserves by RMB38,942,600.00.

6. The Group distributed early retirement expenses to part of its non-wholly owned subsidiaries, which decreased the capital reserves by RMB 68,121,900.00

7. Yunnan Copper (Group) Co., Ltd., a subsidiary of the Group invested in its subsidiary Yunnan

Diqing Ferrous Metal LLC on behalf of the Group resulted in a decrease in capital reserves by RMB 33,476,200.00.

8. The increase of other equities of the Group's joint venture enterprises resulted in an increase in capital reserves by RMB 11,924,400.00.

9. The Group transferred gains from the central government budget in 2011 to paid-in capital, which decreased the capital reserves by RMB469,730,000.00.

### 30. Special reserves

Item	Opening balance	Increase in the period	Decrease in the period	Closing balance	Remark
Safety production costs	133,314,842.57	342,969,692.08	370,173,112.56	106,111,422.09	
Expenses of keeping simple reproduction	6,327,421.58	7,276.10	219,375.22	6,115,322.46	
<u>Total</u>	<u>139,642,264.15</u>	<u>342,976,968.18</u>	<u>370,392,487.78</u>	<u>112,226,744.55</u>	

### 31. Surplus reserves

Item	Opening balance	Increase in the period	Decrease in the period	Closing balance
Statutory surplus reserves	1,419,398,973.78			1,419,398,973.78
<u>Total</u>	<u>1,419,398,973.78</u>			<u>1,419,398,973.78</u>

### 32. Operating income and operating costs

Item	Amount recognized in the current period		Amount recognized in the prior period	
	Income	Cost	Income	Cost
<u>1.Principle operating</u>	<u>232,132,716,733.11</u>	<u>219,274,620,989.91</u>	<u>268,056,798,617.47</u>	<u>258,291,528,448.56</u>
Including: Sale of products	209,149,610,864.61	199,624,106,088.79	226,187,343,942.66	218,901,980,144.08
Render service	1,904,399,928.21	1,699,839,610.76	23,936,026,991.31	23,865,090,771.73
Engineering construction	17,207,644,774.15	14,409,525,505.27	17,677,080,121.78	15,344,532,755.44
Others	3,871,061,166.14	3,541,149,785.09	256,347,561.72	179,924,777.31
<u>2.Other operating</u>	<u>6,424,197,859.77</u>	<u>6,899,161,204.45</u>	<u>4,808,950,226.95</u>	<u>5,251,361,829.90</u>
Including: Sale of materials	2,985,076,751.69	3,909,583,322.88	1,948,274,363.14	2,494,352,852.54
Logistics service	2,413,341,911.71	2,183,005,312.96	1,764,385,612.95	1,796,797,937.91
Leasing	503,329,722.40	462,562,991.39	485,943,498.78	212,634,799.52
Others	522,449,473.97	344,009,577.22	610,346,752.08	747,576,239.93
<u>Total</u>	<u>238,556,914,592.88</u>	<u>226,173,782,194.36</u>	<u>272,865,748,844.42</u>	<u>263,542,890,278.46</u>

### 33. Investment income

#### 33.1 Details of investment income:

Item	Amount recognized in the current period	Amount recognized in the prior period
Income from long-term equity investments under equity method	483,557,750.62	921,182,280.84
Investment income on disposal of long-term equity investments	2,886,799,580.68	147,585,020.16
Investment income from holding financial assets at Fair Value through Profit or Loss ("FVTPL")	-10,793,347.66	9,516,838.59
Investment income on disposal of financial assets at Fair Value through Profit or Loss ("FVTPL")	-438,479,530.46	171,482,520.79
Investment income from holding held-to-maturity investments	114,727,209.50	7,580,939.02
Investment income from holding available-for-sale financial assets, etc.	2,762,981,555.35	2,462,420,881.73
Investment income from disposal of available-for-sale financial assets, etc.	140,212,686.89	186,193,031.70
The remaining equity at fair value to measure the resulting gains after losing control rights	1,294,067,440.89	
Others	94,397,984.01	140,790,520.48
<u>Total</u>	<u>7,327,471,329.82</u>	<u>4,046,752,033.31</u>

33.2 There was not significant limitation of investment income withdrawal in the Group.

### 34. Income tax expense

Item	Amount incurred in the current period	Amount incurred in the prior period
<u>Income tax expense</u>	<u>922,051,794.00</u>	<u>1,495,701,310.08</u>
Including: current tax expense	1,433,300,838.96	827,990,356.44
deferred tax expense	-511,249,044.96	667,664,229.85
Others		46,723.79

### 35. Consolidated Cash Flow Statement

#### 35.1 Net profit adjusted to operating activities cash flow using the indirect method

Supplementary information	Amount for the current period	Amount for the prior period
1. Reconciliation of net profit to cash flow from operating activities:		
Net profit	-5,349,344,162.74	-21,101,610,340.29
Add: Provision for impairment losses of assets	2,470,573,149.83	8,439,599,293.53
Depreciation of fixed assets, depletion of oil and gas assets, depreciation of bearer biological assets	10,136,125,414.08	9,517,446,917.68

Supplementary information	Amount for the current period	Amount for the prior period
Amortization of intangible assets	1,030,988,496.90	787,425,851.74
Amortization of long-term prepaid expenses	214,429,354.42	307,881,680.76
Losses on disposal of fixed assets, intangible assets and other long-term asset (gains are indicated by "—")	-1,850,967,281.55	-468,341,905.68
Losses on write-off of fixed assets (gains are indicated by "—")	244,982.43	9,904,582.69
Losses on changes in fair values (gains are indicated by "—")	157,102,941.34	-115,609,557.28
Financial expenses (income is indicated by "—")	16,175,031,260.35	15,330,431,182.52
Losses arising from investments (gains are indicated by "—")	-7,327,471,329.82	-4,046,752,033.31
Decrease in deferred tax assets (increase is indicated by "—")	7,358,706.03	-697,471,190.26
Increase in deferred tax liabilities (decrease is indicated by "—")	-518,607,750.99	1,365,135,420.11
Decrease in inventories (increase is indicated by "—")	5,494,491,125.81	1,096,034,809.19
Decrease in receivables from operating activities (increase is indicated by "—")	-5,350,445,335.88	-4,388,810,165.42
Increase in payables from operating activities (decrease is indicated by "—")	-6,468,974,060.85	8,532,010,160.55
Others		
Net cash flow from operating activities	8,820,535,509.36	14,567,274,706.53
2. Significant investing and financing activities that do not involve cash receipts and payments:		
Conversion of debt into capital		
Convertible bonds due within one year		
Fixed assets acquired under finance leases		
3. Net changes in cash and cash equivalents:		
Closing balance of cash	42,960,431,265.10	
Less: Opening balance of cash	47,048,586,068.71	
Add: Closing balance of cash equivalents	33,749,038,111.42	
Less: Opening balance of cash equivalents	42,960,431,265.10	
Net increase in cash and cash equivalents	4,088,154,803.61	9,211,393,153.68

## VII. CONTINGENCIES

### 1. The guarantees

#### 1.1 Debt Guarante

No	Guarantee units	Guarantee objects name	Guarantee objects nature	Guarantees method	Category	Counte m
<u>Total</u>						
1	Aluminum Corporation of China Limited	Shanxi Jiexiu Xinyugou Coal (Group) Co., Ltd.	Private	Joint liability guarantee	Loan guarantee	M
2	Shanxi Huasheng Aluminum Co., Ltd.	Huozhou Coal Electricity Group XingShengYuan Coal Co. Ltd.	State-owned holding	Joint liability guarantee	Loan guarantee	Non-cou
3	China Aluminum Ningxia Energy Group	Ningxia Tianjing Shenzhou Wind Power Co., Ltd.	State-owned holding	Joint liability guarantee	Loan guarantee	Non-cou
4	China Aluminum Ningxia Energy Group	Ningxia Electric Investment Group Ltd.	Wholly state-owned	Pledge	Loan guarantee	Non-cou
5	Yunnan Copper (Group) Co., Ltd.	Zambia's modest than copper smelting Co., Ltd.	State-owned holding	Joint liability guarantee	Trade financing guarantee	Non-cou
6	Yunnan Copper (Group) Co., Ltd.	Zambia's modest than copper smelting Co., Ltd.	Wholly state-owned	Joint liability guarantee	Trade financing guarantee	Non-cou
7	Aluminum Corporation of China	Qinghai Yellow River Hydropower Recycled Aluminum Co., Ltd.	State-run equity participation	Joint liability guarantee	Loan guarantee	F

No	Guarantee units	Guarantee objects name	Guarantee objects nature	Guarantees method	Category	Counte m
8	Shanxi Aluminum Plant	Yu Jiexiu City Coal Cleaning Industry Co., Ltd.	State-run equity participation	Joint liability guarantee	Loan guarantee	M
9	Shanxi Aluminum Plant	Shanxi Jiexiu Xinyugou Coal (Group) Co., Ltd.	State-run equity participation	Joint liability guarantee	Loan guarantee	M
10	Baotou Aluminum (Group) Co., Ltd	Baotou Development and Investment Co., Ltd.	Wholly state-owned	Mortgage	Loan guarantee	M

Continued,

No.	Guarantee units	Increase of guarantee amount this year	Status of guarantee objects	Overdue or not	Be sued or not	Compensatory loss amount	Amount recognized in provision	Amount recognized provision current per
<u>Total</u>								
1	Aluminum Corporation of China Limited		operating	Yes	No			
2	Shanxi Huasheng Aluminum Co., Ltd.		operating	No	No			
3	China Aluminum Ningxia Energy Group		operating	No	No			
4	China Aluminum Ningxia		operating	No	No			

No.	Guarantee units	Increase of guarantee amount this year	Status of guarantee objects	Overdue or not	Be sued or not	Compensatory loss amount	Amount recognized in provision	Amount recognized provision current per
Energy Group								
5	Yunnan Copper (Group) Co., Ltd.		operating	No	No			
6	Yunnan Copper (Group) Co., Ltd.		operating	No	No			
7	Aluminum Corporation of China		operating	Yes	No			
8	Shanxi Aluminum Plant		operating	Yes	No			
9	Shanxi Aluminum Plant		operating	Yes	No			
10	Baotou Aluminum (Group) Co., Ltd		operating	No	No			

1.2 According to the balance top-up agreement signed with the joint venture Shanghai FengTong equity funds partnership (limited partnership "Shanghai FengTong") and Harvest Capital Management Co., Ltd. (hereinafter referred to as "Harvest Capital"), if the investee Shanghai FengTong and the expected benefits, China Aluminum International Engineering Co., Ltd. needs to take responsibility to compensate the unpaid amount.

The Board of Directors of China Aluminum International Engineering Co., Ltd. has reviewed all relevant contract terms and information, and the guarantees was not significant from the time of initial establishment of the guarantee. Shanghai FengTong could return debt as scheduled, and the estimated liabilities does not need to be calculated. China Aluminum International Engineering Co., Ltd. will continue to monitor the corresponding account impact when there is the responsibility to compensate the unpaid amount.

## 2. Pending litigation, arbitration and other guarantees

### 2.1 Northeast Light Alloy Co., Ltd.

2.1.1 As of 31 December, 2015, China Aluminum International Engineering Co., Ltd. is involved 29 litigation cases, may be liable for compensation or joint and several liability and result in the amount of outflow of economic benefits from enterprise of total RMB 132,453,310.78.

#### 2.1.2 Loss of overseas Engineering Extension

An overseas project of China Aluminum International Engineering Co., Ltd. is delayed in delivery, and final settlement of this project is under consultation. According to EPC contract, the maximum of compensation amount is 10% of contract amount, approximately 3 hundred million. According to the prudent estimation of management layer, because the possibility of employer's claim is less likely, so they don't withdraw provisions.

#### 2.1.3 Commitments

##### 2.1.3.1 Capital commitments

On 31 December, 2015, the amount of signed capital expenditures not needing to disclose on financial statements is RMB 3,279,970.69 (RMB 151,753,636.28 on December 31, 2014); On 31 December, 2015, the amount of non-signed capital expenditures is RMB 15,000,000.00(RMB 8,800,000.00 on 31 December, 2014).

##### 2.1.3.2 Operating commitments

Future rent payable each year	Closing balance	Opening balance
Within 1 year (inclusive)	5,459,093.08	4,216,120.80
More than 1 year but not exceeding 2 years	5,255,005.76	1,332,161.08
More than 2 years but not exceeding 3years	3,155,750.50	345,525.16
More than 3 years	1,455,518.00	580,279.36
<u>Total</u>	<u>15,325,367.34</u>	<u>6,474,086.40</u>

On 31 December 1, 2015 and December 31, 2014, there aren't investment commitments of China Aluminum International Engineering Co., Ltd.

As of 31December, 2015, China Aluminum International Engineering Co., Ltd.'s capital commitments and operating commitments have carried out by appointment.

## 2.2 Asset Management Company

### 2.2.1 China Great Wall Aluminum Co., Ltd

2.2.1.1 On 31 December, 1996, China Great Wall Aluminum Corporation, Zhengzhou Shangjie Aluminum Works Construct Zhengzhou Dapeng Power Plant, and Henan Construction Engineering Corporation (Renamed Henan International Construction Engineering Corporation) signed "Construction and Installation Works Contract". Because of the problem of construction fulfillment, Henan International Construction Engineering Corporation sued to Zhengzhou Intermediate People's Court, requiring China Great Wall Aluminum Corporation and Zhengzhou Shangjie Aluminum Works to return RMB

1,258,541.50, associated interest RMB 210,095.33, and bear liquidated damages of RMB 20,820,000.00.

Zhengzhou Intermediate People's Court heard this case on 20 December, 2007, first instance verdict that China Great Wall Aluminum Corporation and Zhengzhou Shangjie Aluminum Works should return RMB 1,258,541.50 and associated interests to Henan International Construction Engineering Corporation, and compensate RMB 1,000,000.00 to Henan International Construction Engineering Corporation and bear litigation costs. China Great Wall Aluminum Corporation make reasonable estimate accordingly, confirmed provision RMB 665,172.28.

Henan International Construction Engineering Corporation and China Great Wall Aluminum Corporation refused to accept first instance determination, and sued to Henan Higher People's Court. Henan Higher People's Court heard this case on 16 June, 2009, and then determined to remand this case. Zhengzhou Intermediate People's Court heard this case on December 28, 2010 and make a ruling on 2 April, 2014. The verdict that China Great Wall Aluminum Corporation, Henan Branch of China Aluminum Co. and Zhengzhou Shangjie Aluminum Works bear liquidated damages of RMB 7,396,500.00, returning RMB 1,258,541.50 and interests to the plaintiff, and bear litigation costs RMB 63,243.18. China Great Wall Aluminum Corporation refused to accept the determination and sued to Henan Higher People's Court. This case has not heard yet until now.

2.2.1.1 The number of the former China Great Wall Aluminum Corporation for early retirement in 1998 was 1,183.00. According to "The SCS (1999) No.10", the former Office of Labor of Henan Province put 366 people who were eligible for early retirement through identification and review into the provincial co-ordination directly in early 2000, and the remaining 817 people who did not meet the criteria were not included in the provincial co-ordination and were cleaned up and removed. These people who did not meet the criteria and were cleaned up and removed sued for their pension premiums which should be paid by Henan Branch of China Aluminum Co. and China Great Wall Aluminum Corporation from April, 1998 to the normal retirement. This labor dispute reached a settlement under the auspices of the Zhengzhou Shangjie district People's Court, and reported to Henan Endowment Insurance Administration to rebuild endowment insurance accounts and recalculate retirement benefits. After the calculation, Henan Branch of China Aluminum Co. and China Great Wall Aluminum Corporation are expected to bear RMB 48,774,581.47, and China Great Wall Aluminum Corporation is expected to bear RMB 23,887,281.47. China Great Wall Aluminum Corporation paid RMB 9,598,565.33 in 2015, as of 31 December, 2015, the rest amount is RMB 14,288,716.14.

## 2.2.2 Aluminum Corporation of China Guizhou Aluminum Plant

2.2.2.1 In 13 August, 2012, owners including Hong Tan, Guitao Chen of the Hua Yi blue sky projects developed by Hua Yi Real Estate Development Co., Ltd. (Hua Yi Company), affiliated to Guizhou Aluminum sued to the court to require Hua Yi Company to compensate penalty for deferred housing handover in 2011. Baiyun District People's Court verdict that Hua Yi Company have to pay liquidated damages more than RMB 200,000.00 to 13 owners including Tan Hung and Chen Guitao. Both sides

refused to accept the judgment of first instance, and appealed. At the end of 2012, due to the second instance verdict is not issued, in order to objectively reflecting Hua Yi Company's financial condition and operating results, in December 2012, according to the compensation standards of first instance verdict, Hua Yi Company carried out a detailed estimate of compensation penalty for deferred housing handover of all 783 householders I in the blue sky project, estimated to pay RMB 11.21 million, provisions confirmed and making retroactive reduction treatment for the profit and loss of 2011.

In May 2013, Guiyang Intermediate People's Court made final judgement for litigation matters above. According to the compensation standards of second instance verdict, Hua Yi Company is expected to pay RMB 6,379,200.00. At the end of May, Hua Yi Company launched payment program. During 2013, it paid to 605 owners, and total amount is RMB 5,080,300.00. The 13 owners refused to accept the determination of final judgement and sued to Guiyang Intermediate People's Court, then this case was remanded for retrial to Baiyun District People's Court. According to the compensation standards of second instance verdict, during 2014, Hua Yi Company paid to 50 owners, and total amount is RMB 442,000.00. According to the compensation standards of second instance verdict, during 2015, Hua Yi Company paid to 20 owners, and total amount is RMB 642,200.00. As of 31 December, 2015, Hua Yi Company paid to 675 owners totally, and total amount is RMB 6,164,500.00.

2.2.2.2 Guizhou Jiqian Mineral Smelting Co., Ltd. (Jiqian Company), affiliated to Aluminum Corporation of China Guizhou Aluminum Plant signed "Cleaned coal purchase contract" with Guizhou Huaxia Trade LLC (Huaxia Company) on 6 May, 2009 and 1 August, 2009. Huaxia Company signed "Cleaned coal purchase contract" with Liupanshui Kangmeng Engineering Technology Service Co., Ltd. (Kangmeng Company) on 26 May, 2009. Huaxia Company buys cleaned coal from Kangmeng Company and sales to Jiqian Company, then Jiqian Company sales to Guizhou Branch of Aluminum Corporation of China (Guizhou Branch). During the currency of contract, 2,598.00 tons of coal is under standards, so Guizhou Branch didn't pay to Jiqian Company, Jiqian Company didn't pay to Huaxia Company, and Huaxia Company didn't pay to Kangmeng Company.

Kangmeng Company sued to Zhongshan District People's Court on 25 May, 2010, requiring Huaxia Company to pay the money of RMB 2,156,340.00 related interests of RMB 301,887.60. On 10 April, 2014, High People's Court of Guizhou Province made civil judgement, determining that Huaxia Company should pay RMB 2,156,340.00 to Kangmeng Company in 15 days, and pay out all interests from June 8, 2010 in accordance with the same lending rates over the same period of People's Bank of China.

Huaxia Company refused to accept the determination and sued to Nanming District People's Court of Guiyang Province. On 6 May, 2015, Nanming District People's Court of Guiyang Province determined that Guizhou Branch should return unqualified cleaned coal to Huaxia Company. But Guizhou Branch had used the cleaned coal above, and then court verdict Jiqian Company to pay good money to Huaxia Company, with total amount of RMB 2,282,985.56. If Jiqian Company considered its benefit hurts, it could advocate rights to Guizhou Branch.

Jiqian Company refused to accept the determination of Nanming District People's Court of Guiyang Province, and sued to Intermediate People's Court of Guiyang Province in July, 2015. On 30 August, 2015, Intermediate People's Court of Guiyang Province rejected an appeal and affirmed the original judgment. Jiqian Company still refused to accept the determination, and sued to High People's Court of Guizhou Province on 3 November, 2015. Until now, related materials are under examination without putting on record. Jiqian Company considers it is less likely to win, so recognizes estimated Liabilities of RMB 2,282,985.56.

#### 2.2.3 Southwest Aluminum (Group) Co., Ltd.

Chongqing Southwest Aluminum Decoration Co., Ltd., affiliated to Southwest Aluminum (Group) Co., Ltd. undertook auxiliary project construction of Jiangjin Fuqiao Hotel. Chongqing Southwest Aluminum Decoration Co., Ltd. signed "Cooperation Agreement" with Chongqing Ruikesai Hotel Management Ltd., Zhang Xingfu and Guo Jiafu on 18 November, 2013 to remove hindering of Zhang Xingfu. The agreement appoints that Chongqing Ruikesai Hotel Management Ltd presents authority to pay and provides relevant guarantees, and after these taking effect, Chongqing Southwest Aluminum Decoration Co., Ltd. pay for Chongqing Ruikesai Hotel Management Ltd in 8 months. Until now, the appointment doesn't take effect. According to Zhang Xingfu's property preservation application, the Chongqing No.5 Intermediate Court frozen of Chongqing Southwest Aluminum Decoration Co., Ltd.'s project fund RMB 20,000,000.00. Now the case is under hearing.

#### 2.2.4 Chinalco Luoyang Copper Co., Ltd.

2.2.4.1 China Great Wall Asset Management Co., Ltd sued Loan guarantee contract dispute case with loan amount of RMB 215,640,000.00. The case suspended on 1 November, 2010. In July, 2013, China Great Wall Asset Management Co., Ltd required hearing recovery. On October 12, 2015, the court held a hearing, and there no determination yet as of 31 December, 2015.

2.2.4.2 Henan Province Investment Company applied for resumption of execution of loan guarantee contract dispute case, and required that Chinalco Luoyang Copper Co., Ltd. should bear joint and several liability guarantee with loan amount of RMB 25,600,000.00. In August, 2014 and May, 2015, Luoyang Intermediate Court determined that Chinalco Luoyang Copper Co., Ltd. was executor, and then Chinalco Luoyang Copper Co., Ltd. sued to Luoyang High Court, until now, Chinalco Luoyang Copper Co., Ltd. has not received relevant legal documents yet.

#### 2.2.5 CHINALCO Henan Aluminum Co., Ltd.

In March, 2010, CHINALCO Henan Aluminum Co., Ltd. signed joint venture agreement with Henan Zhongfu Industrial Co., Ltd., and set up Henan Zhongfu Special Aluminum Co., Ltd. Henan Zhongfu Industrial Co., Ltd. buy some equipment of Zhengzhou Cold Rolling Plant from CHINALCO Henan Aluminum Co., Ltd., and CHINALCO Henan Aluminum Co., Ltd. paid RMB 200 billion, and then the rest equipment, house property, land of Zhengzhou Cold Rolling Plant was transferred to new company. After new company set up, Henan Zhongfu Industrial Co., Ltd. proposed that they cannot bear liabilities

due to the problems of land and equipment. After repeated negotiations, both two agreed to make dissolving and liquidation of Henan Zhongfu Special Aluminum Co., Ltd. on April 20, 2013.

CHINALCO Henan Aluminum Co., Ltd. asked Henan Zhongfu Industrial Co., Ltd. to pay occupancy expenses, but both two couldn't reach an agreement. On 24 June, 2014, CHINALCO Henan Aluminum Co., Ltd. sued to High People's Court of Henan Province, requiring Henan Zhongfu Special Aluminum Co., Ltd. and Henan Zhongfu Industrial Co., Ltd. to pay occupancy expenses of 1,081.00 billion, and High People's Court of Henan Province began to hear on July 23. Henan Zhongfu Special Aluminum Co., Ltd. and Henan Zhongfu Industrial Co., Ltd. instituted a countersuit on September 19 to require CHINALCO Henan Aluminum Co., Ltd. to pay money of 213 billion. High People's Court of Henan Province began to hear this case on November 24, and both two reached a settlement agreement on December 26.

On 27 March, 2015, CHINALCO Henan Aluminum Co., Ltd. took back the control right of Zhengzhou Cold Rolling Plant, and obtained formal draft of forensic submissions on July 27. Until now, court hearing has not finished, and relevant amount cannot be estimated.

## 2.2.6 Chinalco Resources Corporation

2.2.6.1 In April, 2015, Chinalco Resources Corporation sued to Urumchi Intermediate People's Court requiring Urumqi Hong River Kaiyuan Company to pay compensation money RMB 14,800,000.00. On 14 August, 2015, Urumchi Intermediate People's Court rejected the suing. Then Chinalco Resources Corporation sued to Higher People's Court of Xinjiang Autonomous Region and Higher People's Court of Xinjiang Autonomous Region ordered Urumchi Intermediate People's Court to hear. Until now, Urumchi Intermediate People's Court confirmed to hear on April 20.

2.2.6.2 On 26 October, 2015, Chinalco Resources Corporation sued to Beijing Haidian District People's Court requiring Urumqi Hong River Kaiyuan Company to return prepayment. Until now, Beijing Haidian District People's Court began to hear on 4 November, 2015.

## 2.2.7 Chinalco Huazhong Copper Co., Ltd.

On 15 August, 2014, Chinalco Huazhong Copper Co., Ltd. was informed that Huangshi Xinpeng Copper Material LLC had transferred creditor's right to Beijing Branch of HSBC, so Chinalco Huazhong Copper Co., Ltd. had accounts payable to Beijing Branch of HSBC.

On 29 August, 2014, Wuhan Branch of HSBC sued to High Court of Hubei Province requiring Chinalco Huazhong Copper Co., Ltd. to bear the liability to pay RMB 201,489,628.21 and related overdue interest.

On 11 September, 2014, Chinalco Huazhong Copper Co., Ltd. report to the Huangshi Municipal Public Security Bureau. Chinalco Huazhong Copper Co., Ltd. was initiative to cooperate with Huangshi Municipal Public Security Bureau's investigation, and kept close contact with the Municipal task force. On September 23 and 28, respectively, Municipal Public Security Bureau placed a case on file and

investigated Huangshi Xinpeng Copper Material LLC and HSBC cases.

On 4 November, 2014, by the Hubei Provincial Higher People's Court sent relevant legal instruments of Huangshi Xinpeng Copper Material LLC case, and determined the limit property to be preserved summed to RMB 164,511,483.09.

On 2 December, 2014, the case transferred to Huangshi Municipal Public Security Bureau. Case court costs RMB 864,357.50 was returned to the Wuhan Branch of HSBC.

On 25 December, 2014, HSBC filed the complaint to the High Court, requiring Chinalco Huazhong Copper Co., Ltd. to bear the liability to pay RMB 201,489,628.21 and related overdue interest, and the total amount is RMB 207,586,656.30.

On 21 April, 2015, Hubei Provincial Higher People's Court rejected Wuhan Branch of HSBC's suing.

On 13 May, 2015, HSBC sued to Supreme People's Court requiring Hubei Provincial Higher People's Court to revoke verdict before.

On 27 May, 2015, Chinalco Huazhong Copper Co., Ltd. submitted the appeal petition.

On 31 August, 2015, Supreme People's Court had put this case on record and began to hear.

In November, 2015, Supreme People's Court sent back this case to Hubei Provincial Higher People's Court.

Until now, this case has not concluded.

## 2.2.8 Overseas holdings

In 2011, Peru Copper Inc. estimated fine expense SOL 256,120.00 about security incidents occurred, and estimated fees SOL 10,398,472.00 paid to Local Energy and Mines Department in charge, these two provisions above totally valued at SOL 10,654,592.00, equal to RMB 24,901,157.00 at exchange rate of 2011 balance sheet date. Forecasts matters related in 2015 didn't change, and the amount of provision is RMB 23,766,286.39 at exchange rate of balance sheet date.

3. In addition to contingencies above, there are no other significant contingencies of the Group as of December 31, 2015.

## VIII. EVENTS AFTER THE BALANCE SHEET DATE

### 1. Aluminum Corporation of China Limited

On 1 February, 2016, Aluminum Corporation of China Limited's associated company JiaoZuo WanFang Aluminum Manufacturing Co. Ltd held its first extraordinary general meeting of 2016 to elect seventh non-independent director and independent director. Aluminum Corporation of China Limited unoccupied seat on the Board of Directors of JiaoZuo WanFang Aluminum Manufacturing Co. Ltd, so since 1 February, 2016 Aluminum Corporation of China Limited loss a significant impact on JiaoZuo WanFang Aluminum Manufacturing Co. Ltd.

1.2 On 25 June, 2015, Aluminum Corporation of China Limited signed Asset Swap Agreement with Chinalco

Asset Management Company's subsidiary Shandong Aluminum Company, to replace part of the assets and liabilities of Aluminum Corporation of China Limited's subsidiary Chinalco Shandong Ltd with part of the assets and liabilities of Shandong Aluminum Company. In January 2016, the replacement completes.

On 5 February, 2016, Aluminum Corporation of China Limited received notice from Aluminum Corporation of China, Aluminum Corporation of China's overseas wholly-owned subsidiary Aluminum Corporation of China Overseas Holdings Limited outperformed H shares of Aluminum Corporation of China Limited since 9 November, 2015. As of 4 February, 2016, the accumulated holding H shares are 187,000,000.00 shares. As of 30 December and 31 December, 2015, Aluminum Corporation of China outperformed A shares of

1.3 Aluminum Corporation of China Limited 1,000,000.00 shares totally. As of 4 February, 2016, Aluminum Corporation of China and Aluminum Corporation of China Overseas Holdings Limited outperformed A shares and H shares of Aluminum Corporation of China Limited 188,000,000.00 shares totally, representing approximately 1.26% of the total issued shares. As of 4 February, 2016, Aluminum Corporation of China and its persons acting in concert holds a total of 5,135,382,055.00 A shares 5,135,382,055.00 and 187,000,000.00 H shares, representing approximately 35.71% of the total issued shares.

## **2. China Aluminum International Engineering Co., Ltd**

On 1 December, 2015, China Aluminum International Engineering Co., Ltd signed equity transfer agreement with Jiuan Real Estate Co., Ltd, and purchased 62.5% of Ninth Smelt Construction Co., Ltd.'s equity interests with cash of RMB 49,980,000.00. As of reporting date, this acquisition has not finished completely.

## **3. Aluminum Corporation of China**

3.1 Aluminum Corporation of China issued the first phase ultra-short-term financing bonds of aggregate nominal amount of RMB 3 billion on 6 January, 2016 for a period of 265 days. Par Value is RMB 100 per unit and the annual rate is 3.20%.

3.2 Aluminum Corporation of China issued the first phase sustainable medium-term notes of aggregate nominal amount of RMB 1.5 billion on 18 January, 2016 for a period of 5 years. Par Value is RMB 100 per unit and the annual rate is 5.70%.

3.3 Aluminum Corporation of China issued the second phase ultra-short-term financing bonds of aggregate nominal amount of RMB 3 billion on 20 January, 2016 for a period of 270 days. Par Value is RMB 100 per unit and the annual rate is 3.60%.

3.4 Aluminum Corporation of China issued the second phase short-term financing bonds of aggregate nominal amount of RMB 2 billion on 2 March, 2016 for a period of 1 year. Par Value is RMB 100 per unit and the annual rate is 3.27%.

## **IX. RELATED PARTY RELATIONSHIPS AND TRANSACTIONS**

### **1. Related parties**

### 1.1 related party transaction

Type of transaction	Company name	Nature of related party relationships	Transaction amount	Percent of transaction			Bad-debt provision of unsettled item amount	Pricing policy
				amount accounted for total transaction	Unsettled item amount	amount (%)		
Purchase of goods/ receipt of services								
Purchase of goods	Guangxi Huayin Aluminum Co., Ltd.	subsidiary's joint ventures	1,276,078,309.65		0.62	156,863,958.58		Market price
Purchase of goods	JiaoZuo Aluminum Co. Ltd	WanFang subsidiary's associates	414,543,272.80		0.20	154,709.31		Market price
Purchase of goods	Guizhou Aluminum Co., Ltd.	associates of Aluminum Corporation of China	131,232,107.35		0.06	3,650,565.51		Market price
Sales of goods/provision of services								
Sales of goods	JiaoZuo Aluminum Co. Ltd	WanFang subsidiary's associates	1,716,872,428.32		0.80	171,775.97		Market price
Sales of goods	Guizhou Aluminum Co., Ltd.	associates of Aluminum Corporation of China	658,989,926.55		0.31	22,964.75		Market price
Sales of goods	Shanxi Huatuo Industry Co., Ltd.	Aluminum subsidiary's associates	446,941,178.68		0.21			Market price
Sales of goods	Guangxi Huayin Co., Ltd.	Aluminum Subsidiary's joint ventures	79,034,327.72		0.04	1,600,000.00		Market price
Sales of goods	Weihai Wanfeng Auto Wheel Co., Ltd.	Aowei Auto subsidiary's associates	44,638,213.42		0.02			Market price
Sales of goods	Ningxia Datang International Dam Electricity LLC	International Subsidiary's joint ventures	33,235,487.62		0.02	11,562,521.82		Market price
Sales of goods	Beijing Jiya Material Co., Ltd	Semiconductor subsidiary's associates	14,799,770.09		0.01			Market price
Sales of goods	Guizhou Yuneng Mining Co., Ltd.	subsidiary's associates	2,931,714.12		0.00			Market price

Type of transaction	Company name	Nature of related party relationships	Transaction amount	Percent of transaction		Bad-debt provision of unsettled item amount	Pricing policy					
				amount for total transaction	Unsettled item amount							
amount (%)												
Other transactions												
Fees for technical services	Ningxia Yinxing Energy Co., Ltd	subsidiary's joint ventures	5,546,000.00	0.29	4,855,000.00		Market price					
Fees for technical services	Tianjing Shenzhou Wind Power Co., Ltd.	subsidiary's joint ventures associates of	2,049,320.75	0.01	1,212,080.00		Market price					
Interest expense on deposits	Sapa Chalco Aluminum Products Co., Ltd.	Aluminum Corporation of China	3,489.05	0.00			Market price					
Interest expense on deposits	Qinghai Yellow River Hydropower	associates of Recycled Aluminum Corporation of China	751.87	0.00			Market price					
Interest expense on deposits	Huozhou Coal Group Xingshengyuan Coal Co., Ltd.	subsidiary's associates of	35.01	0.00			Market price					
Entrusted loan income	Sapa Chalco Aluminum Products Co., Ltd.	Aluminum Corporation of China	162,000.00	0.78			Market price					

## 1.2 Related party guarantees

Guarantee unit	Secured unit	Nature of secured unit	Final total guarantee	Guarantee period	Status quo of secured unit
Aluminum Corporation of China Limited (Note 1)	Shanxi Jiexiu Xinyugou Coal (Group) Co., Ltd.	Private	58,480,000.00	2013.3.12-2021.3.11	operating
Aluminum Corporation of China Limited (Note 1)	Shanxi Jiexiu Xinyugou Coal (Group) Co., Ltd.	Private	63,920,000.00	2013.3.12-2022.3.11	operating
Aluminum Corporation of China Limited (Note 1)	Shanxi Jiexiu Xinyugou Coal (Group) Co., Ltd.	Private	55,760,000.00	2013.3.12-2021.3.11	operating
Aluminum Corporation of China Limited (Note 1)	Shanxi Jiexiu Xinyugou Coal (Group) Co., Ltd.	Private	132,600,000.00	2013.3.12-2023.3.11	operating

Guarantee unit	Secured unit	Nature of secured unit	Final total guarantee	Guarantee period	Status quo of secured unit
Shanxi Huasheng Aluminum Co., Ltd. (Note 2)	Huozhou Coal Group Xingshengyuan Coal Co., Ltd.	State-owned holding	17,470,000.00	2014.2.1-2019.1.1	operating
China Aluminum Ningxia Energy Group (Note3)	Ningxia Tianjing Shenzhou Wind Power Co., Ltd.	State-owned holding	30,140,000.00	2006.12.25-2020.12.24	operating
Yunnan Copper (Group) Co., Ltd.	Zambia's modest than copper smelting Co., Ltd.	State-owned holding	195,808,000.00	2013.5.5-2016.5.5	operating
Yunnan Copper (Group) Co., Ltd.	Zambia's modest than copper smelting Co., Ltd.	State-owned holding	367,140,000.00	2011.3.3-2016.3.3	operating
Aluminum Corporation of China Aluminum Plant	Shanxi Yu Jiexiu City Coal Cleaning Industry Co., Ltd.	State-run equity participation	54,000,000.00	2014.8.20-2016.8.19	operating
Aluminum Corporation of China Aluminum Plant	Shanxi Jiexiu Xinyugou Coal (Group) Co., Ltd.	State-run equity participation	103,275,000.00	2013.3.12-2021.3.11	operating

### 1.3 Amounts due from / to related parties

Name of related party	Related party relationship	Items due from related parties	Closing amount	Aging	Bad-debt provisions
Shanxi Huaxing Aluminum Co., Ltd.	Subsidiary's joint ventures	accounts receivable	308,494,724.20	Within 1 year (inclusive)	
Yunnan Mingchen Import and Export Co., Ltd.	Subsidiary's joint ventures	accounts receivable	22,685,419.88	More than 4 years but not exceeding 5 years	22,685,419.88
Ningxia Datang International Dam Electricity LLC	Subsidiary's joint ventures	accounts receivable	11,562,521.82	Within 1 year (inclusive)	
Ningxia Yinxing Energy Co., Ltd	Subsidiary's joint ventures	accounts receivable	4,855,000.00	Within 1 year (inclusive)	
Qinghai Yellow River Hydropower Recycled Aluminum Co., Ltd.	associates of Aluminum Corporation of China	accounts receivable	4,040,162.86	More than 1 year but not exceeding 2 years	
Chinalco Science and Technology Institute	Subsidiary's joint ventures	accounts receivable	2,670,510.00	Within 1 year (inclusive)	
Guangxi Huayin Aluminum Co., Ltd.	Subsidiary's joint ventures	accounts receivable	1,600,000.00	Within 1 year (inclusive)	
Ningxia Tianjing Shenzhou Wind Power Co., Ltd.	Subsidiary's joint ventures	accounts receivable	1,212,080.00	Within 1 year (inclusive)	
Shanxi Jiexiu Xinyugou Coal (Group) Co., Ltd.	Subsidiary's joint ventures	accounts receivable	876,000.00	More than 2 years but not exceeding 3 years	
JiaoZuo WanFang Aluminum	Subsidiary's joint ventures	accounts receivable	171,775.97	Within 1 year (inclusive)	

Name of related party	Related party relationship	Items due from related parties	Closing amount	Aging	Bad-debt provisions
Manufacturing Co. Ltd					
Datong Coal Mine Group	Subsidiary's joint ventures	accounts receivable	30,000.00	More than 2 years but not exceeding 3 years	
Huasheng Wanjie Coal Co., Ltd.	Subsidiary's joint ventures	accounts receivable	22,964.75	Within 1 year (inclusive)	
Guizhou Aluminum Co., Ltd.	Subsidiary's joint ventures	accounts receivable	4,670.38	More than 3 years	
Shanxi JinXin Aluminum Industry Co., Ltd.	Subsidiary's joint ventures	accounts receivable		More than 1 year but not exceeding 2 years, More than 2 years but not exceeding 3 years, More than 3 years	
Shanxi Jiexiu Xinyugou Coal (Group) Co., Ltd.	Subsidiary's joint ventures	other receivable	956,455,901.88	than 2 years but not exceeding 3 years, More than 3 years	
Chinalco Science and Technology Institute	Subsidiary's associates	other receivable	784,313,929.81	Within 1 year (inclusive), 1-3 years	
Yunnan Copper Rare New Materials Co., Ltd.	Subsidiary's associates	other receivable	416,614,750.35	More than 1 year but not exceeding 4 years	416,614,750.35
Yunnan Mingchen Import and Export Co., Ltd.	Subsidiary's associates	other receivable	245,805,000.00	More than 1 year but not exceeding 3 years	245,805,000.00
Chinalco Guizhong Hengtaihe Mining Co., Ltd.	Subsidiary's joint ventures	other receivable	168,515,195.02	Within 1 year (inclusive)	
Datong Coal Mine Group	Subsidiary's joint ventures	other receivable	105,163,697.33	Within 2 years (inclusive)	
Huasheng Wanjie Coal Co., Ltd.	Subsidiary's joint ventures	other receivable		Within 1 year (inclusive)	
Guangxi Huayin Aluminum Co., Ltd.	Subsidiary's joint ventures	other receivable	100,000,000.00	Within 2 years (inclusive)	
Huozhou Coal Group Hejin Xuehu Coal Co., Ltd.	Subsidiary's joint ventures	other receivable	84,511,480.40	More than 5 years	20,790,254.00
Guangxi Huazheng Aluminum Ltd.	Subsidiary's joint ventures	other receivable	51,898,473.27	Within 2 years (inclusive)	
Guizhou GuiLv Huaguang Aluminum Co., Ltd.	Subsidiary's associates	other receivable	30,087,910.10	More than 2 years but not exceeding 3 years	
Henan Zhongfu Special Aluminum Co., Ltd.	Subsidiary's associates	other receivable	22,856,889.08	Within 1 year (inclusive)	
Guizhou Aluminum Equipment Engineering LLC	Subsidiary's associates	other receivable	20,152,857.59	More than 3 years	
Shanxi JinXin Aluminum Industry	Subsidiary's joint ventures	other receivable	16,662,412.00	More than 3 years	16,662,412.00

Name of related party	Related party relationship	Items due from related parties	Closing amount	Aging	Bad-debt provisions
Co., Ltd.					
Chinalco Chengdu Aluminum Co., Ltd.	associates of Aluminum Corporation of China	other receivable	16,163,031.04	Within 1 year (inclusive)	
Guizhou Aluminum Equipment Technology Ltd	Subsidiary's associates	other receivable	10,146,050.21	Within 1 year (inclusive), More than 1 year but not exceeding 2 years	
Shanxi Huaxing Aluminum Co., Ltd.	Subsidiary's joint ventures	other receivable	9,549,733.70	More than 1 year but not exceeding 2 years	
Guizhou Aluminum Xingxin Furnace Building Ltd	Subsidiary's associates	other receivable	6,911,879.76	Within 1 year (inclusive)	
Baotou Sendu Carbon Co., Ltd.	Subsidiary's associates	other receivable	5,000,000.00	More than 1 year but not exceeding 2 years	
Guangxi Huayin Aluminum Co., Ltd.	Subsidiary's joint ventures	dividends receivable	66,471,438.00	Within 1 year (inclusive)	
Ningxia Jingneng Ningdong Power Generation Co., Ltd.	Subsidiary's joint ventures	dividends receivable	18,500,000.00	More than 1 year but not exceeding 2 years	
Ningxia Tianjing Shenzhou Wind Power Co., Ltd.	Subsidiary's joint ventures	dividends receivable	8,385,929.37	Within 1 year (inclusive)	
Shanxi Jixiu Xinyugou Coal (Group) Co., Ltd.	Subsidiary's joint ventures	interests receivable	41,849,061.22	More than 1 year but not exceeding 2 years	
Shanxi Huaxing Aluminum Co., Ltd.	Subsidiary's joint ventures	long-term receivables	409,251,000.00	Within 1 year (inclusive)	
Huozhou Coal Group Xingshengyuan Coal Co., Ltd.	Subsidiary's joint ventures	long-term receivables	111,846,000.00	More than 1 year but not exceeding 2 years	

Name of related party	Related party relationship	Items due to related parties	Closing amount	Aging
Guangxi Huayin Aluminum Co., Ltd.	Subsidiary's joint ventures	accounts payable	156,863,958.58	Within 1 year (inclusive)
Guizhou Aluminum Co., Ltd.	associates of Aluminum Corporation of China	accounts payable	3,650,565.51	More than 1 year but not exceeding 2 years
Shanxi Huaxing Aluminum Co., Ltd.	Subsidiary's joint ventures	accounts payable	2,146,181.61	More than 1 year but not exceeding 2 years
Guizhou Yuneng Mining Co., Ltd.	Subsidiary's joint ventures	accounts payable	526,273.20	More than 1 year but not exceeding 2 years
Shanxi Cheng City Dongdong Coal Co., Ltd.	Subsidiary's joint ventures	accounts payable	449,211.33	More than 1 year but not exceeding 2 years

Name of related party	Related party relationship	Items due to related parties	Closing amount	Aging
JiaoZuo WanFang Aluminum Manufacturing Co. Ltd	Subsidiary's joint ventures	accounts payable	154,709.31	Within 1 year (inclusive)
ISHIBASHIGEARBOX (YINCHUAN) Co., Ltd.	Subsidiary's joint ventures	accounts payable	75,000.00	More than 1 year but not exceeding 2 years
Shanxi Huatuo Aluminum Industry Co., Ltd.	Subsidiary's joint ventures	accounts payable	0.12	More than 1 year but not exceeding 2 years
Shanxi Huaxing Aluminum Co., Ltd.	Subsidiary's joint ventures	receipts in advance	11,813,000.00	Within 1 year (inclusive)
Shanxi Huatuo Aluminum Industry Co., Ltd.	Subsidiary's joint ventures	receipts in advance	9,782,895.93	Within 1 year (inclusive)
Baotou Tiansheng Aluminum Ltd	Subsidiary's joint ventures	receipts in advance	7,592,718.66	Within 1 year (inclusive)
JiaoZuo WanFang Aluminum Manufacturing Co. Ltd	Subsidiary's joint ventures	receipts in advance	3,573,761.98	Within 1 year (inclusive)
Shanxi JinXin Aluminum Industry Co., Ltd.	Subsidiary's joint ventures	receipts in advance	332,076.48	More than 3 years
Guizhou Aluminum Co., Ltd.	associates of Aluminum Corporation of China	receipts in advance	167,399.76	Within 1 year (inclusive)
Qinghai Yellow River Hydropower Recycled Aluminum Co., Ltd.	associates of Aluminum Corporation of China	receipts in advance	3,486.58	Within 1 year (inclusive)
Guangxi Huazheng Aluminum Ltd.	Subsidiary's joint ventures	other payables	35,000,000.00	Within 1 year (inclusive)
Ningxia Tianjing Shenzhou Wind Power Co., Ltd.	Subsidiary's joint ventures	other payables	2,872,926.35	More than 3 years
Shanxi Huaxing Aluminum Co., Ltd.	Subsidiary's joint ventures	other payables	1,980,000.00	Within 2 years (inclusive)
Qinghai Yellow River Hydropower Recycled Aluminum Co., Ltd.	associates of Aluminum Corporation of China	other payables	1,019,471.04	More than 1 year but not exceeding 2 years
JiaoZuo WanFang Aluminum Manufacturing Co. Ltd	Subsidiary's joint ventures	other payables	931,312.00	Within 1 year (inclusive)
ISHIBASHIGEARBOX (YINCHUAN) Co., Ltd.	Subsidiary's joint ventures	other payables	517,611.31	Note 2
Chinalco Science and Technology Institute	Subsidiary's joint ventures	other payables	30,000.00	Within 1 year (inclusive)
Baotou Tiansheng Aluminum Ltd	Subsidiary's joint ventures	other payables	20,000.00	Within 1 year (inclusive)
Shanxi Huatuo Aluminum Industry Co., Ltd.	Subsidiary's joint ventures	other payables	10,000.00	More than 3 years

## X. NOTES TO IMPORTANT ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS

### 1 Other receivables

Category	Closing Amount			
	Carrying amount		Bad-debt provision	
	Amount	Percentage (%)	Amount	Percentage (%)
Other receivables that are individually significant and for	12,994,802,924.39	99.77	94,659,610.86	0.73

Category	Closing Amount			
	Carrying amount		Bad-debt provision	
	Amount	Percentage (%)	Amount	Percentage (%)
which bad debt provision has been assessed individually				
Accounts receivables for which bad debt provision has been assessed by portfolios				
Accounts receivable that are not individually significant but for which bad debt provision has been assessed individually	30,222,905.35	0.23		
<b>Total</b>	<b>13,025,025,829.74</b>	--	<b>94,659,610.86</b>	--

Continued,

Category	Beginning Amount			
	Carrying amount		Bad-debt provision	
	Amount	Percentage (%)	Amount	Percentage (%)
Other receivables that are individually significant and for which bad debt provision has been assessed individually				
Accounts receivables for which bad debt provision has been assessed by portfolios	10,214,151,101.98	99.84	94,659,610.86	0.93
Accounts receivable that are not individually significant but for which bad debt provision has been assessed individually	16,090,311.22	0.16		
<b>Total</b>	<b>10,230,241,413.20</b>	--	<b>94,659,610.86</b>	--

## 2 Long-term equity investments

### 2.1 Disclosure by categories

Item	Opening balance	Increase	Decrease	Closing balance
Investment to subsidiaries	77,047,946,683.31	2,213,242,958.42	1,085,043,685.00	78,176,145,956.73
Investment to Joint venture	99,091,631.32	607,512,835.84		706,604,467.16
Investment to associates	189,288,636.68	179,208,709.93	235,182.56	368,262,164.05
<b>Subtotal</b>	<b>77,336,326,951.31</b>	<b>2,999,964,504.19</b>	<b>1,085,278,867.56</b>	<b>79,251,012,587.94</b>
Less: impairment losses of Long-term equity investment	1.00			1.00
<b>Total</b>	<b>77,336,326,950.31</b>	<b>2,999,964,504.19</b>	<b>1,085,278,867.56</b>	<b>79,251,012,586.94</b>

## 2.2 Long-term equity investments details

Investee	Investment cost	Opening balance	Additional investments	Negative investment	Increase and decrease under
<u>Total</u>	<u>79,029,980,913.85</u>	<u>77,336,326,951.31</u>	<u>1,787,215,217.60</u>	<u>1,085,043,685.00</u>	
<u>1.Subsidiaries</u>	<u>78,293,803,956.73</u>	<u>77,047,946,683.31</u>	<u>1,574,699,787.60</u>	<u>1,085,043,685.00</u>	
Oriental Prospect Pte.Ltd.	43,141,800,000.00	43,141,800,000.00			
Yunnan Copper Group	10,903,036,198.90	10,829,523,517.90		73,512,681.00	
Aluminum Corporation of China Limited	7,494,261,144.23	7,807,802,435.63		12,816,493.60	326,357,785.00
Southwest Aluminum (Group) Co., Ltd.	1,684,838,968.81	1,665,795,030.81		19,043,938.00	
CHINALCO Ruimin Aluminum Plate and Strip Co., Ltd.	1,515,506,399.44	1,515,506,399.44			
Finance Company	1,500,000,000.00	1,500,000,000.00			
Chinalco Luoyang Copper Co., Ltd.	1,296,605,335.67	1,264,370,675.67		32,234,660.00	
Northeast Light Alloy Co., Ltd.	1,251,719,952.82	1,230,329,529.82		21,390,423.00	
Northwest Aluminum Processing Plant	1,022,796,855.48	1,007,933,099.48		14,863,756.00	
Chinalco Shanghai Copper Co., Ltd.	872,557,225.50	857,234,135.50		15,323,090.00	
Baotou Aluminum Group	839,764,885.23	798,303,216.23		41,461,669.00	

**Increase and decrease**

Investee	Investment cost	Opening balance	Additional investments	Negative investment	Increase and decrease under
Chinalco Huazhong Copper Co., Ltd.	654,161,100.00	654,161,100.00			
Chinalco Shenyang Non-ferrous Metals Processing Co., Ltd.	688,209,700.00	586,659,700.00	101,550,000.00		
Chinalco Resources Corporation	516,890,000.00	550,000,000.00		33,110,000.00	
Chalco-swa Cold Rolling Co., Ltd.	529,486,882.64	529,201,245.64	285,637.00		
Aluminum Corporation OF China Overseas Holdings Limited	500,712,716.50	500,712,716.50			
Chinalco Asset Management Company	1,005,177,148.20	483,723,039.20	521,454,109.00		
CHINALCO Southwest Aluminum Plate and Strip Co., Ltd.	440,437,946.39	440,308,583.39	129,363.00		
China Aluminum International Engineering Corporation Limited	347,082,945.00	347,082,945.00			
Aluminum Kunming Copper Co., Ltd.	293,860,000.00	293,860,000.00			
Chinalco Rare Earth Corporation Limited	213,800,098.42	213,800,098.42			
Huaxi Aluminum Co., Ltd.	285,273,493.01	187,842,194.01	97,431,299.00		
Chinalco Rio Tinto Exploration Company	168,300,000.00	168,300,000.00			

Investee	Investment cost	Opening balance	Additional investments	Negative investment	Increase and decrease under
CHALCO Qingdao International Trading Co., Ltd.	153,686,369.36	153,686,369.36			
China Copper Company Limited	101,633,728.63	101,633,728.63			
Chinalco Metal Trade Ltd	100,000,000.00	100,000,000.00			
Chinalco Chengdu Aluminum Co., Ltd.	50,000,000.00	50,000,000.00			50,000,000.00
Chinalco Science and Technology Institute	50,000,000.00	50,000,000.00			675,575,900.00
Chinalco Insurance Brokers (Beijing) Co., Ltd.	17,658,000.00	17,658,000.00			
CHINALCO Henan Aluminum Co., Ltd.	1,664,941.68	718,922.68		946,019.00	
Chinalco Aluminum Foil Co., Ltd.	20,000,000.00			20,000,000.00	
Chinalco Capital Holding Limited	630,625,270.82			600,000,000.00	
Southwest Aluminum Minsheng Company	2,256,650.00			2,256,650.00	
<u>2. Joint venture</u>	<u>152,788,142.38</u>	<u>99,091,631.32</u>			
Sapa Chalco Aluminum Products Co., Ltd.	127,788,142.38	99,091,631.32			

Investee	Investment cost	Opening balance	Additional investments	Negative investment	Increase and decrease under
Chinalco Science and Technology Institute	25,000,000.00				
<u>3. Associates</u>	<u>583,388,814.74</u>	<u>189,288,636.68</u>	<u>212,515,430.00</u>		
Guizhou Aluminum Co., Ltd.	137,296,973.38	149,776,934.73			
Beijing Zhongan Technology Development Ltd	30,000,000.00	31,611,254.73			
China Beijing International Mining Exchange	10,000,000.00	7,900,447.22			
Fushun Titanium Co., Ltd	206,091,841.36		12,515,430.00		
China Construction Aluminum New Material Ltd	200,000,000.00		200,000,000.00		

### 2.3 Important information of the Group's joint ventures.

Item	Amount this period		Amount previous period	
	Sapa Chalco Aluminum Products Co., Ltd.			
Current assets	95,859,319.34		125,857,976.93	
Non-current assets	544,700,500.57		607,592,123.83	
Total assets	640,559,819.91		733,450,100.76	
Current liabilities	354,448,701.67		155,433,601.86	
Non-current liabilities	220,675,923.60		376,455,175.94	
Total liabilities	575,124,625.27		531,888,777.80	
Net assets	65,435,194.64		201,561,322.96	
Net assets share of joint ventures according to shareholding rate	32,717,597.32		100,780,661.48	
Adjusting events	-1,689,030.16		-1,689,030.16	
The book value of equity investment to joint ventures	31,028,567.16		99,091,631.32	
The fair value of equity investment with public price				
Operating income	40,155,526.66		23,143,846.71	
Finance expenses	25,347,802.92		5,278,184.68	
Income tax expenses	15,606,346.55		-8,788,560.20	
Net profit	-136,126,128.31		-43,990,048.73	
Other comprehensive income				
Total comprehensive income	-136,126,128.31		-43,990,048.73	
Dividends received from joint ventures				

### 2.4 Important information of the Group's associates

Item	Amount this period					Amount previous period	
	Beijing Zhong'an					Beijing Zhong'an	
	Guizhou	Kechuang	China Beijing	Guizhou	Kechuang	China Beijing	China Beijing
	Aluminum Co.,	Technology	International	Aluminum Co.,	Technology	International	International
	Ltd.	Development Co.,	Mining Exchange	Ltd.	Development Co.,	Ltd.	Mining Exchange
		Ltd.				Ltd.	
Current assets	382,819,020.74	77,166,307.41	42,958,142.33	235,272,897.76	96,639,678.12	50,653,175.46	
Non-current assets	558,873,317.17	21,875,714.78	2,758,490.18	596,889,947.86	6,085,559.41	2,807,848.93	
Total assets	941,692,337.91	99,042,022.19	45,716,632.51	832,162,845.62	102,725,237.53	53,461,024.39	
Current liabilities	479,931,863.03	17,251,776.52	906,382.58	268,968,982.31	25,399,813.89	560,308.80	

Item	Amount this period			Amount previous period			China Beijing International Mining Exchange	
	Beijing Zhong'an			Beijing Zhong'an				
	Guizhou Aluminum Co., Ltd.	Kechuang Technology Development Co., Ltd.	China Beijing International Mining Exchange	Guizhou Aluminum Co., Ltd.	Kechuang Technology Development Co., Ltd.			
		Ltd.			Ltd.	Ltd.		
Non-current liabilities	188,000,000.00			237,000,000.00				
Total liabilities	667,931,863.03	17,251,776.52	906,382.58	505,968,982.31	25,399,813.89	560,308.80		
Net assets	273,760,474.88	81,790,245.67	44,810,249.93	326,193,863.31	77,325,423.64	52,900,715.59		
Net assets share of associates according to shareholding rate	109,504,189.95	24,577,968.82	7,725,287.09	130,477,545.32	23,236,289.80	9,120,083.37		
Adjusting events	19,299,389.41	8,374,964.93	-1,219,636.15	19,299,389.41	8,374,964.93	-1,219,636.15		
The book value of equity investment to associates	128,803,579.36	32,952,933.75	6,505,650.94	149,776,934.73	31,611,254.73	7,900,447.22		
The fair value of equity investment with public price								
Operating income	799,957,099.58	44,386,803.58	560,467.71	471,812,965.58	37,368,701.07	3,984,233.57		
Finance expenses	-52,433,388.43	5,247,459.50	-8,090,465.66	-27,886,825.59	3,261,389.93	7,406,336.05		
Income tax expenses								
Net profit	-52,433,388.43	5,247,459.50	-8,090,465.66	-27,886,825.59	3,261,389.93	7,406,336.05		
Dividends received from associates								

### 3 Total operating income and total operating costs

Item	Accrual this period		Accrual prior period	
	Income	Cost	Income	Cost
Other business subtotal	<u>2,000,000.00</u>		<u>2,800,000.00</u>	
Including: Service charges	2,000,000.00		2,800,000.00	
<u>Total</u>	<u><u>2,000,000.00</u></u>		<u><u>2,800,000.00</u></u>	

### 4 Investment incomes

#### 4.1 Detailed investment income

The source of investment income	Accrual this period	Accrual prior period
Income from long-term equity investments under equity method	-101,369,784.23	-234,594,231.70

The source of investment income	Accrual this period	Accrual prior period
Investment income on disposal of long-term equity investment	3,610,734,271.01	
Investment income from holding held-to-maturity investment	83,058,184.09	
Investment income from holding available-sale financial assets	36,499,981.00	92,228,409.36
Others	313,341,695.94	416,446,675.73
<u>Total</u>	<u>3,942,264,347.81</u>	<u>274,080,853.39</u>

#### 4.2 Explanation about investment income and significant limitation of investment income withdraw

There isn't significant limitation of investment income withdraw in the Group

#### **XI. APPROVAL OF THE FINANCIAL STATEMENTS**

The Company's financial statements have been approved by the Board of Directors and authorized for issue.

## AUDITOR'S REPORT

Baker Tilly China [2016] No. 4092-1

To Aluminum Corporation of China Overseas Holdings Limited,

We have audited the accompanying financial statements of Aluminum Corporation of China Overseas Holdings Limited ("Overseas Holdings Limited "), which comprise the consolidated balance sheet as at 31 December 2015, the consolidated income statement, the consolidated cash flow statement for the year then ended, and the notes to the financial statements.

### **I. The Management's Responsibility for the Financial Statements**

The management of Overseas Holdings Limited is responsible for the preparation and fair presentation of the financial statements. This responsibility includes: (1) preparing the financial statements in accordance with Accounting Standards for Business Enterprises to achieve fair presentation of the financial statements; (2) designing, implementing and maintaining internal control which is necessary to enable that the financial statements are free from material misstatement due to fraud or error.

### **II. Auditor's Responsibility**

Our responsibility is to express an audit opinion on the financial statements based on our audit. We conducted our audit in accordance with China Standards on Auditing. China Standards on Auditing require that we comply with the Code of Ethics for Chinese Certified Public Accountants and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing audit procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, Certified Public Accountants consider the internal control relevant to the preparation and fair presentation of the financial statements 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 the internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### III. Opinion

In our opinion, the financial statements of Overseas Holdings Limited present fairly, in all material respects, the consolidated financial position as of 31 December 2015, and the consolidated result of operations and cash flows for the year then ended in accordance with Accounting Standards for Business Enterprises.

### IV. Emphasis of Matter

We ask the users of financial statements to pay attention that, as the disclosure of Note XII to the financial statements: "OTHER MATTERS SHOULD BE DISCLOSED ACCORDING TO ACCOUNTING STANDARDS", the subsidiary of Overseas Holdings Limited, Shining Prospect Pte. Ltd., by the end of 31 December 2015, holds 182.00 million shares of Rio Tinto listed in United Kingdom (equivalent to the carrying amount of RMB 101.26 billion). At 31 December 2015, the closing price of Rio Tinto is 19.795 pounds per share, and the total market value of Rio Tinto shares held by Shining Prospect Pte. Ltd. is RMB 34.64billion, representing a reduction of RMB 66.62 billion compared with its carry amount. Overseas Holdings Limited is the sole majority shareholder of Rio Tinto with non-short-term investment purpose, accordingly, the Rio Tinto shares are classified as available-for-sale financial assets and its initial investment cost is measured at historical cost method. Our opinion is not qualified in respect of this matter.

Baker Tilly China Certified Public Accountants  
Beijing, China  
3 April, 2016



Chinese Certified Public  
Accountant:



Chinese Certified Public  
Accountant:



Chinese Certified Public  
Accountant:



## Consolidated Balance Sheet

Company: Aluminum Corporation of China Overseas Holdings Limited      31 December 2015      Currency: RMB

Item	Closing balance	Opening balance	Notes
<b>Current Assets:</b>			
Cash and bank balances	4,648,734,107.82	6,087,930,167.56	VIII.1
Balances with clearing agencies			
Placements with banks and other financial institutions			
Financial assets measure by fair value through profit or loss			
Notes receivable			
Accounts receivable	470,449,709.44	465,001,167.00	VIII.2
Prepayments	196,449,841.82	274,216,866.00	VIII.3
Premiums receivable			
Accounts receivable under reinsurance contracts			
Reinsurer's share of insurance contract reserves			
Interest receivable	23,534,422.86	15,450,787.95	VIII.4
Dividends receivable			
Other receivables	6,721,464,586.28	3,998,446,142.72	VIII.5
Financial assets purchased under resale agreements			
Inventories	719,874,002.40	642,849,902.00	VIII.6
Divided into holding assets for sale			
Non-current assets due within one year			
Other current assets			
<b>Total Current Assets</b>	<b>12,780,506,670.62</b>	<b>11,483,895,033.23</b>	
<b>Non-current Assets:</b>			
Loans and advances to customers			
Available-for-sale financial assets	101,667,891,575.74	95,746,803,020.27	VIII.7
Held-to-maturity investments	48,742,024.14	46,006,486.42	VIII.8
Long-term receivables	76,156,674.56	75,392,199.00	VIII.9
Long-term equity investments	13,404,907,810.07	12,144,833,406.49	VIII.10
Investment properties	311,614,876.80		VIII.11
Property Plant and Equipment (PPE)	18,638,347,376.68	1,678,586,507.15	VIII.12
Construction in progress	6,297,275,945.70	24,882,036,397.07	VIII.13
Materials for construction of fixed assets			
Disposal of fixed assets			
Bearer biological assets			
Oil and gas assets			
Intangible assets	9,609,723,105.85	4,018,971,503.60	VIII.14
Development expenditure			
Goodwill	1,693,772,908.96	1,596,063,266.90	VIII.15
Long-term prepaid expenses			
Deferred tax assets	92,559,774.40	191,065,775.00	VIII.16
Other non-current assets	51,173,132.99	48,266,672.00	VIII.17
<b>Total Non-current Assets</b>	<b>151,892,165,205.89</b>	<b>140,428,025,233.90</b>	
<b>Total Assets</b>	<b>164,672,671,876.51</b>	<b>151,911,920,267.13</b>	

Legal representative: Wang Jun

Chief accountant: Yu Hongwei

Person in charge of accounting body: Hu Weixi

## Consolidated Balance Sheet (Continued)

Company: Aluminum Corporation of China Overseas Holdings Limited	31 December 2015		Currency: RMB
Item	Closing balance	Opening balance	Notes
<b>Current Liabilities:</b>			
Short-term borrowings	6,969,889,449.38	6,792,090,000.00	VIII.18
Loans from the central bank			
Customer deposits and deposits from banks and other financial institution			
Taking from banks and other financial institution			
Financial liabilities measure by fair value through profit or loss	148,560,652.23		VIII.19
Notes payable			
Accounts payable	1,478,908,750.52	2,402,392,828.00	VIII.20
Receipts in advance			
Financial assets sold under repurchase agreements			
Fees and commissions payable			
Employee benefits payable	42,366,434.74	52,140,274.00	VIII.21
Taxes payable	-1,434,887,863.39	-1,468,658,448.00	VIII.22
Interest payable	305,251,954.46	245,582,307.93	VIII.23
Dividends payable			
Other payable	14,612,824,917.10	13,429,797,618.77	VIII.24
Amounts payable under reinsurance contracts			
Insurance contract reserves			
Funds from securities trading agency			
Funds from underwriting securities agency			
Non-current liabilities due within one year	1,307,423,040.91	1,364,414,620.00	VIII.25
Other current liabilities	53,002,484.00		VIII.26
<b>Total Current Liabilities</b>	23,483,339,819.95	22,817,759,200.70	
<b>Non-current Liabilities:</b>			
Long-term borrowings	89,759,287,922.79	82,137,056,923.20	VIII.27
Bonds payable	3,025,779,594.17	2,809,329,882.64	VIII.28
Long-term payables	3,585,123,976.27	4,029,014,541.75	VIII.29
Long-term employee benefits payable			
Special payables			
Provisions	755,221,888.03	819,138,258.00	VIII.30
Deferred income			
Deferred tax liabilities	1,363,946,484.20	1,285,263,726.88	VIII.16
Other non-current liabilities	25,799,072.80	24,916,568.00	VIII.31
<b>Total Non-current Liabilities</b>	98,515,158,938.26	91,104,719,900.47	
<b>Total Liabilities</b>	121,998,498,758.21	113,922,479,101.17	
<b>Owners' equity:</b>			
Paid-in capital (share capital)	500,583,034.06	500,583,034.06	VIII.32
Other equity instruments			
Capital reserves	2,032,360,085.52	2,032,360,085.52	VIII.33
Less: Treasury shares			
Other comprehensive income	-4,479,721,125.57	-6,816,565,905.56	VIII.43
Including: Exchange fluctuation reserve	-4,249,786,366.93	-6,635,886,143.80	VIII.43
Special reserves			
Surplus reserves			
General risk reserves			
Retained earnings	-3,671,012,684.14	-5,577,715,175.74	VIII.34
<b>Total Owners' Equity Attributable To the Company</b>	-5,617,790,690.13	-9,861,337,961.72	
Minority interests	48,291,963,808.43	47,850,779,127.68	
<b>Total Owners' Equity</b>	42,674,173,118.30	37,989,441,165.96	
<b>Total Liabilities and Owners' Equity</b>	164,672,671,876.51	151,911,920,267.13	

Legal representative: Wang Jun

Chief accountant: Yu Hongwei

Person in charge of accounting body: Hu Weixi

## Consolidated Income Statement

Company: Aluminum Corporation of China Overseas Holdings Limited

Year 2015

Currency: RMB

Item	Amount for the current period	Amount for the prior period	Notes
<b>I. Total operating income</b>	2,735,779,394.11	-	
Including: Operating income	2,735,779,394.11		VIII.35
Interest income			
Premiums earned			
Fee and commission income			
<b>II. Total operating costs</b>	3,452,927,775.76	821,152,866.85	
Including: Operating costs	2,004,273,562.47		VIII.35
Interest expenses			
Fee and commission expenses			
Surrenders			
Claims and policyholder benefits (net of amounts recoverable from reinsurers' share)			
Changes in insurance contract reserves (net of reinsurers' share)			
Insurance policyholder dividends			
Expenses for reinsurance accepted			
Business taxes and levies			
Selling expenses	258,715,768.31		VIII.36
Administrative expenses	110,915,867.71	38,127,886.17	VIII.37
Financial expenses	1,079,022,577.27	783,024,980.68	VIII.38
Impairment losses of assets			
Add: Gains from changes in fair values (Losses are indicated by "-")			
Investment income (Loss is indicated by "-")	2,708,377,115.76	2,290,989,096.99	VIII.39
Including: Income from investments in associates and joint ventures	3,760,215.54	-5,954,333.50	VIII.39
Foreign exchange gains (Losses are indicated by "-")			
<b>III. Operating profit (Loss is indicated by "-")</b>	1,991,228,734.11	1,469,836,230.14	
Add: Non-operating income	19,138,387.00	772,545.52	VIII.40
Less: Non-operating expenses	2,697.40	20,000.00	VIII.41
Including: Losses from disposal of non-current assets	2,697.40		VIII.41
<b>IV. Total profit (Total Loss is indicated by "-")</b>	2,010,364,423.71	1,470,588,775.66	
Less: Income tax expenses	107,485,365.49		VIII.42
<b>V. Net profit (Net loss is indicated by "-")</b>	1,902,879,058.22	1,470,588,775.66	
Net profit attributable to owners of the Company	1,906,702,491.60	1,477,958,227.67	
Profit or loss attributable to minority interests	-3,823,433.38	-7,369,452.01	
<b>VI. Earnings per share</b>			
(I) Basic earnings per share			
(II) Diluted earnings per share			
<b>VII. Other comprehensive income</b>	2,674,991,459.41	-336,827,821.48	VIII.43
<b>VIII. Total comprehensive income</b>	4,577,870,517.63	1,133,760,954.18	
Total comprehensive income attributable to owners of the Company	4,243,547,271.59	1,186,253,786.62	
Total comprehensive income attributable to minority interests	334,323,246.04	-52,492,832.44	

Legal representative: Wang Jun

Chief accountant: Yu Hongwei

Person in charge of accounting body: Hu Weixi

## Consolidated Cash Flow Statement

Company: Aluminum Corporation of China Overseas Holdings Limited

Year 2015

Currency: RMB

Item	Amount for the current period	Amount for the prior period	Notes
<b>I. Cash Flows from Operating Activities:</b>			
Cash receipts from the sale of goods and the rendering of services	4,051,816,347.28		
Net increase in customer deposits and deposits from banks and other financial institutions			
Net increase in loans from the central bank			
Net increase in taking from banks and other financial institutions			
Cash receipts from premiums under direct insurance contracts			
Net cash receipts from reinsurance business			
Net cash receipts from policyholders' deposits and investment contract liabilities			
Net cash receipts from disposal of financial assets held for trading			
Cash receipts from interest, fees and commissions			
Net increase in taking from banks			
Net increase in financial assets sold under repurchase arrangements			
Receipts of tax refunds	483,922,898.06	305,077,737.00	
Other cash receipts relating to operating activities	408,552,048.88	194,275,101.63	
<b>Sub-total of cash inflows from operating activities</b>	<b>4,944,291,294.22</b>	<b>499,352,838.63</b>	
Cash payments for goods purchased and services received	3,405,066,782.32		
Net increase in loans and advances to customers			
Net increase in balance with the central bank and due from banks and other financial institutions			
Cash payments for claims and policyholders' benefits under direct insurance contracts			
Cash payments for interest, fees and commissions			
Cash payments for insurance policyholder dividends			
Cash payments to and on behalf of employees	445,177,430.69	18,496,265.00	
Payments of various types of taxes	136,141,648.89	30,345,971.00	
Other cash payments relating to operating activities	2,322,806,880.07	3,539,230,326.84	
<b>Sub-total of cash outflows from operating activities</b>	<b>6,309,192,741.97</b>	<b>3,588,072,562.84</b>	
<b>Net Cash Flow from Operating Activities</b>	<b>-1,364,901,447.75</b>	<b>-3,088,719,724.21</b>	<b>VIII.44</b>
<b>II. Cash Flows from Investing Activities:</b>			
Cash receipts from disposals and recovery of investments			
Cash receipts from investment income	3,270,109,766.77	2,261,628,070.05	
Net cash receipts from disposals of PPE, intangible assets and other long-term assets			
Net cash receipts from disposals of subsidiaries and other business units			
Other cash receipts relating to investing activities		341,118,646.55	
<b>Sub-total of cash inflows from investing activities</b>	<b>3,270,109,766.77</b>	<b>2,602,746,716.60</b>	
Cash payments to acquire or construct PPE, intangible assets and other long-term assets	2,783,018,578.24	3,189,340,497.24	
Cash payments to acquire investments	588,865,648.09	393,760,091.59	
Net increase in pledged loans receivables			
Net cash payments for acquisitions of subsidiaries and other business units			
Other cash payments relating to investing activities		1,349,662.93	
<b>Sub-total of cash outflows from investing activities</b>	<b>3,371,884,226.33</b>	<b>3,584,450,251.76</b>	
<b>Net Cash Flow from Investing Activities</b>	<b>-101,774,459.56</b>	<b>-981,703,535.16</b>	
<b>III. Cash Flows from Financing Activities:</b>			
Cash receipts from capital contributions	73,277,647.35	248,048,637.17	
Including: cash receipts from capital contributions from minority owners of subsidiaries	73,277,647.35	248,048,637.17	
Cash receipts from borrowings	7,599,316,041.40	10,611,782,432.29	
Cash receipts from issue of bonds			
Other cash receipts relating to financing activities			
<b>Sub-total of cash inflows from financing activities</b>	<b>7,672,593,688.75</b>	<b>10,859,831,069.46</b>	
Cash repayments of borrowings	5,653,256,774.00	2,331,339,000.00	
Cash payments for distribution of dividends or profits or settlement of interest expenses	2,298,494,747.31	1,421,200,682.13	
Including: payments for distribution of dividends or profits to minority owners of subsidiaries			
Other cash payments relating to financing activities	59,420,962.48		
<b>Sub-total of cash outflows from financing activities</b>	<b>8,011,172,483.79</b>	<b>3,752,539,682.13</b>	
<b>Net Cash Flow from Financing Activities</b>	<b>-338,578,795.04</b>	<b>7,107,291,387.33</b>	
<b>IV. Effect of Foreign Exchange Rate Changes on Cash and Cash Equivalents</b>			
	366,058,642.61	-60,583,903.57	
<b>V. Net Increase in Cash and Cash Equivalents</b>			
Add: Opening balance of cash and cash equivalents	-1,439,196,059.74	2,976,284,224.39	VIII.44
<b>VI. Closing Balance of Cash and Cash Equivalents</b>	<b>4,648,734,107.82</b>	<b>6,087,930,167.56</b>	<b>VIII.44</b>

Legal representative: Wang Jun

Chief accountant: Yu Hongwei

Person in charge of accounting body: Hu Weixi

## Consolidated Statement of Changes in Owners' Equity

Company: Aluminum Corporation of China Overseas Holdings Limited

Year 2015

ITEM	Amount for the current period								
	Attributable to owners of the Company								
	Paid-in capital/ Share capital	Other equity instruments	Capital reserves	Less: Treasury shares	Other comprehensive income	Special reserves	Surplus reserves	General risk reserves	Retained earnings
I. Closing balance of the preceding year	500,583,034.06	-	2,032,360,085.52	-	-6,816,565,905.56	-	-	-	-5,577,715,175.00
Add: Changes in accounting policies									
Corrections of prior period errors									
Others									
II. Opening balance of the current year	500,583,034.06	-	2,032,360,085.52	-	-6,816,565,905.56	-	-	-	-5,577,715,175.00
III. Changes for the year (Decrease is indicated by "-")				-	2,336,844,779.99	-	-	-	1,906,702,491.00
(I) Total comprehensive income					2,336,844,779.99				1,906,702,491.00
(II) Owners' contributions and reduction in capital				-	-	-	-	-	-
1. Capital contribution from owners									
2. Capital contribution from owners of Other equity instruments									
3. Share-based payment recognised in owners' equity									
4. Others									
(III) Special reserves									
1. Transfer to special reserves in the period									
2. Amount utilised in the period									
(IV) Profit distribution									
1. Transfer to surplus reserves									
2. Transfer to general reserves									
3. Distributions to [owners/shareholders]									
4. Others									
(V) Transfers within owners' equity									
1. Capitalisation of capital reserves									
2. Capitalisation of surplus reserves									
3. Loss offset by surplus reserves									
4. Others									
IV. Closing balance of the current year	500,583,034.06	-	2,032,360,085.52	-	-4,479,721,125.57	-	-	-	-3,671,012,684.00

Legal representative: Wang Jun

Chief accountant: Yu Hongwei

Person in charge of accounting body: Hu Weixi

### Consolidated Statement of Changes in Owners' Equity (Continued)

Company: Aluminum Corporation of China Overseas Holdings Limited

Year 2015

ITEM	Amount for the prior period								
	Attributable to owners of the Company								
	Paid-in capital (Share capital)	Other equity instruments	Capital reserves	Less: Treasury shares	Other comprehensive income	Special reserves	Surplus reserves	General risk reserves	Retained earnings
I. Closing balance of the preceding year	500,583,034.06	-	2,032,360,085.52	-	-6,524,861,464.51	-	-	-	-7,055,673,403.41
Add: Changes in accounting policies									
Corrections of prior period errors									
Others									
II. Opening balance of the current year	500,583,034.06	-	2,032,360,085.52	-	-6,524,861,464.51	-	-	-	-7,055,673,403.41
III. Changes for the year (Decrease is indicated by "-")				-	-291,704,441.05	-	-	-	1,477,958,227.67
(I) Total comprehensive income					-291,704,441.05				1,477,958,227.67
(II) Owners' contributions and reduction in capital				-	-	-	-	-	-
1. Capital contribution from owners									
2. Capital contribution from owners of Other equity instruments									
3. Share-based payment recognised in owners' equity									
4. Others									
(VI) Special reserves									
1. Transfer to special reserves in the period									
2. Amount utilised in the period									
(III) Profit distribution									
1. Transfer to surplus reserves									
2. Transfer to general reserves									
3. Distributions to [owners/shareholders]									
4. Others									
(V) Transfers within owners' equity									
1. Capitalisation of capital reserves									
2. Capitalisation of surplus reserves									
3. Loss offset by surplus reserves									
4. Others									
IV. Closing balance of the current year	500,583,034.06	-	2,032,360,085.52	-	-6,816,565,905.56	-	-	-	-5,577,715,175.74

Legal representative: Wang Jun

Chief accountant : Yu Hongwei

Person in charge of accounting body: Hu Weixi

### Consolidated Statement of Provision for Impairment of Assets

Company: Aluminum Corporation of China Overseas Holdings  
Limited

31 December 2015

ITEM	Opening balance	Increase in the current period				Decrease in the current period				Total	Closing balance
		Accrual amount in the current period	Increase due to new subjects involved in consolidation scope	Increase due to other reasons	Total	Reversal due to asset value recovery	Write-off	Decrease due to new subjects involved in consolidation scope	Decrease due to other reasons		
Total amounts of bad debts provided					-					-	Net loss of unsettled accounting system
Total amounts of inventory write-down provided					-					-	Net loss of current assets
Provision for impairment of available-for-sale assets					-					-	Including: Bad debt
Provision for impairment of held-to-maturity investments					-					-	Inventory
Provision for impairment of long-term equity investments					-					-	Short-term investments
Provision for impairment of Investment properties					-					-	Net loss of fixed assets
Provision for impairment of fixed assets					-					-	Including: Fix assets
Provision for impairment of materials for construction of fixed assets					-					-	Fix assets
Provision for impairment of construction in progress					-					-	Fixed assets
Provision for impairment of bearer biological assets					-					-	Loss of long-term assets
Provision for impairment of oil and gas assets					-					-	Loss of intangible assets
Provision for impairment of intangible assets					-					-	Loss of construction in progress
Provision for impairment of goodwill					-					-	Loss of entrusted loans
Other provision for impairment					-					-	Policy staying on
					-					-	Previous year loss current year
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	Including: Previous current profit and loss

Legal representative: Wang Jun

Chief accountant : Yu Hongwei

Person in charge of accounting body: Hu Weixi

**Aluminum Corporation of China Overseas Holdings Limited**  
**NOTES TO THE FINANCIAL STATEMENTS**  
**FOR THE YEAR ENDED 31 DECEMBER, 2015**

(All amounts denominated in RMB unless otherwise stated)

**I. BASIC INFORMATION ABOUT THE COMPANY**

Aluminum Corporation of China Overseas Holdings Limited ("the Company") is a limited liability company established in Hong Kong special administrative region of the People's Republic of China on 18 July 2007. As 31 December 2015, the registered capital of the Company is USD 73,000,641.00 (RMB 500,583,034.06). The Company is a wholly-owned subsidiary of Aluminum Corporation of China. The major business operations of the company and its subsidiaries are overseas resource development and foreign investment management. The business scope is the exploitation, production, process and sales of copper ore resource.

By the end of 31 December 2015, the Company become to an investment management entity, which owns ten subsidiaries and one representative office. The scope of the Company has expanded from Hong Kong to Singapore, Peru and the Cayman Islands. The capital scale of the Company has enlarged from 114.10 billion in the end of 2008 to 151.90 billion.

The Company has set up the board of directors that is to implement management and control for the major decisions and routine of the Company

**II. BASIS OF PREPARATION OF FINANCIAL STATEMENTS**

The financial statements of the Company have been prepared on going concern basis, in accordance with Accounting Standards for Business Enterprises and supplementary regulations and the significant accounting policies and accounting estimates as follows.

**III. STATEMENT OF COMPLIANCE WITH THE ACCOUNTING STANDARDS FOR BUSINESS ENTERPRISES**

The Company has adopted the latest Accounting Standards for Business Enterprise ("ASBE") issued by the Ministry of Finance ("MOF"). The financial statements of the Company have been proposed in accordance with ASBE, and present truly and completely, the Group's financial position at 31 December, 2015 and results of operation and cash flows of year 2015.

## **IV. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES**

### **1. Accounting year**

The accounting year of the Company is from 1 January to 31 December of each calendar year.

### **2. Functional currency**

The reporting currency of domestic companies is Renminbi ("RMB").

### **3. Accounting basis and valuation principle**

The Company adopts historical cost, replacement cost, net realizable value, present value or fair value as its measurement attribution.

### **4. Business combinations**

#### **4.1 Business combinations involving enterprises under common control**

Assets and liabilities obtained shall be measured according to the share of combining entities' owners' equity in the carrying amount of the ultimate holding company's owners' equity. The difference between the carrying amount of the net assets obtained and the carrying amount of the consideration paid for the combination is adjusted to the share premium in capital reserves. If the share premium is not sufficient to absorb the difference, any excess shall be adjusted against retained earnings.

#### **4.2 Business combinations not involving enterprises under common control**

The acquiree's identifiable assets, liabilities and contingent liabilities, acquired by the acquirer in a business combination, that meet the recognition criteria shall be measured at fair value at the acquisition date. Where the cost of combination exceeds the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is treated as an asset and recognized as goodwill, which is measured at cost on initial recognition. Where the cost of combination is less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the acquirer firstly reassesses the measurement of the fair values of the acquiree's identifiable assets, liabilities and contingent liabilities and measurement of the cost of combination. If after that reassessment, the cost of combination is still less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the acquirer recognizes the remaining difference immediately in profit or loss for the current period.

### **5. Preparation of consolidated financial statements**

The Company will take all the subsidiaries under control into combination scope of consolidated financial statements. Consolidated financial statements have been prepared on the basis of the Company and subsidiaries' financial statements, according to other related information, and in accordance with "Enterprise Accounting Standards No. 33 – Consolidated Financial Statements".

## **6. The determine criteria of cash and cash equivalents**

Cash comprises cash on hand and deposits that can be readily withdrawn on demand. Cash equivalents are short-term (usually due within 3 months from the acquisition date), highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

## **7. Translation of transactions and financial statements denominated in foreign currencies**

### **7.1 Translation of transactions denominated in foreign currencies**

On initial recognition of transactions denominated in foreign currencies, foreign currency amount is translated into Renminbi amount by applying the spot exchange rate on the date of the transaction. At the balance sheet date, foreign currency monetary items shall be translated by applying the spot exchange rate at the balance sheet date. The difference between the translated functional currency amount and the original functional currency amount (changes of exchange rate) is recognized in profit and loss, except the exchange rate changes of principal and interest of foreign specific borrowed loan for production activities and construction of assets eligible for capitalization. Foreign currency non-monetary items measured at historical cost are still translated at the spot exchange rate on the date of the transaction without changing their Renminbi amounts. Foreign currency non-monetary items measured at fair value are translated at the spot exchange rate on the date the fair value is determined, and the difference is recognized in profit and loss or capital reserves.

### **7.2 Translation of financial statements denominated in foreign currencies**

For the purpose of preparing the consolidated financial statements, financial statements of a foreign operation are translated from the foreign currency into RMB using the following method: assets and liabilities on the balance sheet are translated at the spot exchange rate prevailing at the balance sheet date; shareholders' equity items except for retained earnings are translated at the spot exchange rates at the dates on which such items arose; all items in the income statement as well as items reflecting the distribution of profits are translated at the spot exchange rates on the dates of the transactions. The difference between the translated assets and the aggregate of liabilities and shareholders' equity items is separately presented as the exchange differences arising on translation of financial statements denominated in foreign currencies under the shareholders' equity in the balance sheet.

## **8. Financial instruments**

### **8.1 Classification of financial assets and financial liabilities**

At initial recognition, financial assets are classified as financial assets at Fair Value through Profit or Loss ("FVTPL") including trading financial assets and financial assets designated as at FVTPL, held-to-maturity investments, loans, receivables and available-for-sale financial assets.

At initial recognition, financial liabilities are classified as financial liabilities at FVTPL including trading financial liabilities and financial liabilities designated as at FVTPL and other financial liabilities.

## 8.2 The recognition caution, measurement methods and derecognition condition of financial assets and financial liabilities

Financial assets and financial liabilities are recognized when company becomes a party to the contractual provisions of the instruments. Financial assets and financial liabilities are initially measured at fair value; for the financial assets and financial liabilities at FVTPL, related transaction cost is recognized in profit and loss; for the other financial assets and financial liabilities, related transaction cost is recognized in initially measured amount.

Financial assets are subsequently measured at fair value, and transaction cost in future disposal will not be deducted, except following conditions: (1)held-to-maturity investments, loans and receivables adopt the contractual calculation and measured at amortized cost; or(2) equity instrument investment without price and of which fair value can't be measured reliably in active market, and the derivative financial assets which are linked to the above equity instrument investment and settled by delivering the equity instrument investment, are measured at cost.

Financial liabilities adopt contractual calculation that are subsequently measured at amortized cost, except following conditions: (1) financial liabilities at FVTPL are measured at fair value, and transaction cost in future settlement of financial liabilities will not be deducted; or (2) equity instrument investment without price and of which fair value can't be measured reliably in active market, and the derivative financial liabilities which are linked to the above equity instrument investment and settled by delivering the equity instrument investment, are measured at cost; or (3) financial guarantee contract not belong to financial liabilities designated as at FVTPL, or loan commitment of the loan not designated as at FVTPL of which the interest below market rates, are subsequently measured at the higher amount: 1) the amount recognized in accordance with "Enterprise Accounting Standards No. 13 – Contingency" ; or 2) the amount that initially recognized amount deducting the accumulative amortization amount recognized in accordance with "Enterprise Accounting Standards No. 14 – Revenue".

As for the financial assets and financial liabilities, the profit and loss due to changes in fair value except for the hedging related financial assets and liabilities are dealt by the methods below: (1)the profit and loss of financial assets and financial liabilities at FVTPL due to changes in fair value is recognized in fair value; the interest and cash dividends acquired during the assets holding period are recognized as investment income; the difference between the fair value on disposal and initial recognition amount shall be recognized to investment income, then adjust the profit and loss arising from fair value changes at the same time.(2)the changes in fair value of available-for-sale financial assets are recognized in capital reserve; the interest under the contractual calculation within the asset holding period is recognized in income from investment; the cash dividends of available-for-sale equity instruments are recognized in income from investment when investee declare to pay dividends; the balance of the actual received amount and book value deducting accumulated changes in fair value is recognized in investment income.

The Company derecognizes a financial asset when the contractual right of obtaining the cash flow of a financial asset is derecognized or substantially all the risk and reward of a financial asset's ownership is transferred; the Company derecognizes a financial liability (or part of it) only when the underlying present

obligation (or part of it) is discharged.

#### 8.3 The recognition basis and measurement methods of financial assets transfer

Company derecognizes a financial asset when substantially all the risk and reward of a financial asset's ownership is transferred; company continues confirming transferred financial asset and confirms the consideration received as a financial liability, when substantially all the risk and reward of a financial asset's ownership is retained. When company neither transfers nor retains substantially all the risk and reward of a financial asset's ownership, the financial asset transfer is dealt by the methods below: (1) when company gives up control of a financial asset, it derecognizes the financial asset; or (2) when company doesn't give up control of a financial asset, it continues to confirm related financial asset according to the degree of involvement in the transferred financial asset and confirms related liabilities.

For the financial assets which meet holistic transfer conditions, the difference between following two amounts shall be recognized in the profit and loss: (1) the carrying amount of financial assets transferred; and (2) the sum of consideration received from transfer and the amount originally directly recognized in accumulated variation due to fair value change of owner's equity. When financial asset satisfies the condition of derecognition, we should share the holistic carrying amount of the financial assets transferred according to the respective fair value of the derecognized part and the non- derecognized part, and the difference between following two amounts shall be recognized in the profit and loss: (1) the carrying amount of the derecognized part; and (2) the sum of the consideration received of the derecognized part and the related derecognized amount originally directly recognized in accumulated variation due to fair value change of owner's equity.

#### 8.4 The determination method of fair value of financial assets and financial liability

For financial assets and financial liabilities in active market, the fair value is the price in active market; for financial assets and financial liabilities not in active market, we should determine their fair value by valuation technique (including referring to the price in recent market transaction among parties who are familiar with market situation and willing to transaction, referring to recent fair value of other essentially similar financial instruments, discounted cash flow, option price models and others); for financial assets initially obtained and financial liabilities initially born, we should determine their fair value on the basis of market transaction price.

#### 8.5 The impairment testing and measurement method of the financial assets

The Company should check the impairment carrying amount of the financial assets apart from financial assets at FVTPL, if there is objective evidence indicating that the financial asset has impairments, we should test the impairment of this financial asset and measure the impairment.

The Company should separately test the impairment of financial assets of individually significant amount; for financial assets of no significant amount specifically, we should test the impairment individually or test impairment of the financial portfolio with similar credit risk characteristics. For the financial asset with recognized impairment not including the financial portfolio with similar credit risk characteristics, we also

should test the impairment.

For financial assets measured at amortized cost, if there is objective evidence indicating that the financial asset has impairments at the end of the period, we determine impairment loss according to the difference between carrying amount and the present value of estimated future cash flow. For equity instrument investment without price and of which fair value can't be measured reliably in active market, and the derivative financial assets which are linked to the above equity instrument investment and settled by delivering the equity instrument investment, when they have impairment, we determine the difference between carrying amount of equity instrument investment and derivative financial assets and the present value of estimated future cash flow according to the similar financial assets' market rate of return as impairment loss. When the fair value of available-for-sale financial assets has sharp fall, or when we confirm that this downward trend is not temporary after a consideration of all relevant factors, we should determine the impairment loss and roll out the accumulated losses recognized in owners' equity because of the decrease of the fair value, and then recognize them in current profit and loss.

8.6 The reasons for change of holding intention and ability as well as reclassifying held-to-maturity investments which has not yet expired to the available-for-sale financial assets:

8.6.1 There isn't financial resource supporting the financial asset investment to make it held to maturity;

8.6.2 The management doesn't have intent to hold to maturity;

8.6.3 The difficulty of the Company to hold the financial asset to maturity due to the limit of laws and regulations or other reasons;

8.6.4 Other situation indicating the Company doesn't have the ability to hold the financial asset to maturity.

Any substantial reclassification of held-to-maturity investments to available-for-sale needs to be examined and approved by the board of directors.

## 9. Receivables

9.1 Accounts receivable that are individually significant and for which bad debt provision is individually assessed:

Basis or monetary criteria for determining an individually significant receivable	A receivable that exceeds RMB 5.00 million is deemed as an individually significant receivable by the Company
Method of determining provision for receivable that are individually significant and for which bad debt provision is individually assessed	Individual impairment test according to the net amount when the current value of future cash flow is lower than the book value

9.2 Receivables for which bad debt provision is collectively assessed on a portfolio basis

Basis for determining a portfolio

Aging analysis portfolio

Bad debt provision assessing on a portfolio basis

Aging analysis portfolio Portfolios that aging analysis is used for bad debt provision

### 9.2.1 Portfolios that aging analysis is used for bad debt provision:

Aging	Provision as a proportion of accounts receivable (%)	Provision as a proportion of other receivables (%)
Within 1 year		
More than 1 year but not exceeding 2 years	10.00	10.00
More than 2 years but not exceeding 3 years	20.00	20.00
More than 3 years but not exceeding 4 years	30.00	30.00
More than 4 years but not exceeding 5 years	50.00	50.00
More than 5 years	100.00	100.00

### 9.3 Receivable that are not individually significant but for which bad debt provision is individually assessed:

Reasons for making individual bad debt provision	Uncertainty of the amount reclaimable
Bad debt provision method	Individual impairment test according to the net amount when the current value of future cash flow is lower than the book value

The bad debt recognized when the current value of future cash flow is lower than the book value for notes receivable, prepayment, interest receivable, long-term receivable and other receivables.

## 10. Inventories

## 10.1 Categories of inventories

The Company's inventories mainly include materials in transit, raw materials, work in progress, finished goods, etc.

## 10.2 Valuation method of inventories upon delivery

The actual cost of inventories upon delivery is calculated using the monthly weighted average method.

## 10.3 Basis for determining net realizable value of inventories and provision methods for decline in value of inventories

At the balance sheet date, inventories are measured at the lower of cost and net realizable value, and inventory falling price reserves are measured as the difference between cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion, the estimated costs necessary to make the sale and relevant taxes. At the balance sheet date, if part of inventory has contract price and others not, then impairment tests should be carried out for both parts. The net realizable value should be compared with the cost and the difference is the inventory falling price reserve.

#### 10.4 Inventory count system

The perpetual inventory system is maintained for stock system.

#### 10.5 Amortization method for low cost and short-lived consumable items and packaging materials

##### 10.5.1 Low cost and short-lived consumable items

Low cost and short-lived consumable items are amortized using the several time write-off according to number of use or immediate write-off.

##### 10.5.2 Packaging materials

Packaging materials are amortized using the several time write-off according to number of use or immediate write-off.

### **11. Long-term equity investments**

#### 11.1 Determination of investment cost

11.1.1 For a long-term equity investment acquired through a business combination involving enterprises under common control, when merger parties make the amount of paying cash, transferring non-cash assets, assumption of debt and issue of equity securities as merger consideration, the investment cost of the long-term equity investment is the attributable share of the carrying amount of the shareholders' equity of the acquiree at the date of combination. Company uses the difference between the initial cost of long-term equity investment and the carrying amount of the merger consideration or the book value of shares issued to adjust capital reserve; if capital reserve isn't enough to reduce, the retained earnings should be adjusted.

11.1.2 For a long-term equity investment acquired through business combination not involving enterprises under common control, the investment cost of the long-term equity investment is the fair value of the merger consideration paid at the acquisition date.

11.1.3 In addition to a business combination: for acquisition by paying cash, the initial investment cost is the price actually paid; for acquisition by issuing equity securities, the initial investment cost is the fair value of the equity securities; for acquisition by investment, the initial investment cost is the promissory value in investment contract or agreement (except the price in investment contract or agreement is not fair).

#### 11.2 Subsequent measurement and recognition of profit or loss

For long-term equity investments that the Company can control the invested entity, company uses Cost method, and adjust in Equity method when preparing consolidated financial statements; for long-term equity investments that the Company has joint control or significant influence of the invested entity, the Company uses Entity method.

### 11.3 Basis for determining joint control and significant influence over investee

Joint control is the contractually agreed sharing of control over an economic activity, and exists only when the strategic financial and operating policy decisions relating to the activity require the unanimous consent of the parties sharing control. Significant influence is the power to participate in the financial and operational policy decisions of the investee but does not control or jointly control those policy decisions.

### 11.4 Methods of impairment assessment and determining the provision for impairment loss

The Company reviews the long-term equity investments at each balance sheet date to determine whether there is any indication that they have suffered an impairment loss. If there is any indication that assets may be impaired, the recoverable amounts are estimated for such assets. If the recoverable amount is less than its carrying amount, the deficit is accounted for as an impairment loss and is recognized in profit or loss for the period.

## 12. Investment properties

12.1 Investment property includes a land use right that is leased out; a land use right held for transfer upon capital appreciation; and a building that is leased out.

12.2 An investment property is measured initially at cost. Company uses the cost model for subsequent measurement of investment property, and adopts a depreciation or amortization policy like the fixed assets and intangible assets for the investment property which is consistent with that for buildings or land use rights. The Company reviews the investment properties at each balance sheet date to determine whether there is any indication that they have suffered an impairment loss. If there is any indication that such assets may be impaired, the recoverable amounts are estimated for such assets. If the recoverable amount is less than its carrying amount, the deficit is accounted for as an impairment loss and is recognized in profit or loss for the period.

## 13. Property Plant and Equipment (PPE)

13.1 Recognition criteria, valuation and depreciation method for PPE

PPE are tangible assets that are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes, and have useful lives of more than one accounting year.

PPE are initially measured at cost and recognized the depreciation from the next month since acquired.

### 13.2 Depreciation of each category of fixed assets

Category	Depreciation period (years)	Residual value	Annual depreciation
		rate (%)	rate (%)
Buildings	8-45	5.00	2.11-11.88
Machinery and equipment	8-30	5.00	3.17-11.88
Transportation vehicles	8-10	5.00	9.50-11.88

Category	Depreciation period (years)	Residual value	Annual depreciation
		rate (%)	rate (%)
Office equipment	5-10	5.00	9.50-19.00
Other	5-20	5.00	4.75-19.00

**13.3 Methods of impairment assessment and determining the provision for impairment losses of fixed assets**

The Company assesses at each balance sheet date whether there is any indication that the fixed assets may be impaired. If the recoverable amount of an asset is less than its carrying amount, the deficit is accounted for as an impairment loss and is recognized in profit or loss for the period.

**13.4 Identification basis and valuation methods for fixed assets acquired under finance leases**

The Company adopts a depreciation policy for a fixed asset held under a finance lease which is consistent with that for its owned fixed asset. The finance lease will be recorded if: (1) there is reasonable certainty that the Company will obtain ownership of the leased asset at the end of the lease term, (2) the tenant has the option to purchase the leased asset and the purchase price is far less than the fair value at that point. The option can be assured since the lease period begins, (3) the leased period (more than 75% of the useful life) takes up the greater part of the useful life of the leased asset, even though the Company cannot obtain the ownership, (4) the lessee's minimum lease payment (more than 90% of the fair value) takes up the greater part of the fair value of the lease asset, (5) the leased asset is rather special that only the tenant can use it without material adjustments.

A company recognizes the leased asset with the lower amount of the lessee's minimum lease payment and the fair value and depreciates the leased asset as the self-owned fixed assets.

**14. Construction in progress**

14.1 Construction in progress is transferred to fixed asset when it is ready for intended use. If a construction in progress has reached the working condition for its intended use but the final project accounts have not been completed and approved, the asset should be transferred to fixed assets at an estimated value based on project budget, contracted construction price or actual project costs. Depreciation should also be accrued in accordance with relevant requirements of the Company. After the project accounts have been approved, the estimated values should be adjusted according to actual costs without adjusting depreciation recognized.

14.2 The company assesses at each balance sheet date whether there is any indication that construction in progress may be impaired. If the recoverable amount of an asset is less than its carrying amount, the deficit is accounted for as an impairment loss and is recognized in profit or loss for the period.

**15. Borrowing cost**

**15.1 Capitalization of borrowing costs**

Capitalization of borrowing costs ceases when the qualifying asset being acquired, constructed or produced

becomes ready for its intended use or for sale. Other borrowing costs are recognized as an expense in the period in which they are incurred.

#### 15.2 Capitalization period of borrowing costs:

- (1) When the borrowing cost satisfies the following criteria, it should be capitalized: 1) the qualifying asset expenditure happens, 2) the borrowing funds happens, 3) the necessary constructing and production activities for the asset intended use and sale have incurred.
- (2) Capitalization of borrowing costs is suspended during periods in which the acquisition, construction or production of a qualifying asset is suspended abnormally and when the suspension is for a continuous period of more than 3 months. Capitalization is suspended until the acquisition, construction or production of the asset is resumed. During the suspending period, the borrowing cost should be as an expense.
- (3) When the qualifying asset reached its intended use or sale, the capitalization halt.

#### 15.3 Capitalization amount of borrowing costs:

Where funds are borrowed under a specific-purpose borrowing, the amount of interest to be capitalized is the actual interest expense incurred on that borrowing for the period less any bank interest earned from depositing the borrowed funds before being used on the asset or any investment income on the temporary investment of those funds. Where funds are borrowed under general-purpose borrowings, the Company determines the amount of interest to be capitalized on such borrowings by applying a capitalization rate to the weighted average of the excess of cumulative expenditures on the asset over the amounts of specific-purpose borrowings. The capitalization rate is the weighted average of the interest rates applicable to the general-purpose borrowings.

### 16. Intangible assets

16.1 Intangible assets including software and franchise are initially recorded at cost.

16.2 For an intangible asset with a finite useful life, the Company systematically and reasonably amortizes it in accordance with the expected realization approaches of the economic interest related to the intangible asset, for an intangible asset of which realization approaches cannot be expected, the Company amortizes it in straight-line method. Specific fixed number of year is as follows:

Item	Amortize fixed number of year (year)
Incl. Software	3-10

For intangible asset with an indefinite useful life is not amortized, the Company reviews the useful life method at the end of the period. The criterions of intangible asset with an indefinite useful life are: (1) from contractual rights or other legal rights, but there is no usable life set in the contract or by the law; (2) the Company cannot judge the deadline that the intangible asset brings economic profit in accordance with the

same industry situation and related experts argument.

Intangible assets with indefinite useful life and intangible assets not yet available for use are tested for impairment from bottom to top by related department using intangible assets annually, and related department assesses if the criterions of intangible asset with an indefinite useful life change.

16.3 For intangible assets with definite useful life, if there is any indication that intangible asset may be impaired, the Company recognizes the difference between carrying amount and recoverable amount as the provision for impairment; for intangible assets with indefinite useful life which don't reach serviceable condition, regardless of whether there is any indication that intangible asset may be impaired, company should make impairment test every year.

16.4 Expenditure during development phase that does not meet the following conditions is recognized in profit or loss for the period. Expenditure during the development phase that meets all of the following conditions simultaneously is recognized as intangible asset: (1) It is technically feasible to complete the intangible asset so that it will be available for use or sale; (2) The Company has the intention to complete the intangible asset and use or sell it; (3) The Company can demonstrate the ways in which the intangible asset will generate economic benefits, including the evidence of the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset; (4) The availability of adequate technical, financial and other resources to complete the development and the ability to use or sell the intangible asset; and (5) The expenditure attributable to the intangible asset during its development phase can be reliably measured.

## **17. Long-term prepaid expenses**

Long-term prepaid expenses are recorded as actual amount and amortized over the expected periods in which benefits are derived. If long-term prepaid expenses cannot bring benefit in the later period, all of the part not yet amortized will be transferred to current profit and loss.

## **18. Employee benefits**

Employee benefits: Employee benefits are all forms of consideration given by an entity in exchange for service rendered by employees or for the termination of employment, including short-term employee benefits, post-employment benefits, termination benefits and other long-term employee benefits. It also includes the welfare of spouse, children, parents, the deceased employees' families and other beneficiaries of employee in the companies.

18.1 When an employee has rendered service to an entity during an accounting period, the entity shall recognize the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service:(a) as a liability (accrued expense), after deducting any amount already paid; or (b) as an expense, unless another CAS requires or permits the inclusion of the benefits in the cost of an asset.

Employee benefits should be accounted with the actual cost of the related assets or in the current profits

and losses. Non-monetary-welfare should be accounted with fair value measurement.

## 18.2 post-employment benefits

18.2.1 Accounting for defined contribution plans: The Company should pay pension insurance and unemployment insurance in accordance with the relevant provisions of the local government for the workers. When an employee has rendered service to an entity during an accounting period, the entity shall recognize the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service as a liability and an expense or cost of an asset. When contributions to a defined contribution plan are not expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related service, they shall be discounted using the reasonable discount rate. The rate used to discount post-employment benefit obligations shall be determined by reference to market yields at the end of the reporting period on high quality corporate bonds. In countries where there is no deep market in such bonds, the market yields on government bonds shall be used.

18.2.2 Defined benefit plans: According to the expected cumulative welfare unit method formula, the company will recognize the welfare benefit plan duty into period when employee provides services, and the cost of the related assets or in the current profits and losses. The present value of defined benefit plan obligations minus the fair value of plan assets formed by the deficit or surplus in recognition of a defined benefit plan is net debt or net assets. If defined benefit plan is surplus, companies should compare with defined benefit plan assets and earnings limit, and the lower is defined benefit plan value.

When contributions to a defined contribution plan are not expected to be settled wholly within twelve months after the end of the annual reporting period in which the employees render the related service, they shall be discounted using the reasonable discount rate. The rate used to discount post-employment benefit obligations shall be determined by reference to market yields at the end of the reporting period on high quality corporate bonds.

Determining the measurement of the net defined benefit liability/asset to be recognized in other comprehensive income, comprising:

Actuarial gains and losses return on plan assets, excluding amounts included in net interest on the net defined benefit liability/asset and any change in the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability/asset.

In the defined benefit plan settlement, comprising defined benefit plans obligations on the settlement date and the present value of the settlement price, and confirm the gains or losses on the settlement date.

## 18.3 Termination benefits

Termination benefits are employee benefits payable as a result of either an entity decision to terminate an employee employment before the normal retirement date or an employees' decision to accept an offer of benefits in exchange for the termination of employment. An entity is required to recognize termination benefits at the earlier of when the entity can no longer withdraw an offer of those benefits and when it recognizes any related restructuring costs.

The company has made a formal plan on the cancellation of labor relationship or put forward a proposal on voluntary layoff, and formal dismissal plan or proposal has been approved. The suggestions include: to be labor relations or reduction of the staff's Department, position and quantity, the amount of compensation according to the relevant provisions, and the time of terminating the labor relationship or reduction.

An entity should not cancel or revise the plan amendment or a curtailment of other employee benefits unilaterally.

In accordance with the provisions of the terms of the dismissal plan reasonably expected, the company confirms the termination benefits of employee compensation payable. The confirmation of the expected benefits will finish within twelve months after the full payment of the relevant provisions, regarded as short-term compensation, or applying the relevant provisions of other long-term employee benefits.

#### 18.4 Other long-term employee benefits

The Company implements the internal retirement plan. The workers did not terminate the labor relationship with the company, but this part of the employee cannot bring economic benefits to the enterprise, the Company is committed to providing substantially compensation for termination benefits. The compensation in accordance with the conditions of deposit plan, accounting period to provide services for the Company, with local regulations and the proportion should pay the amount of calculation, is recognized as a liability, and recognized the cost of the related assets or in the current profits and losses. The compensation is not in accordance with the conditions of deposit plan, as a defined benefit plan is determined according to the expected cumulative welfare unit formula during the welfare obligations, and the cost of the related assets or in the current profits and losses.

### 19. Share-based payment

#### 19.1 The types of Share-based payment

The types of Share-based payment include equity-settled share-based payment and cash-settled share-based payment.

#### 19.2 Determining the fair value of equity instruments granted

19.2.1 For transactions measured by reference to the fair value of the equity instruments granted, the Company shall measure the fair value of equity instruments granted at the measurement date, based on market prices if available, taking into account the terms and conditions upon which those equity instruments were granted;

19.2.2 If market prices are not available, the Company shall estimate the fair value of the equity instruments granted using a valuation technique to estimate what the price of those equity instruments would have been on the measurement date in an arm's length transaction between knowledgeable, willing parties. The valuation technique shall be consistent with generally accepted valuation methodologies for pricing financial instruments, and shall incorporate all factors and assumptions that knowledgeable, willing market participants would consider in setting the price.

### 19.3 The optimal estimated basis of the vesting equity instruments determination

According to the subsequent information of changes in the number of equity instruments expected to vest.

### 19.4 Relevant accounting treatment for implementation, modification and termination of share-based payment

#### 19.4.1 Equity-settled share-based payment

If the equity instruments granted vest immediately, the Company should recognize the fair value of the equity instruments to the relevant cost or expenditure, with a corresponding increase in equity (capital reserve). If the equity instruments granted do not vest until the counterparty completes a specified period of service, the Company should account for those services as they are rendered by the counterparty during the vesting period, and recognize the services received during the current period to the relevant cost or expenditure based on the fair value of the equity instruments, with a corresponding adjustment in equity (capital reserve).

The general principle is that when the Company recognizes the goods/ services received and the corresponding increase in equity, it should measure it at the fair value of the goods/ services received;

If the fair value of the goods/services cannot be measured reliably, the Company should measure the fair value by reference to the fair value of the equity instruments granted, with a corresponding adjustment in equity.

#### 19.4.2 Cash-settled share-based payment

If the equity instruments granted vest immediately, the Company should recognize the fair value of the liability to the relevant cost or expenditure, with a corresponding increase in the liability. If the equity instruments granted do not vest until the counterparty completes a specified period of service, the Company shall remeasure the fair value of the liability at the end of each reporting period and at the date of settlement, with any changes in fair value recognized in profit or loss for the period and corresponding liabilities.

#### 19.4.3 Modification, cancellation of share-based payment

The Company might modify the terms and conditions on which the equity instruments were granted. If the modification increases the fair value of the granted equity instruments, the company recognizes the corresponding increase in services obtained; if the modification increases the number of the granted equity instruments, the company would recognize the fair value of the increasing granted equity instruments as services increased; if the modification of the vesting condition which is advantageous to employees, the company would consider the modified vesting conditions in dealing with the vesting conditions.,

If the modification reduces the fair value of the granted equity instruments, the Company would continue to recognize the amount of services based on the fair value of equity instruments at the grant date, and do not consider the reduction of the fair value of equity instruments; if the modification reduces the number of the

granted equity instruments, the reduced part would be processed as the canceled granted equity instruments; if the modification of the vesting condition which is not conducive to employees, the modified vesting conditions would not consider when the Company dispose the vesting conditions.

If a grant of equity instruments is cancelled or settled during the vesting period (other than a grant cancelled by forfeiture when the vesting conditions are not satisfied), the Company shall account for the cancellation or settlement as an acceleration of vesting, and shall therefore recognize immediately the amount that otherwise would have been recognized or services received over the remainder of the vesting period.

## **20. Bonds payable**

Bonds payable is recorded as the actual amount received, and bond interest cost is calculated in accordance with amortized cost and actual rate at balance sheet date. When there is little difference between actual rate and coupon rate, bond interest cost is calculated in accordance with coupon rate.

## **21. Provisions**

21.1 Provisions are recognized when the Company has a present obligation related to a contingency such as products quality assurance, onerous contract, restructuring, it is probable that an outflow of economic benefits will be required to settle the obligation, and the amount of the obligation can be measured reliably.

21.2 The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account factors pertaining to a contingency such as the risks, uncertainties and time value of money.

## **22. Revenue**

### **22.1 Revenue from sale of goods**

Revenue from sale of goods is recognized when (1) the Company has transferred to the buyer the significant risks and rewards of ownership of the goods; (2) the Company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold; (3) the amount of revenue can be measured reliably; (4) it is probable that the associated economic benefits will flow to the Company; and (5) the associated costs incurred or to be incurred can be measured reliably.

### **22.2 Revenue from rendering of services**

Revenue from rendering of services is recognized when (1) the amount of revenue can be measured reliably; (2) it is probable that the associated economic benefits will flow to the enterprise; (3) the stage of completion of the transaction can be determined reliably; and (4) the associated costs incurred or to be incurred can be measured reliably. Revenue from rendering of services is recognized using the percentage of completion method at the balance sheet date. When the outcome of the transaction involving the rendering of services cannot be estimated reliably, revenue is recognized only to the extent of the costs

incurred that will be recoverable, and the costs incurred are recognized as expenses for the period. When it is not probable that the costs incurred will be recovered, revenue is not recognized.

### 22.3 Revenue from alienating of right to use assets

When the economic benefit will probably flow into the Company and the revenue can be measured reliably, the amount of revenue from alienating of right to use assets shall be recognized. Revenue of interest shall be confirmed by the time and actual interest of the assets that have been used and the revenue of charge for use shall be confirmed by the agreed time and methods in the contract.

## 23. Construction contracts

23.1 Where the outcome of a construction contract can be estimated reliably, contract revenue and costs are recognized using the percentage of completion method at the balance sheet date. The stage of completion of a contract is determined using the proportion that actual contract costs incurred to date bears to the estimated total contract costs.

23.2 Where the outcome of a construction contract cannot be estimated reliably, (1) if contract costs are expected to be recoverable, contract revenue is recognized to the extent of contract costs that are expected to be recoverable; and contract costs are recognized as expenses in the period in which they are incurred; (2) if contract costs are not expected to be recoverable, they are recognized as expenses immediately when incurred and contract revenue is not recognized. When the uncertainties that prevented the outcome of the construction contract from being estimated reliably no longer exist, revenue and expenses associated with the construction contract are recognized using the percentage of completion method.

23.3 If the estimated total contract costs exceed total contract revenue, the expected loss is recognized immediately as an expense for the period.

23.4 The cumulative costs incurred and cumulative gross profits (or losses) recognized for contracts in progress and the progress billings are offset and the net amount is presented in the balance sheet. Where the aggregate of cumulative costs incurred and cumulative gross profits (or losses) recognized exceed the progress billings for contracts in progress, the surplus is shown as inventory. Where the progress billings for contracts exceed the aggregate of cumulative costs incurred and cumulative gross in progress profits (or losses) recognized, and the surplus is shown as receipts in advance.

## 24. Government grants

24.1 Government grants include government grant related to an asset and government grant related to income.

24.2 If a government grant is in the form of a transfer of a monetary asset, it is measured at the amount received or receivable. If a government grant is in the form of a non-monetary asset, it is measured at fair value. If the fair value cannot be reliably determined, it is measured at a nominal amount. A government grant measured at a nominal amount is recognized immediately in profit or loss for the period.

24.3 A government grant related to an asset is recognized as deferred income, and evenly amortized to profit or loss over the useful life of the related asset. For a government grant related to income, if the grant is a compensation for related expenses or losses to be incurred in subsequent periods, the grant is recognized as deferred income, and recognized in profit or loss over the periods in which the related costs are recognized. If the grant is a compensation for related expenses or losses already incurred, the grant is recognized immediately in profit or loss for the period.

## **25. Deferred tax assets/ deferred tax liabilities**

25.1 For temporary differences between the carrying amounts of certain assets or liabilities and their tax base, or between the nil carrying amount of those items that are not recognized as assets or liabilities and their tax base that can be determined according to tax laws, deferred tax assets and liabilities are recognized using the balance sheet liability method.

25.2. Deferred tax is generally recognized for all temporary differences. Deferred tax assets for deductible temporary differences are recognized to the extent that it is probable that taxable profits will be available against which the deductible temporary differences can be utilized. For deductible losses and tax credits that can be carried forward, deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which the deductible losses and tax credits can be utilized.

25.3 At the balance sheet date, deferred tax assets and liabilities are measured at the tax rates, according to tax laws, that are expected to apply in the period in which the asset is realized or the liability is settled.

25.4 Current and deferred tax expenses or income are recognized in profit or loss for the period, except when they arise from transactions or events that are directly recognized in other comprehensive income or in shareholders' equity and when they arise from business combinations.

## **26. Leases**

26.1 Operating leases

26.1.1 When the Company is the lessee, operating lease payments are recognized on a straight-line basis over the term of the relevant lease, and are either included in the cost of related asset or charged to profit or loss for the period. Initial direct costs incurred are charged to profit or loss for the period. Contingent rents are charged to profit or loss in the period in which they are actually incurred.

26.1.2 When the Company is the lessor, rental income from operating leases is recognized in profit or loss on a straight-line basis over the term of the relevant lease. Initial direct costs with more than an insignificant

amount are capitalized when incurred, and are recognized in profit or loss on the same basis as rental income over the lease term. Other initial direct costs with an insignificant amount are charged to profit or loss in the period in which they are incurred. Contingent rents are charged to profit or loss in the period in which they actually arise.

## 26.2 finance leases

26.2.1 When the Company is the lessee, at the commencement of the lease term, the Company records the leased asset at an amount equal to the lower of the fair value of the leased asset and the present value of the minimum lease payments at the inception of the lease, and recognizes a long-term payable at an amount equal to the minimum lease payments. The difference between the recorded amounts is accounted for as unrecognized finance charge. Besides, initial direct costs that are attributable to the leased item incurred during the process of negotiating and securing the lease agreement are also added to the amount recognized for the leased asset. Unrecognized finance charges are recognized as finance charge for the period using the effective interest method over the lease term. Contingent rents are credited to profit or loss in the period in which they are actually incurred. The net amount of minimum lease payments less unrecognized finance charges is separated into long-term liabilities and the portion of long-term liabilities due within one year for presentation.

26.2.2 When company is lessor, at the commencement of the lease term, the aggregate of the minimum lease receivable at the inception of the lease and the initial direct costs is recognized as a finance lease receivable, and the unguaranteed residual value is recorded at the same time. The difference between the aggregate of the minimum lease receivable, the initial direct costs and the unguaranteed residual value, and the aggregate of their present values is recognized as unearned finance income. Unrealized finance income is recognized as finance income for the period using the effective interest method over the lease term. Contingent rents are credited to profit or loss in the period in which they are actually incurred. The net amount of financial lease receivables less unearned finance income is separated into long-term debts receivable and the portion of long-term debts receivable due within one year for presentation.

## 27. Non-current assets held for sale

Non-current assets held for sale can be recognized when the Company has determined to dispose of and has entered into an irrevocable transfer agreement with the transferee and it is highly probable that the transfer will be completed within one year, are accounted for as non-current assets held for sale.

Non-current assets held for sale are not depreciated or amortized, and are measured at the lower of carrying amount and fair value less costs to sell.

## 28. Fair Value Measurements

### 28.1 Fair Value Initial Measurement

Fair value Measurements would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Fair value is a market-based measurement, not an entity-specific measurement. When measuring fair value, the Company uses the assumptions that market participants would use when pricing the asset or liability

under current market conditions, taking into account any relevant characteristics of the asset. The highest and best use of the asset or liability and whether it is used on a standalone basis or in conjunction with other assets or liability. It is assumed that the transaction to sell the asset or transfer the liability takes place either in the principal market or in the absence of it, in the most advantageous market for the asset and liability. The principal market is the market which is the most liquid (has the greatest volume and level of activity) for that asset or liability.

#### 28.2 valuation techniques

The Company shall use valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

#### 28.3 Fair value hierarchy

The fair value hierarchy of the Company that categorizes into three levels:

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company can access at the measurement date. A quoted price in an active market provides the most reliable evidence of fair value and shall be used without adjustment to measure fair value.

Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3 inputs are unobservable inputs for the asset or liability.

### **V. CHANGES IN SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES**

#### **1. Changes in accounting policy**

The Company has no significant changes in accounting policy during the current year.

#### **2. Changes in accounting estimates**

The Company has no significant changes in accounting estimates during the current year.

#### **3. The significant corrections of prior period accounting error**

The Company has no significant corrections of prior period accounting error during the current year.

### **VI. TAXES**

#### **Major categories of taxes and tax rates**

Category of tax	Tax Basis	Tax rate
VAT(Value added tax)	Taxable VAT ( Calculated according to the balance that taxable amount times applicable tax rate and deducts input VAT)	18%
Corporate income tax	Taxable income	15%-32%

**VII. BUSINESS COMBINATIONS AND CONSOLIDATED FINANCIAL STATEMENTS**

**1. The basic situation of the subsidiaries involved in consolidated statements scope**

No	Full name of the subsidiary	Level	Type	Place of incorporation	Nature of business	Share capital	Proportion
						(million)	of ownership
							interest (%)
1	Chinalco Mining Corporation International	3	3	Cayman Islands	Investment Holdings Company	2,976,975,887.61	84.63
2	Central Calcium Co., Ltd.	5	3	Peru	limestone mine exploitation	257,707,832.00	100.00
3	Century Mining Corporation	5	3	Peru	Copper ore exploitation	74,475,610.00	100.00
4	Chinalco Peru Copper Company	4	3	Peru	Copper ore exploitation	4,089,102,746.93	100.00
5	Oriental Prospect Pte.Ltd.	3	3	Singapore	Investment Holdings Company	43,141,804,760.07	100.00
6	Shining Prospect Pte.Ltd.	4	3	Singapore	Investment Holdings Company	43,141,804,760.07	100.00
7	Chinalco Iron Ore Holdings Ltd.	3	3	Hong Kong	Iron ore selection	1,616.81	65.00
8	Bomakecha Electric Power Company	5	3	Peru	Electricity	2,277.20	100.00
9	Chinalco Finance Holdings Limited	3	3	B.V.I.	Investment Holdings Company	6,828.20	100.00
10	Chinalco Assets Holdings Limited	3	3	B.V.I.	Investment Holdings Company	6,828.20	100.00

Note1: Enterprises type: 1. domestic non-finance subsidiary enterprises, 2. domestic finance subsidiary enterprises, 3. overseas subsidiary enterprises, 4. infrastructure unit.

Note2: Obtain Method: 1. investment, 2. business combination under the common control, 3. business combination not under the common control.

## 2. Significant non-wholly-owned subsidiary

### 2.1 Minority

No	Full name of the subsidiary	Proportion of Minority interest (%)	Profit or loss attributable to minority interests during this period	Dividend paid to minority during this period	The closing minority interests
1	Chinalco Iron Ore Holdings Ltd.	35.00	-3,986,598.55		4,391,060,257.95

### 2.2 The main financial information

Item	The current year	The prior year
	Chinalco Iron Ore Holdings Ltd.	Chinalco Iron Ore Holdings Ltd.
Current Assets	19,748,061.51	35,521,935.28
Non-Current Assets	13,194,203,682.50	12,144,910,690.49
Total Assets	13,213,951,744.01	12,180,432,625.77
Current Liability	668,065,292.73	634,941,192.89
Non-Current Liability		
Total Liabilities	668,065,292.73	634,941,192.89
Total operating income		
Net profit	-11,390,281.58	-14,286,098.91
Total comprehensive income	695,076,633.54	10,146,671.08
Net Cash Flow from Operating Activities	-4,020,755.12	-7,278,016.74

## VIII. NOTES TO IMPORTANT ITEMS IN CONSOLIDATED FINANCIAL STATEMENTS

The data of financial statements disclosed as follow, excluding special indicators, "The opening of the year" means 1 January 2015, "The closing of the year" means 31 December 2015, "The current year" stands for 1 January 2015 to 31 December 2015, and "The prior year" stands for 1 January 2014 to 31 December 2014. In addition, unless otherwise specified, all amounts take RMB as the monetary unit.

### 1. Cash and bank balances

Item	Closing balance	Opening balance
	Amount	Amount
Cash	382,537.27	415,242.18
Bank Deposit	4,648,351,570.55	6,087,514,925.38
Other Cash and bank balances		
<u>Total</u>	<u>4,648,734,107.82</u>	<u>6,087,930,167.56</u>
Including: Amount deposit overseas	14,493,569.29	31,578,391.04

## 2. Accounts receivable

Item	Closing balance				Opening balance			
	Carrying amount		Bad debt provision		Carrying amount		Bad debt provision	
	Amount	Proportion (%)	Amount	Proportion (%)	Amount	Proportion (%)	Amount	Proportion (%)
Accounts receivable that are individually significant and for which bad debt provision has been assessed individually								
Accounts receivables for which bad debt provision has been assessed by portfolios	470,449,709.44	100.00			465,001,167.00	100.00		
Accounts receivable that are not individually significant but for which bad debt provision has been assessed individually								
<u>Total</u>	<u>470,449,709.44</u>	--	--	--	<u>465,001,167.00</u>	--	--	--

### 2.1 Accounts receivables for which bad debt provision has been assessed by portfolios.

Accounts receivable portfolios for which bad debt provision has been assessed using the aging analysis approach

Aging	Closing balance				Opening balance		
	Carrying amount		Bad debt		Carrying amount		Bad debt
	Amount	Proportion (%)	provision	Amount	Proportion (%)	provision	
Within 1 year (inclusive)	470,449,709.44	100.00		465,001,167.00	100.00		
<u>Total</u>	<u>470,449,709.44</u>	--	--	<u>465,001,167.00</u>	--	--	--

### 2.2 Closing balance owed by the Top Five parties

Debtor	Closing Balance
WERCO TRADE AG	150,437,911.00
LOUIS DREYFUS COMMODITIES	64,464,402.00
TRANSAMINE TRADING SA	62,948,935.00
SHANDONG HUMON SMELTING CO. LTD.	46,060,792.00
MCC NON FERROUS TRADING INC.	31,643,179.00
<u>Total</u>	<u>355,555,219.00</u>

### 3. Prepayments

3.1 Aging analysis of prepayments is as follows

Aging	Closing balance			Opening balance		
	Amount	Proportion (%)	Bad debt provision	Amount	Proportion (%)	Bad debt provision
Within 1 year	119,148,649.82	60.65		274,216,866.00	100.00	
More than 1 year but not exceeding 2 years	77,301,192.00	39.35				
<u>Total</u>	<u>196,449,841.82</u>	--		<u>274,216,866.00</u>	--	

3.2. Long prepayments aged more than one year

Creditors	Debtor	Closing balance	Aging	The reason for not settlement
Chinalco Peru Copper Company	SUPERINTENDENCIA NACIONAL DE ADMINI	3,838,200.00	More than 1 year but not exceeding 2 years	Prepaid material cost, goods have not purchased
Chinalco Peru Copper Company	DOLPHIN TELECOM DEL PERU S.A.C.	2,401,466.00	More than 1 year but not exceeding 2 years	Prepaid Electric Fee
Chinalco Peru Copper Company	UNION DE CONCRETERAS S.A	2,350,131.00	More than 1 year but not exceeding 2 years	Prepaid material cost, goods have not purchased
<u>Total</u>		<u>8,589,797.00</u>	--	--

### 4. Dividends receivable

Item	Closing balance	Opening balance
Deposit	14,062,589.32	13,621,918.52
Bond Investment	3,608,775.09	1,828,869.43
Borrowing Interest	5,863,058.45	
<u>Total</u>	<u>23,534,422.86</u>	<u>15,450,787.95</u>

## 5. Other receivables

Item	Closing balance				Opening balance			
	Carrying amount		Bad debt provision		Carrying amount		Bad debt provision	
	Amount	Proportion (%)	Amount	Proportion (%)	Amount	Proportion (%)	Amount	Proportion (%)
Other receivable that are individually significant and for which bad debt provision that has been assessed individually	6,596,339,809.62	98.14			3,919,826,788.66	98.03		
Other receivables for which bad debt provision has been assessed by portfolios	118,528,382.00	1.76			77,319,802.17	1.93		
Other receivable that are not individually significant but for which bad debt provision has been assessed individually	6,596,394.66	0.10			1,299,551.89	0.04		
<b>Total</b>	<b><u>6,721,464,586.28</u></b>	--	--	--	<b><u>3,998,446,142.72</u></b>	--	--	--

### 5.1 Other receivables for which bad debt provision has been assessed by portfolios

Other receivable portfolios for which bad debt provision has been assessed using the aging analysis approach

Aging	Closing balance				Opening balance			
	Carrying amount		Bad debt provision		Carrying amount		Bad debt provision	
	Amount	Proportion (%)	Amount	Proportion (%)	Amount	Proportion (%)	Amount	Proportion (%)
Within 1 year (including 1 year)	118,528,382.00	100.00			77,319,802.17	100.00		
<b>合计</b>	<b><u>118,528,382.00</u></b>	--	--	--	<b><u>77,319,802.17</u></b>	--	--	--

### 5.2 Other receivable for which bad debt provision has been assessed individually

5.2.1 Other receivable that are individually significant at the end of the period but for which bad debt provision has been assessed individually

Content of other receivable	Closing balance	Amount of bad debt	Aging	Proportion of provision (%)	Reasons for the provision
Aluminum Corporation of China	6,596,339,809.62	More than 2 years but not exceeding 3 years	--	--	--
<u>Total</u>	<u>6,596,339,809.62</u>		--	--	--

5.2.2 Other receivable that are individually significant at the end of the period but for which bad debt provision has been assessed individually

Content of other receivable	Closing balance	Amount of bad debt	Aging	Proportion of provision (%)	Reasons for the provision
Baosteel Resources International Co., Ltd.	3,896,160.00	Within 1 year (including 1 year)	--	--	Related party transaction, low recovery risk
China Copper Company Limited	1,341,902.44	More than 3 years	--	--	Related party transaction, low recovery risk
Rio Tinto UK	1,079,905.81	Within 1 year (including 1 year)	--	--	low recovery risk
Petty cash for employees	225,790.37	Within 1 year (including 1 year)	--	--	low recovery risk
Chalco Hong Kong Co., Ltd.	52,636.04	Within 1 year (including 1 year)	--	--	Related party transaction, low recovery risk
<u>Total</u>	<u>6,596,394.66</u>		--	--	--

5.2.3 Closing balance owed by the Top Five parties

Content of other receivable	Nature	Closing Balance
Aluminum Corporation of China	Current account	6,596,339,809.62
Baosteel Resources International Co., Ltd.	Current account	3,896,160.00
British Rio Tinto Ltd.	Current account	3,592,226.00
SAN MARTIN CONTRA. GRALES SA	Current account	2,496,176.00
Chinalco (Hong Kong) Co., Ltd.	Current account	1,544,750.00
<u>Total</u>		<u>6,607,869,121.62</u>

## 6. Inventories

### Categories of inventories

Item	Closing balance			Opening balance		
	Gross carrying amount	Provision for decline in value of inventories	Net carrying amount	Gross carrying amount	Provision for decline in value of inventories	Net carrying amount
Raw materials	523,420,550.40		523,420,550.40	531,630,958.00		531,630,958.00
Work-in-progress	180,546,288.00		180,546,288.00	81,480,604.00		81,480,604.00
Merchandise	15,907,164.00		15,907,164.00	29,738,340.00		29,738,340.00
<u>Total</u>	<u>719,874,002.40</u>		<u>719,874,002.40</u>	<u>642,849,902.00</u>		<u>642,849,902.00</u>

## 7. Available-for-sale financial assets

### 7.1 Details of Available-for-sale financial assets

Item	Closing fair value			Opening fair value		
	Gross carrying amount	Provision for decline in value of inventories	Net carrying amount	Gross carrying amount	Provision for decline in value of inventories	Net carrying amount
1 Available-for-sale debentures						
investment(in the fair value measurement)	391,004,262.07		391,004,262.07	312,385,913.14		312,385,913.14
2. Available-for-sale equity investment(cost measurement)	101,276,887,313.67		101,276,887,313.67	95,434,417,107.13		95,434,417,107.13
3. Available-for-sale equity investment(cost measurement)						
<u>Total</u>	<u>101,667,891,575.74</u>		<u>101,667,891,575.74</u>	<u>95,746,803,020.27</u>		<u>95,746,803,020.27</u>

### 7.2 Financial Assets Available-for-sale disclosed by fair value measurement at the closing date

Item	Available-for-sale financial assets
Stock of China Datang Corporation Renewable Power Co. Limited	135,551,868.48
Stock of China Nonferrous Metal Mining (Group) Co., Ltd.	148,801,531.80
Stock of Aluminum Corporation of China	106,650,861.79
<u>Total</u>	<u>391,004,262.07</u>

## 8. Held-to-maturity investments

### 8.1 Details of Held-to-maturity investments

Item	Closing balance			Opening balance		
	Provision for		Net carrying amount	Provision for		Net carrying amount
	Gross carrying amount	decline in value of inventories		Gross carrying amount	decline in value of inventories	
Bonds	48,742,024.14		48,742,024.14	46,006,486.42		46,006,486.42
<u>Total</u>	<u>48,742,024.14</u>		<u>48,742,024.14</u>	<u>46,006,486.42</u>		<u>46,006,486.42</u>

### 8.2 Significant Held-to-maturity investment at the closing date

Item	Denomination (USD)	Nominal Interest Rate	Real Interest Rate	Maturity Date
BALLANTYNE Bonds	4,500,000.00	3.4692%	3.9283%	2 May, 2036
ATHILON Bonds	4,000,000.00	2.5368%	3.9283%	24 January, 2045
<u>Total</u>	<u>8,500,000.00</u>		—	—

## 9. Long-term receivables

Item	Closing balance	Opening balance
Capital Current Account	76,156,674.56	75,392,199.00
<u>Total</u>	<u>76,156,674.56</u>	<u>75,392,199.00</u>

## 10. Long-term equity investments

### 10.1 Categories of long-term equity investments

Item	Opening balance	Increase	Decrease	Closing balance
Investment in subsidiary	12,144,833,406.49	1,260,074,403.58		13,404,907,810.07
<u>Subtotal</u>	<u>12,144,833,406.49</u>	<u>1,260,074,403.58</u>		<u>13,404,907,810.07</u>
Minus: depreciation provision for Long term equity investment				
<u>Total</u>	<u>12,144,833,406.49</u>	<u>1,260,074,403.58</u>		<u>13,404,907,810.07</u>

### 10.2 Details of long-term equity investments

Investee	Investment cost	Opening balance	Changes		
			additional investment	investment recognized at equity method	P/L on
					Closing balance
<u>Total</u>	<u>13,401,147,594.53</u>	<u>12,144,833,406.49</u>	<u>1,256,314,188.02</u>	<u>3,760,215.56</u>	<u>13,404,907,810.07</u>
joint ventures					

Investee	Investment cost	Opening balance	Changes		
			additional investment	P/L on investment recognized at equity method	Closing balance
Including: 1.Simfer Jersey Limited	12,076,248,091.41	11,376,817,992.10	699,430,099.32	-2,438,804.80	12,073,809,286.62
2.Simfer Jersey Finance2Limited	1,120,351,103.12	768,015,414.39	352,335,688.70		1,120,351,103.09
3.Chinalco Financial Leasing Co., Ltd.	204,548,400.00		204,548,400.00	6,199,020.36	210,747,420.36

#### Main financial information of important joint ventures

Item	Amount in current period			Amount in previous period	
	Simfer Jersey Limited	Simfer Jersey Finance2Limited	Chinalco Financial Leasing Co., Ltd.	Simfer Jersey Limited	Simfer Jersey Finance2Limited
Current assets	173,688,169.90	2,383,725,751.26	540,918,684.63	159,895,166.79	1,634,075,349.76
Non-current assets	23,288,599,985.75		871,502,203.68	20,956,706,028.57	
Total assets	23,462,288,155.65	2,383,725,751.26	1,412,420,888.31	21,116,601,195.36	1,634,075,349.76
Current liabilities	4,027,182,456.05		487,624,806.73	1,117,165,245.59	
Non-current liabilities	122,236,890.06		100,000,000.00	136,937,198.90	
Total liabilities	4,149,419,346.11		587,624,806.73	1,254,102,444.49	
Net assets	19,312,868,809.54	2,383,725,751.26	824,796,081.58	19,862,498,750.87	1,634,075,349.76
Net assets share of joint ventures according to shareholding rate	9,077,048,340.48	1,120,351,103.09	206,116,540.79	9,335,374,412.91	768,015,414.39
Adjusting events	2,996,760,946.14		4,548,399.96	2,041,443,579.19	
The book value of equity investment to joint ventures	12,073,809,286.62	1,120,351,103.09	210,747,420.36	11,376,817,992.10	768,015,414.39
The fair value of equity investment with public price					
Operating income			35,665,128.61		
Finance expenses	-5,188,946.38		24,796,081.58	-14,351,088.37	
Income tax expenses					
Net profit	-5,188,946.38		24,796,081.58	-14,351,088.37	
Other comprehensive income					

Note: Chinalco Financial Leasing Co., Ltd. established newly during this year, there is no amount in the prior period.

## 11. Investment properties

Investment properties measured at cost

Item	Opening carrying amount	Increase in the current period	Decrease in the current period	Closing carrying amount
I. Total original carrying amount		311,614,876.80		311,614,876.80
1. Buildings		311,614,876.80		311,614,876.80
II. Total accumulated depreciation and amortization				
1. Buildings				
III. Total net book value for investment properties				311,614,876.80
1. Buildings				311,614,876.80
III. Total net book value for investment properties				
1. Buildings				
V. Total net carrying amount of investment properties				311,614,876.80
1. Buildings				311,614,876.80

## 12. Property Plant and Equipment

Disclosure by categories

Item	Opening carrying amount	Increase in the current period	Decrease in the current period	Closing carrying amount
I. Total original carrying amount	2,028,481,171.52	17,640,394,237.53	378,630.00	19,668,496,779.05
Including: Land	80,016,833.89	38,858.59		80,055,692.48
Buildings	264,873,153.00	7,248,124,807.00		7,512,997,960.00
Machinery and equipment	1,520,088,099.00	9,902,235,865.00		11,422,323,964.00
Transportation vehicles	132,959,751.00	8,293,497.00	324,680.00	140,928,568.00
Office equipment	1,147,658.63	43,673,509.94	53,950.00	44,767,218.57
Others	29,395,676.00	438,027,700.00		467,423,376.00
II. Total accumulated depreciation	349,894,664.37	680,539,760.60	285,022.60	1,030,149,402.37
Including: Land	--	--	--	--
Buildings	27,309,097.00	114,236,833.00		141,545,930.00
Machinery and equipment	256,679,812.00	528,104,534.00		784,784,346.00
Transportation vehicles	46,516,638.00	25,083,917.00	233,770.00	71,366,785.00
Office equipment	946,451.37	7,678,485.60	51,252.60	8,573,684.37
Others	18,442,666.00	5,435,991.00		23,878,657.00

Item	Opening carrying amount	Increase in the current period	Decrease in the current period	Closing carrying amount
III. Total net book value of fixed assets	1,678,586,507.15	--	--	18,638,347,376.68
Including: Land	80,016,833.89	--	--	80,055,692.48
Buildings	237,564,056.00	--	--	7,371,452,030.00
Machinery and equipment	1,263,408,287.00	--	--	10,637,539,618.00
Transportation vehicles	86,443,113.00	--	--	69,561,783.00
Office equipment	201,207.26	--	--	36,193,534.20
Others	10,953,010.00	--	--	443,544,719.00
IV. Total provision for impairment losses				
Including: Land		--	--	--
Buildings				
Machinery and equipment				
Transportation vehicles				
Office equipment				
Others				
V. Total carrying amount of fixed assets	1,678,586,507.15	--	--	18,638,347,376.68
Including: Land	80,016,833.89	--	--	80,055,692.48
Buildings	237,564,056.00	--	--	7,371,452,030.00
Machinery and equipment	1,263,408,287.00	--	--	10,637,539,618.00
Transportation vehicles	86,443,113.00	--	--	69,561,783.00
Office equipment	201,207.26	--	--	36,193,534.20
Others	10,953,010.00	--	--	443,544,719.00

### 13. Construction in progress

13.1. Details of construction in progress are as follows

Item	Closing balance			Opening balance		
	Closing balance	Provision for decline in value of inventories	Book Value	Closing balance	Provision for decline in value of inventories	Book Value
Toromocho						
Copper Ore	6,297,275,945.70		6,297,275,945.70	24,882,036,397.07		24,882,036,397.07
Project						
Total	<u>6,297,275,945.70</u>		<u>6,297,275,945.70</u>	<u>24,882,036,397.07</u>		<u>24,882,036,397.07</u>

### 13.2. Changes in significant Construction in progress project

Item	Budget amount	Opening balance	Increase in the current period	Transfer to PPE	Other decreases
Toromocho					
Copper Ore Project	29,368,767,300	24,882,036,397.07	2,304,871,802.00	16,575,362,289.00	4,314,269,964.37
<u>Total</u>	<u>29,368,767,300</u>	<u>24,882,036,397.07</u>	<u>2,304,871,802.00</u>	<u>16,575,362,289.00</u>	<u>4,314,269,964.37</u>

Continued

Item	Amount injected as a proportion of budget amount (%)	Construction progress	Amount of accumulated capitalized interest	Including: capitalized interest for the period	Interest capitalization rate for the period (%)	Source of funds	Closing balance
Toromocho							
Copper Ore Project	85.83	85.83	1,875,651,693.70	387,990,697.70	2.87	Bank loan	6,297,275,945.70
<u>Total</u>	--	--	<u>1,875,651,693.70</u>	<u>387,990,697.70</u>	--	--	<u>6,297,275,945.70</u>

### 14. Intangible assets

Disclosure by categories

Item	Opening carrying amount	Increase in the current period	Decrease in the current period	Closing carrying amount
I. Total original carrying amount	4,047,271,878.60	5,753,827,125.54		9,801,099,004.14
Including: Software	31,457,779.00	5,285,380.00		36,743,159.00
Franchise	4,015,814,099.60	5,748,541,745.54		9,764,355,845.14
II. Total accumulated amortization	28,300,375.00	163,075,523.29		191,375,898.29
Including: Software	28,300,375.00	4,960,889.00		33,261,264.00
Franchise		158,114,634.29		158,114,634.29
III. Total provision for impairment		--	--	
Including: Software		--	--	
Franchise		--	--	
IV. Total carrying amount of Intangible assets	4,018,971,503.60	--	--	9,609,723,105.85
Including: Software	3,157,404.00	--	--	3,481,895.00
Franchise	4,015,814,099.60	--	--	9,606,241,210.85

### 15. Goodwill

Name of the investee or item resulting in goodwill	Opening balance	Opening balance of provision for impairment	Increase in the current period	Decrease in the current period
Goodwill	1,596,063,266.90	97,709,642.06		1,693,772,908.96
<u>Total</u>	<u>1,596,063,266.90</u>	<u>97,709,642.06</u>		<u>1,693,772,908.96</u>

### 16. Deferred tax assets/deferred tax liabilities

Deferred tax assets and deferred tax liabilities that are not presented at the net amount after offset

Item	Deferred tax assets or liabilities after offset	Closing balance	Opening balance	
		Deductible or taxable temporary differences after offset	Deferred tax assets or liabilities after offset	Deferred tax assets or liabilities after offset
1. Deferred tax assets:				
Mine reclamation fee	30,162,737.00	94,258,553.13	21,587,832.00	67,461,975.00
Capitalized expense	14,857,628.40	46,430,088.75	139,733,484.00	436,667,138.00
Account receivable - the price adjustment	47,539,409.00	148,560,653.13	29,744,459.00	92,951,434.38
2. Deferred tax liabilities:	1,363,946,484.20	4,262,332,763.13	1,285,263,726.88	4,016,449,146.50
Assets evaluation appreciation	1,363,946,484.20	4,262,332,763.13	1,285,263,726.88	4,016,449,146.50

### 17. Other non-current assets

Item	Closing balance	Opening balance
Cash deposit	51,173,132.99	48,266,672.00
<u>Total</u>	<u>51,173,132.99</u>	<u>48,266,672.00</u>

### 18. Short-term borrowings

Categories of short-term borrowings

Item	Closing balance	Opening balance
Secured loan	811,700,000.00	
Guaranteed loan	5,584,496,000.00	6,792,090,000.00
Fiduciary loan	573,693,449.38	
<u>Total</u>	<u>6,969,889,449.38</u>	<u>6,792,090,000.00</u>

### 19. Financial Liabilities measure by fair value through profit or loss

Item	Closing balance (Fair value)	Opening balance (Fair value)
Financial Liabilities Specified as measurement by fair value through profit or loss	148,560,652.23	
<u>Total</u>	<u>148,560,652.23</u>	

### 20. Accounts payable

Aging	Closing balance	Opening balance
Within 1 year (inclusive)	1,390,935,671.00	2,402,392,828.00
More than 1 year but not exceeding 2 years(including 2 years)	87,973,079.52	
<u>Total</u>	<u>1,478,908,750.52</u>	<u>2,402,392,828.00</u>

#### 20.1 Significant account payable aged more than one year:

Creditors of accounts payable	Closing balance	Outstanding reason
JACOBS PERU S.A.	18,182,080.00	To pay after the accomplishment of the project
G Y M S.A.	7,003,885.59	To pay after the accomplishment of the project
COBRA PERU S.A	2,550,342.24	To pay after the accomplishment of the project
SAN MARTIN CONTRAT.GRALES.SA	2,444,489.10	To pay after the accomplishment of the project
SUPERINTENDENCIA NACIONAL DE ADMINI	2,166,161.29	To pay after the accomplishment of the project
<u>Total</u>	<u>32,346,958.22</u>	--

### 21. Employee benefits payable

#### 21.1 Employee benefits payable

Item	Opening balance	Increase in the current period	Decrease in the current period	Closing balance
I. Short-term employee benefits	52,140,274.00	434,994,253.97	444,768,093.23	42,366,434.74
II. Post-employment benefits		409,337.46	409,337.46	
<u>Total</u>	<u>52,140,274.00</u>	<u>435,403,591.43</u>	<u>445,177,430.69</u>	<u>42,366,434.74</u>

## 21.2 Short-term employee benefits

Item	Opening balance	Increase in the current period	Decrease in the current period	Closing balance
I. Wages or salaries, bonuses, allowances and subsidies	52,140,274.00	434,536,682.96	444,310,522.22	42,366,434.74
II. Social security contributions		216,364.01	216,364.01	
Including: Medical insurance		194,922.60	194,922.60	
Employment injury insurance		5,847.79	5,847.79	
Maternity insurance		15,593.62	15,593.62	
III. Housing fund		241,207.00	241,207.00	
<u>Total</u>	<u>52,140,274.00</u>	<u>434,994,253.97</u>	<u>444,768,093.23</u>	<u>42,366,434.74</u>

## 21.3 Post-employment benefits

Item	Opening balance	Increase in the current period	Decrease in the current period	Closing balance
I. Basic endowment insurance		389,845.20	389,845.20	
II. Unemployment insurance		19,492.26	19,492.26	
<u>Total</u>		<u>409,337.46</u>	<u>409,337.46</u>	

## 22. Taxes payable

Item	Opening balance	Amount payable in current period	Amount paid in current period	Closing balance
Value added tax	-1,490,355,878.00	149,243,994.90	121,572,734.90	-1,462,684,618.00
Individual income tax	14,124,501.90	6,099,324.61		20,223,826.51
Others	7,572,928.10			7,572,928.10
<u>Total</u>	<u>-1,468,658,448.00</u>	<u>155,343,319.51</u>	<u>121,572,734.90</u>	<u>-1,434,887,863.39</u>

## 23. Interest payable

Item	Closing balance	Opening balance
Interest of long-term borrowings with interest payable by installments and principal payable on maturity	253,728,130.62	213,330,232.43
Interest on corporate debenture	6,329,514.39	6,380,943.50
Interest payable on short-term borrowings	45,194,309.45	25,871,132.00
<u>Total</u>	<u>305,251,954.46</u>	<u>245,582,307.93</u>

## 24. Other payables

### 24.1 Disclosure by nature of other payables

Item	Closing balance	Opening balance
Current account	6,686,487,111.56	3,527,372,962.58
Share price	5,367,723,982.81	7,587,109,372.73
Liquidated damages	1,266,252,000.00	1,193,205,000.00
House purchasing fee	218,130,413.76	
Shares investment	196,821,016.00	185,466,890.00
Agency fee	191,912,371.81	238,515,343.90
cash call	32,157,955.08	30,302,840.82
Others	653,340,066.08	667,825,208.74
<u>Total</u>	<u>14,612,824,917.10</u>	<u>13,429,797,618.77</u>

### 24.2 Other payables aged more than one year

Creditors of other payables	Outstanding amounts	Outstanding reason
Aluminum Corporation of China	8,149,560,127.56	Unsettled
Chinalco Hong Kong Co., Ltd.	5,585,854,396.57	Unsettled
The lawyer fee of CL project	5,552,755.00	Acquisition project failed, unsettled
<u>Total</u>	<u>13,740,967,279.13</u>	

## 25. Non-current liabilities due within one year

Item	Closing balance	Opening balance
Long-term borrowings due within one year	1,307,423,040.91	1,364,414,620.00
<u>Total</u>	<u>1,307,423,040.91</u>	

## 26. Other current liabilities

Item	Closing balance	Opening balance
Accrued labor cost	10,822,669.00	
Environmental protection project payment	42,179,815.00	
<u>Total</u>	<u>53,002,484.00</u>	

## 27. Long-term borrowings

Item	Closing balance	Opening balance
Secured loan	20,450,294,480.00	19,270,566,700.00
Mortgage loan	512,413,167.00	

Item	Closing balance	Opening balance
Guaranteed loan	66,609,837,818.13	62,866,490,223.20
Fiduciary loan	2,186,742,457.66	
<u>Total</u>	<u>89,759,287,922.79</u>	<u>82,137,056,923.20</u>

Note: The guarantee of guaranteed loan is Aluminum Corporation of China.

## 28. Bonds payable

### 28.1 Details of Bonds payable

Item	Closing balance	Opening balance
Higher U.S dollar bonds	3,025,779,594.17	2,809,329,882.64
<u>Total</u>	<u>3,025,779,594.17</u>	<u>2,809,329,882.64</u>

28.2 Variation of Bonds payable (excluding Preference shares, Perpetual Capital Securities and etc. which are divided into financial liabilities.)

Name of bonds	Par value	Issue date	The term of bond	Issue amount	Opening balance
Higher U.S dollar bonds	3,246,800,000.00	2014.12.11	5 years	3,231,669,829.53	2,809,329,882.64
<u>Total</u>	<u>3,246,800,000.00</u>	—	—	<u>3,231,669,829.53</u>	<u>2,809,329,882.64</u>

Continued

Name of bonds	Issue during the current period	Provision for interest at par value	Premium/ discount amortization	Payback during the current period	Closing balance
Higher U.S dollar bonds		114,301,687.50	-102,148,024.03		3,025,779,594.17
<u>Total</u>		<u>114,301,687.50</u>	<u>-102,148,024.03</u>		<u>3,025,779,594.17</u>

## 29. Long-term payables

Item	Opening balance	Closing balance
<u>Total</u>	<u>3,585,123,976.27</u>	<u>4,029,014,541.75</u>
Aluminum Corporation of China	3,585,123,976.27	4,029,014,541.75

## 30. Provisions

Item	Opening balance	Closing balance
Discard Expenses	731,455,601.64	773,882,168.00
Pending action (Note)	23,766,286.39	23,699,270.30
Others		21,556,819.70
<u>Total</u>	<u>755,221,888.03</u>	<u>819,138,258.00</u>

Note: In 2011, the subsidiary of the Company, Chinalco Peru Copper Co. predicted the related fine of an occurred security incident at 256,120.00 Sol as the local currency. At the same year, it predicted to pay 10,398,472.00 Sol toward the local energy mining department due to the adjustment of investment plan. The above two items account for 10,654,592.00 Sol as the total accrued liability. In 2015, the related predicted incident did not have any adjustments. Accordingly, the amount of the accrued liability converts to RMB 223,766,286.39 at the closing exchange rate in 2015.

### 31. Other non-current liabilities

Item	Opening balance	Closing balance
Deferred income	25,799,072.80	24,916,568.00
<u>Total</u>	<u>25,799,072.80</u>	<u>24,916,568.00</u>

### 32. Paid-in capital (share capital)

Name of the Investor	Opening balance	Proportion (%)	Increase in the current period	Decrease in the current period	Investment amount	Proportion (%)	Closing balance
	Investment amount						
<u>Total</u>	500,583,034.06	100.00			500,583,034.06	100.00	
Aluminum Corporation of China	500,583,034.06	100.00			500,583,034.06	100.00	

### 33. Capital reserves

Item	Opening balance	Increase in the period	Decrease in the period	Closing balance
I. Capital (equity) at a premium	1,765,018,268.52			1,765,018,268.52
II. Other capital reserves	267,341,817.00			267,341,817.00
<u>Total</u>	<u>2,032,360,085.52</u>			<u>2,032,360,085.52</u>

Including: State-owned capital reserves exclusively

### 34. Retained earnings

Item	Amount for the current period	Amount for the prior period
Retained earnings at the opening of year	-5,577,715,175.74	-7,055,673,403.41
Add for the period:	1,906,702,491.60	1,477,958,227.67
Including: Net profit attributable to owners of the Company for the period	1,906,702,491.60	1,477,958,227.67
Others		

Item	Amount for the current period	Amount for the prior period
Less for the period:		
Including: Appropriation to statutory surplus reserves		
Appropriation to general risk reserves		
Declaration of dividends on ordinary shares transferred to capital		
Transfer to paid-in capital		
Others		
Retained earnings at the closing of year	-3,671,012,684.14	-5,577,715,175.74

### 35. Operating income and operating costs

Item	Amount recognized in the current period		Amount recognized in the prior period	
	Income	Cost	Income	Cost
<u>1.Principle operating</u>	2,690,459,663.59	1,973,578,648.34		
Including: Sale of copper concentrate	2,690,459,663.59	1,973,578,648.34		
<u>2.Other operating</u>	45,319,730.52	30,694,914.13		
Including: Sales of diesel	27,631,393.99	16,478,256.27		
Rental	6,982,453.00			
Operation service	10,705,883.53	14,216,657.86		
<u>Total</u>	<u>2,735,779,394.11</u>	<u>2,004,273,562.47</u>		

### 36. Sales expenses

Item	Amount for the current period	Amount for the prior period
Transportation	125,014,163.00	
Warehousing management costs	88,553,259.00	
Cost of packing	12,923,247.00	
Depreciation	11,285,877.00	
Staff Salaries	5,525,502.00	
Insurance expenses	343,206.00	
Repair charge	181,821.00	
Others	14,888,693.31	
<u>Total</u>	<u>258,715,768.31</u>	

### 37. Administrative expenses

Item	Amount for the current period	Amount for the prior period
Tax	39,782,243.00	12,939,580.43

Item	Amount for the current period	Amount for the prior period
Staff Salaries	25,088,049.69	9,724,264.60
Insurance expenses	13,899,580.55	
laboratory fee	11,214,447.20	
Agency fees	4,645,578.99	5,026,037.67
Consulting fees	4,424,255.00	
Travelling expense	4,319,376.84	4,789,326.77
Outsourcing service	3,600,751.10	
Travelling expense	536,127.24	19,336.64
Rent	344,160.80	1,672,297.16
Business entertainment	187,706.12	175,269.47
Price regulation fund	144,176.00	
Conference fee	63,167.24	2,726.37
Repair charge	865.98	5,910.99
Executive board expenses		3,658,438.00
Others	2,665,381.96	114,698.07
<u>Total</u>	<u>110,915,867.71</u>	<u>38,127,886.17</u>

### 38. Finance expenses

Item	Amount for the current period	Amount for the prior period
Interest cost	2,297,794,291.62	1,677,531,410.31
Subtract : interest income	676,816,511.60	621,346,950.33
Loss on foreign exchange	-540,142,918.31	-273,534,255.54
Subtract :Gain on foreign exchange	17,766,316.24	-16,027.71
Handling charge	15,954,031.80	358,748.53
<u>Total</u>	<u>1,079,022,577.27</u>	<u>783,024,980.68</u>

### 39. Investment income

#### Details of investment income

Item	Amount recognized in the current period	Amount recognized in the prior period
Income from long-term equity investments under equity method	3,760,215.54	-5,954,333.50
Investment income on disposal of financial assets at Fair Value through Profit or Loss ("FVTPL")	94,543,406.36	
Investment income from holding held-to-maturity investments	2,015,398.14	1,704,456.44

Item	Amount recognized in the	Amount recognized in the
	current period	prior period
Investment income from holding available-for-sale financial assets, etc.	2,608,058,095.72	2,295,238,974.05
<u>Total</u>	<u>2,708,377,115.76</u>	<u>2,290,989,096.99</u>

#### 40. Non-operating income

Item	Amount incurred in the current	Amount incurred in the prior	Amount recognized to
	period	period	non-operating profit or loss
Compensation fund	19,138,387.00	2,007.43	19,138,387.00
Others		770,538.09	
<u>Total</u>	<u>19,138,387.00</u>	<u>772,545.52</u>	<u>19,138,387.00</u>

#### 41. Non-operating expenses

Item	Amount incurred in the current	Amount incurred in the prior	Amount recognized to
	period	period	non-operating profit or loss
Total losses on disposal of non-current assets	2,697.40		2,697.40
Including: Losses on disposal of PPE	2,697.40		2,697.40
Others		20,000.00	
<u>Total</u>	<u>2,697.40</u>	<u>20,000.00</u>	<u>2,697.40</u>

#### 42. Income tax expense

Item	Amount incurred in the current period	Amount incurred in the prior period
Current tax expense	8,979,364.89	
Deferred tax expense	98,506,000.60	
<u>Total</u>	<u>107,485,365.49</u>	

#### 43. Other comprehensive income

43.1 Items of other comprehensive income, their income tax impact and situation of loss and gain brought forward.

Item	Accrual amount this period			Accrual amount previous period		
	Amount before income tax	Income tax	Net amount after income tax	Amount before income tax	Income tax	Net amount after income tax
Other comprehensive income will be reclassified into the profits and loss.						

Item	Accrual amount this period			Accrual amount previous period		
	Amount before income tax	Income tax	Net amount after income tax	Amount before income tax	Income tax	Net amount after income tax
Gains on changes in fair values of available-for-sale financial assets	-49,254,996.88		-49,254,996.88	-70,741,714.07		-70,741,714.07
Translation differences of financial statements denominated in foreign currencies	2,724,246,456.29		2,724,246,456.29	-266,086,107.41		-266,086,107.41
<b>Total</b>	<b>2,674,991,459.41</b>		<b>2,674,991,459.41</b>	<b>-336,827,821.48</b>		<b>-336,827,821.48</b>

#### 43.2 The adjustment situation of items of other comprehensive income

Item	Gains on changes in fair values of available-for-sale financial assets	Translation differences of financial statements denominated in foreign currencies	Subtotal
Opening balance of prior year	-109,938,047.69	-6,414,923,416.82	-6,524,861,464.51
Variation of increase or decrease for prior year (decrease is indicated by "—")	-70,741,714.07	-220,962,726.98	-291,704,441.05
Opening balance of current year	-180,679,761.76	-6,635,886,143.80	-6,816,565,905.56
Variation of increase or decrease for current year (decrease is indicated by "—")	-49,254,996.88	2,386,099,776.87	2,336,844,779.99
Closing balance of current year	-229,934,758.64	-4,249,786,366.93	-4,479,721,125.57

### 44. Consolidated Cash Flow Statement

Net profit adjusted to operating activities cash flow using the indirect method

Supplementary information	Amount for the current period	Amount for the prior period
1. Reconciliation of net profit to cash flow from operating activities:		
Net profit	1,902,879,058.22	1,470,588,775.66
Add: Provision for impairment losses of assets	680,539,760.60	184,933,232.99
Depreciation of PPE, depletion of oil and gas assets, depreciation of bearer biological assets	163,075,523.29	6,814,900.00
Amortization of intangible assets		
Amortization of long-term prepaid expenses	2,697.40	
Losses on disposal of fixed assets, intangible assets and other long-term asset (gains are indicated by "—")		

Supplementary information	Amount for the current period	Amount for the prior period
Losses on write-off of fixed assets (gains are indicated by "—")		
Losses on changes in fair values (gains are indicated by "—")		
Financial expenses (income is indicated by "—")	1,063,068,545.47	1,404,013,182.46
Losses arising from investments (gains are indicated by "—")	-2,708,377,115.76	-2,290,989,096.99
Decrease in deferred tax assets (increase is indicated by "—")	98,506,000.60	
Increase in deferred tax liabilities (decrease is indicated by "—")		
Decrease in inventories (increase is indicated by "—")	-77,024,100.40	-261,122,993.00
Decrease in receivables from operating activities (increase is indicated by "—")	-2,771,111,783.37	-1,401,630,506.07
Increase in payables from operating activities (decrease is indicated by "—")	283,539,966.20	-2,201,327,219.26
Others		
Net cash flow from operating activities	-1,364,901,447.75	-3,088,719,724.21
2. Significant investing and financing activities that do not involve cash receipts and payments:		
Conversion of debt into capital		
Convertible bonds due within one year		
Fixed assets acquired under finance leases		
3. Net changes in cash and cash equivalents:		
Closing balance of cash	4,648,734,107.82	6,087,930,167.56
Less: Opening balance of cash	6,087,930,167.56	3,111,645,943.17
Add: Closing balance of cash equivalents		
Less: Opening balance of cash equivalents		
Net increase in cash and cash equivalents	-1,439,196,059.74	2,976,284,224.39

#### 44.2 Composition of cash and cash equivalents

Item	Closing balance	Opening balance
I. Cash	4,648,734,107.82	6,087,930,167.56
Including: Cash on hand	382,537.27	415,242.18
Bank deposits	4,648,351,570.55	6,087,514,925.38
Other monetary fund		
Deposits with the Central Bank		

Item	Closing balance	Opening balance
Deposits made with other banks		
Placements with banks		
II. Cash equivalents		
Including: Investments in debt securities due within three months		
III. Closing balance of cash and cash equivalents	4,648,734,107.82	6,087,930,167.56
Including: Cash and cash equivalents with restricted use of parent company or subsidiaries		

#### 45. Restricted ownership assets

Restricted ownership assets	Opening balance	Increase	Decrease	Closing balance
I. Assets for guarantee				
II. Other reasons that ownership of asset is restricted	<u>95,422,705,341.13</u>	<u>7,355,245,659.66</u>		<u>102,777,951,000.79</u>
Including: Stock Mortgage (Note 1)	95,422,705,341.13	5,841,697,241.50		101,264,402,582.63
Account receivable (Note2)		1,513,548,418.16		1,513,548,418.16
<u>Total</u>	<u>95,422,705,341.13</u>	<u>7,355,245,659.66</u>		<u>102,777,951,000.79</u>

Note 1: The subsidiary of the Company, Shining Prospect Pte., Ltd. utilize the shares of British Rio Tinto Ltd. which the carry amount is RMB 101,264,402,582.63 for a 15 years long-term mortgage at USD 3.149 billion from China Development Bank.

Note 2: The subsidiary of the Company, Chinalco Peru Copper Co. pledged account receivable which is USD 233.08 million to apply for liquidity loan of USD 125.00 million from China Development Bank. The balance of the liquidity loan is USD 80 million, and the account receivable equals to RMB 1,513,548,418.16 at 31 December 2015.

#### IX. CONTINGENCIES

In 2011, the subsidiary of the Company, Chinalco Peru Copper Co. predicted the related fine of an occurred security incident at 256,120.00 Sol as the local currency. At the same year, it predicted to pay 10,398,472.00 Sol toward the local energy mining department due to the adjustment of investment plan. The above two items account for 10,654,592.00 Sol as the total accrued liability. In 2015, the related predicted incident did not have any adjustments. Accordingly, the amount of the accrued liability converts to RMB 23,766,286.39 at the closing exchange rate in 2015.

#### X. EVENTS AFTER THE BALANCE SHEET DATE

By the end of 3 April 2016, the Company has no disclosure of events after the balance sheet date.

#### XI. RELATED PARTY RELATIONSHIPS AND TRANSACTIONS

##### 1. The Company's parent company

Name of parent company	Registered Place	Nature of business	Registered Capital (million)	Proportion of ownership interest (%)	Proportion of voting power (%)
Aluminum Corporation of China	Beijing	the operating and management of state-owned assets and state-owned equity; aluminum, copper, rare earth and related nonferrous metal mine products, smelting products, processing products and carbon products production and sale; production, exploration design, engineer construction EPC and construction and installation; equipment manufacture; technology development and technology service; import and export business.	22,301.05	100.00	100.00

## 2. The information of the Company's subsidiaries

Note: The information of the Company's subsidiaries is detailed in Note VII.1.

## 3. The information of the Company's joint ventures and associates

Note: The information of the Company's joint ventures and associates is detailed in Note VIII.10.

#### 4. Related parties

##### 4.1 Related party transaction

Type of transaction	Company name	Nature of related party relationships	Transaction amount	Percent of transaction amount accounted for total transaction amount (%)	Unsettled if amount
Purchase of goods/ receipt of services					
Rentals	Chinalco Investment and Development Co. Ltd.	The same ultimate control	1,992,900.00	84.02	
Properties management fees	Chinalco Union Properties Management Ltd.	The same ultimate control	378,990.57	15.98	
Other transactions					
Fund lending	Chinalco (Hong Kong) Co. Ltd.	The same ultimate control	165,822,401.51	100.00	
others	Chinalco( Hong Kong) Co. Ltd.	The same ultimate control	311,614,876.80	100.00	218,130,41

#### 4.2Amount due from/to related party

Name of related party	Nature of related party relationships	Items due from related parties	The Closing balance	Aging	Provision for bad debt
Aluminum Corporation of China	Parent Company	Other receivable	6,596,339,809.62	More than 2 years but not exceeding 3 years	
China Copper Co. Ltd.	The same ultimate control	Other receivable	1,341,902.44	More than 3 years	
Chinalco (Hong Kong) Co. Ltd.	The same ultimate control	Other receivable	52,636.04	Within 1 year,	
Name of related party	Nature of related party relationships	Items due to related parties	The Closing balance	Aging	
Aluminum Corporation of China	Parent Company	Other payables	8,149,560,127.56	Note 1	
Chinalco (Hong Kong) Co. Ltd.	The same ultimate control	Other payables	5,585,854,396.57	Note 2	
Aluminum Corporation of China	Parent Company	Long-term payables	3,584,183,462.73	More than 3 years	
Chinalco Investment and Development Co. Ltd.	The same ultimate control	Other payables	5,714,822.52	More than 3 years	

Note 1: The amount within 1 year is RMB 2,943,171,362.29; the amount more than 1 year but not exceeding 2 years is RMB 1,520,403,943.83; the amount more than 3 years is 3,685,984,821.44.

Note 2: The amount within 1 year is RMB 218,130,413.76; the amount more than 2 years but not exceeding 3 years is RMB 5,367,723,982.81.

#### XII. OTHER MATTERS SHOULD BE DISCLOSED ACCORDING TO ACCOUNTING STANDARDS

Before 1 February, 2008, the Company acquired 12% of the shares of British Rio Tinto Ltd. (Rio Tinto) at USD 14.136 billion (equivalent to about RMB 96.6 billion) in the UK secondary securities market through its subsidiary Shining Prospect Pte.Ltd., which includes buying 110 million shares through block trading market, swaps purchasing 9 million shares, approximately 119 million shares in total. In June 2009, according to requirements of Rio Tinto right issue, Shining Prospect Pte., Ltd. purchased 63,000,000 placed shares at 14 pounds per share totaled USD 1,458,000,000, then the Company holds Rio Tinto's 182,000,000 shares, while its shareholding ratio remains unchanged.

By the end of 31 December 2015, Shining Prospect Pte., Ltd. holds 182.00 million shares of Rio Tinto listed in United Kingdom (equivalent to the carrying amount of RMB 101.26 billion). At 31 December 2015, the closing price of Rio Tinto is 19.795 pounds per share, and the total market value of Rio Tinto shares held by Shining Prospect Pte. Ltd. is RMB 34.64billion, representing a reduction of RMB 66.62 billion compared with its carry amount. Overseas Holdings Limited is the sole majority shareholder of Rio Tinto with non-short-term investment purpose, accordingly, the Rio Tinto shares are classified as available-for-sale financial assets and its initial investment cost is measured at historical cost method.

#### XIII. APPROVAL OF THE FINANCIAL STATEMENTS

The Company's financial statements have been approved by the general manager's office.

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