http://www.oblible.com
OFFERING MEMORANDUM

US$500,000,000

Alpek, S.A.B. de C.V.

4.250% Senior Notes due 2029

We are offering US$500,000,000 aggregate principal amount of our 4.250% Senior Notes due 2029 (the "notes"). We will pay interest on the notes semi-annually in arrears on March 18 and September 18 of each year, beginning on March 18, 2020. The notes will mature on September 18, 2029.

We may redeem the notes, at our option, in whole or in part, at any time and from time to time, prior to June 18, 2029 (the date that is three months prior to the scheduled maturity of the notes), at a redemption price equal to the greater of 100% of the outstanding principal amount of the notes to be redeemed and the applicable "make-whole" amount plus in each case accrued and unpaid interest and additional amounts thereon, if any, to the redemption date. In addition, we may redeem the notes at our option, in whole or in part, at any time and from time to time, beginning on June 18, 2029 (the date that is three months prior to the scheduled maturity of the notes), at a redemption price equal to 100% of the outstanding principal amount of the notes to be redeemed, plus accrued and unpaid interest, and additional amounts thereon, if any, to the redemption date. In the event of certain changes in tax laws applicable to payments of interest or amounts deemed interest under the notes, we may redeem the notes in whole, but not in part, at 100% of their principal amount, plus accrued and unpaid interest and additional amounts thereon, if any, to the redemption date. Upon the occurrence of a change of control triggering event, we will be required to offer to repurchase the notes at 101% of the principal amount thereof, plus accrued and unpaid interest, if any, to the date the notes are repurchased. There is no sinking fund for the notes.

The notes will be unconditionally guaranteed by certain of our subsidiaries. The notes and the subsidiary guarantees will be our and our subsidiary guarantors' senior unsecured general obligations (subject to certain statutory preferences under Mexican law, including tax, social security and labor claims) and will rank equally in right of payment with each other and with all of our and our subsidiary guarantors' respective existing and future senior unsecured indebtedness. The notes and the subsidiary guarantees will rank effectively junior to any of our and the subsidiary guarantors' respective existing and future secured indebtedness to the extent of the value of the assets securing such indebtedness and structurally junior to debt obligations of our non-guarantor subsidiaries.

No public market currently exists for the notes. This Offering Memorandum constitutes a Listing Particulars for the purposes of listing on the Official List of the Irish Stock Exchange plc, trading as Euronext Dublin ("Euronext Dublin"). Application has been made to Euronext Dublin for the notes to be admitted to the Official List and to trading on the Global Exchange Market of Euronext Dublin. Euronext Dublin has approved this Listing Particulars.

Investing in the notes involves risks. See "Risk Factors" beginning on page 20 for certain information that you should consider before investing in the notes.

Offering Price: 99.718%, plus accrued interest, if any, from September 18, 2019.

THE NOTES HAVE NOT BEEN AND WILL NOT BE REGISTERED WITH THE NATIONAL SECURITIES REGISTRY (*REGISTRO NACIONAL DE VALORES*) MAINTAINED BY THE MEXICAN NATIONAL BANKING AND SECURITIES COMMISSION (*COMISIÓN NACIONAL BANCARIA Y DE VALORES*, OR "CNBV"), AND MAY NOT BE OFFERED OR SOLD PUBLICLY IN MEXICO, EXCEPT TO INVESTORS DEEMED AS INSTITUTIONAL OR QUALIFIED INVESTORS, PURSUANT TO THE PRIVATE PLACEMENT EXEMPTION SET FORTH IN ARTICLE 8 OF THE MEXICAN SECURITIES MARKET LAW (*LEY DEL MERCADO DE VALORES*), AND REGULATIONS THEREUNDER. WE WILL NOTIFY THE CNBV OF THE TERMS AND CONDITIONS OF THIS OFFERING OF NOTES AS REQUIRED UNDER APPLICABLE LAW AND FOR INFORMATIONAL PURPOSES ONLY. DELIVERY OR RECEIPT OF SUCH NOTICE DOES NOT CONSTITUTE OR IMPLY A CERTIFICATION AS TO THE INVESTMENT QUALITY OF THE NOTES, OUR SOLVENCY, LIQUIDITY OR CREDIT QUALITY OR THE ACCURACY OR COMPLETENESS OF THE INFORMATION SET FORTH IN THIS OFFERING MEMORANDUM. THIS OFFERING MEMORANDUM IS SOLELY OUR RESPONSIBILITY AND HAS NOT BEEN REVIEWED OR AUTHORIZED BY THE CNBV.

The notes have not been, and will not be, registered under the U.S. Securities Act of 1933, as amended (the "Securities Act"), or the securities laws of any other jurisdiction and may not be offered or sold in the United States or to U.S. persons (as defined in Regulation S under the Securities Act ("Regulation S")) except in transactions exempt from, or not subject to, the registration requirements of the Securities Act. Accordingly, we are offering the notes to qualified institutional buyers in reliance on Rule 144A under the Securities Act ("Rule 144A") and outside the United States to non-U.S. persons in reliance on Regulation S. You are hereby notified that sellers of the notes may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A. See "Transfer Restrictions" for additional information about eligible offerees and transfer restrictions.

The notes are being offered pursuant to an exemption from the requirement to publish a prospectus under Regulation (EU) 2017/1129 (as amended and supplemented from time to time, the "Prospectus Regulation"), of the European Union, and this offering memorandum has not been approved by a competent authority within the meaning of the Prospectus Regulation. The notes are not intended to be offered, sold, or otherwise made available to and should not be offered, sold, or otherwise made available to any retail investor in the European Economic Area.

The notes will be represented by global notes in registered form. Delivery of the notes was made to investors in book-entry form through the facilities of The Depository Trust Company ("DTC") for the accounts of its direct and indirect participants, including Euroclear Bank S.A./N.V., as operator of the Euroclear System ("Euroclear"), and Clearstream Banking, *société anonyme*, Luxembourg ("Clearstream"), on September 18, 2019.

Joint Book-Running Managers

Citigroup **HSBC** **J.P. Morgan**

MUFG

The date of this offering memorandum is November 21, 2019.

http://www.oblible.com

TABLE OF CONTENTS

Page

Notice to Investors ... ii
Enforcement of Civil Liabilities ... iii
Available Information ... iv
Forward-Looking Statements ... v
Certain Definitions ... vii
Presentation of Financial and Certain Other Information ... x
Summary ... 1
The Offering ... 13
Summary Historical Financial Data and Other Information ... 17
Risk Factors ... 20
Exchange Rate Information ... 44
Use of Proceeds ... 45
Capitalization ... 46
Selected Historical Financial Data and Other Information ... 47
Management's Discussion and Analysis of Financial Condition and Results of Operations ... 50
Industry ... 77
Business ... 98
Management ... 127
Principal Shareholders ... 131
Related Party Transactions ... 132
Description of the Notes ... 133
Book-Entry, Delivery and Form ... 156
Transfer Restrictions ... 160
Taxation ... 163
Plan of Distribution ... 170
Listing and General Information ... 177
Legal Matters ... 179
Independent Auditors ... 180
Index to Financial Statements ... F-1

You should rely only on the information contained in this offering memorandum. We have not, and the initial purchasers have not, authorized anyone to provide you with information that is different from or additional to that contained in this offering memorandum, and we take no responsibility for any other information that others may give you. If anyone provides you with different or additional information, you should not rely on it. You should assume that the information in this offering memorandum is accurate only as of the date on the front cover of this offering memorandum, regardless of time of delivery of this offering memorandum or any sale of the notes. Our business, financial condition, results of operations and prospects may change after the date on the front cover of this offering memorandum. This document may only be used where it is legal to sell the notes. Neither we nor any of the initial purchasers is making an offer to sell the notes in any jurisdiction where such an offer is not permitted.

Unless otherwise indicated or the context otherwise requires, all references in this offering memorandum to "Alpek," "our company," "the Company," "we," "ours," "us" or similar terms refer to Alpek, together with its consolidated subsidiaries and "the Issuer" refer to Alpek, S.A.B. de C.V. on an individual basis.

NOTICE TO INVESTORS

This offering memorandum has been prepared by us solely for use in connection with the proposed offering of the notes described in this offering memorandum. This offering memorandum is personal to each offeree and does not constitute an offer to any other person or the public generally to subscribe for or otherwise acquire the notes.

Neither we nor the initial purchasers are making an offer to sell the notes in any jurisdiction except where such an offer or sale is permitted. You must comply with all applicable laws and regulations in force in your jurisdiction and you must obtain any consent, approval or permission required by you for the purchase, offer or sale of the notes under the laws and regulations in force in your jurisdiction to which you are subject or in which you make such purchase, offer or sale, and neither we nor the initial purchasers will have any responsibility therefor.

We are relying upon an exemption from registration under the Securities Act for an offer and sale of securities which do not involve a public offering. We have submitted this offering memorandum solely to a limited number of qualified institutional buyers in the United States and to investors outside the United States so they can consider a purchase of the notes. This offering memorandum may be used only for the purposes for which it has been published. By accepting delivery of this offering memorandum, you acknowledge that the use of the information in this offering memorandum for any purpose other than to consider a purchase of the notes is strictly prohibited. These undertakings and prohibitions are for our benefit, and we may enforce them. Applicable securities laws restrict trading in our securities while in possession of material non-public information with respect to us. By accepting delivery of this offering memorandum and by purchasing the notes, you will be deemed to have made certain acknowledgments, representations and agreements as set forth under "Transfer Restrictions" in this offering memorandum. The notes are subject to restrictions on transfer and resale and may not be transferred or resold except as permitted under the Securities Act and applicable state securities laws pursuant to registration or exemption therefrom. As a prospective purchaser of the notes, you should be aware that you may be required to bear the financial risks of this investment for an indefinite period of time.

This offering memorandum is based on information provided by us and obtained from other sources that we believe to be reliable. We and the initial purchasers cannot assure you that the information obtained from other sources is accurate or complete. This offering memorandum summarizes certain documents and other information and we refer you to them for a more complete understanding of what we discuss in this offering memorandum. In making an investment decision, you must rely upon your own examination of our company and of the terms of the offering and the notes, including the merits and risks involved.

Neither we nor the initial purchasers are making any representation to any purchaser regarding the legality of an investment in the notes by such purchaser under any legal investment or similar laws or regulations. You should not consider any information in this offering memorandum to be legal, financial, business or tax advice. You should consult your own counsel, accountant, business advisor and tax advisor for legal, accounting, business and tax advice regarding any investment in the notes.

We reserve the right to withdraw this offering of notes at any time and we and the initial purchasers reserve the right to reject any commitment to subscribe for the notes in whole or in part and to allot to any prospective investor less than the full amount of notes sought by that investor. The initial purchasers and certain related entities may acquire for their own account a portion of the notes.

The initial purchasers make no representation or warranty, express or implied, as to the accuracy or completeness of the information contained in this offering memorandum. Nothing contained in this offering memorandum is, or shall be relied upon as, a promise or representation by the initial purchasers as to the past or future.

None of the U.S. Securities and Exchange Commission ("SEC"), the CNBV or any state or foreign securities commission or any other regulatory authority has approved or disapproved the offering of the notes nor have any of the foregoing authorities passed upon or endorsed the merits of this offering or the accuracy, adequacy or completeness of this offering memorandum. Any representation to the contrary is a criminal offense.

ENFORCEMENT OF CIVIL LIABILITIES

The Issuer and the majority of the Subsidiary Guarantors (collectively, the "Non-U.S. Alpek Companies") are incorporated or formed under the laws of countries other than the United States. In addition, most of the directors, executive officers and controlling persons of the Non-U.S. Alpek Companies are non-residents of the United States and substantially all of our assets and the assets of such non-resident persons are located in Mexico or elsewhere outside the United States. As a result, it may not be possible for investors to effect service of process on the Non-U.S. Alpek Companies or their directors or executive officers, or to enforce judgments obtained in U.S. courts against the Non-U.S. Alpek Companies or such persons predicated on civil liability provisions of the U.S. securities laws. The Issuer and each of the non-U.S. Subsidiary Guarantors have appointed CT Corporation System at 28 Liberty Street, Floor 42, New York, NY, 10005, as their agent to receive service of process with respect to any action brought against any of them in any federal or state court in the State of New York arising under the indenture governing the notes.

Uncertainty exists as to whether courts in the jurisdictions of organization of the Non-U.S. Alpek Companies will enforce judgments obtained in other jurisdictions, including the United States, against the Non-U.S. Alpek Companies or their directors or officers under the securities laws of those jurisdictions or entertain actions in those jurisdictions against the Non-U.S. Alpek Companies or their directors or officers under the securities laws of other jurisdictions.

No treaty exists between the United States and Mexico for the reciprocal enforcement of judgments issued in the other country. Generally, Mexican courts would enforce final judgments rendered in the United States if certain requirements are met, including the review in Mexico of the U.S. judgment to ascertain compliance with certain basic principles of due process and the non-violation of Mexican law or public policy (*orden público*), provided that U.S. courts would grant reciprocal treatment to Mexican judgments issued in analogous cases. Additionally, there is doubt as to the enforceability, in original actions in Mexican courts, of liabilities predicated, in whole or in part, on U.S. federal securities laws and as to the enforceability in Mexican courts of judgments of U.S. courts obtained in actions predicated on the civil liability provisions of U.S. federal securities laws.

AVAILABLE INFORMATION

We are not subject to the information requirements of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"). To permit compliance with Rule 144A in connection with resales of notes, we will be required under the indenture under which the notes are issued (the "Indenture"), upon the request of a holder of Rule 144A notes or Regulation S notes (during the restricted period, as defined in the legend included under "Transfer Restrictions"), to furnish to such holder and any prospective purchaser designated by such holder the information required to be delivered under Rule 144A(d)(4) under the Securities Act, unless we either furnish information to the SEC in accordance with Rule 12g3-2(b) under the Exchange Act or furnish information to the SEC pursuant to Section 13 or 15(d) of the Exchange Act. Any such request may be made to us in writing at our main office located at Ave. Gómez Morín 1111 Sur, Col. Carrizalejo, San Pedro Garza García, C.P. 66254, Nuevo León, México.

The Indenture will further require that we furnish to the Trustee (as defined herein) all notices of meetings of the holders of notes and other reports and communications that are generally made available to holders of the notes. At our request, the Trustee will be required under the Indenture to mail these notices, reports and communications received by it from us to all record holders of the notes promptly upon receipt. See "Description of the Notes."

Application has been made to Euronext Dublin for the notes to be admitted to listing on the Official List and to trading on the Global Exchange Market, a market of Euronext Dublin, in accordance with its rules. This offering memorandum forms, in all material respects, the listing memorandum for admission to Euronext Dublin. We will be required to comply with any undertakings given by us from time to time to Euronext Dublin in connection with the notes, and to furnish to them all such information as the rules of Euronext Dublin may require in connection with the listing of the notes.

FORWARD-LOOKING STATEMENTS

This offering memorandum includes forward-looking statements. These statements relate to our future prospects, developments and business strategies and are identified by our use of terms and phrases such as "anticipate," "believe," "could," "would," "will," "estimate," "expect," "intend," "may," "might," "potential," "plan," "predict," "project," "goals," "target," "seek," "should," "strategy" and similar terms and phrases, and may include references to assumptions. These statements are contained in the sections entitled "Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Industry," "Business" and other sections of this offering memorandum.

Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, by their nature, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. Our actual results may differ materially from those contemplated by the forward-looking statements. Important factors that could cause actual results to differ materially from those in the forward-looking statements include regional, national or global economic, business, market and regulatory conditions, without limitation, and the following:

- general economic conditions in the countries in which we conduct our business and any significant economic, political, regulatory or social developments in those countries;
- competition and loss of market share;
- availability and price volatility of raw materials and energy;
- our ability to maintain high capacity utilization rates;
- the impact of competition from other petrochemical manufacturers, including imports of polyester-related raw materials, polypropylene and products from other regions and the use of substitute products;
- our ability to implement our strategy;
- loss of business from one or more significant customers;
- disruption of our supply chain;
- potential changes in industry pricing practices, including changes in the margins in the "cost plus" pricing formula for purified terephthalic acid ("PTA") in the Americas;
- our ability to maintain margins for products sold under fixed price arrangements;
- cyclicality in the demand for our products;
- losses from derivative transactions, particularly with respect to our energy and raw material requirements;
- the impact of hurricanes and other natural disasters;
- unanticipated downtime of our production plants;
- difficulties, uncertainties, liabilities, unenforceability of provisions (including indemnifications) and regulations related to mergers, acquisitions, strategic alliances or joint ventures;
- risks associated with acquisitions and our ability to integrate and benefit from our recent or future acquisitions and strategic alliances;
- changes to environmental and other regulations, or their interpretation;
- loss of key personnel;
- risks related to our control by Alfa, S.A.B. de C.V., the Issuer's parent company;

- interruptions or failures in our information technology systems, including as a result of malicious software;
- risks related to fluctuations in currencies or interest rates;
- terrorist and organized criminal activities as well as geopolitical events;
- increases in our operating costs or our inability to meet efficiency or cost reduction objectives;
- changes to regulations or interpretations thereof, in respect of importation and exportation of goods;
- risks inherent in international operations, such as trade barriers, currency fluctuations, changes in duties and royalties;
- changes to, or withdrawals from, free trade agreements, including the North American Free Trade Agreement ("NAFTA"), to which Mexico is a party, and timely ratification of the United States Mexico Canada Agreement ("USMCA"), to which Mexico is a party and which is intended to replace NAFTA;
- the imposition of tariffs on Mexican imports by the United States or any other country;
- the implementation of exchange controls in any of the jurisdictions where we operate;
- our ability to refinance short-term debt and other obligations on favorable terms; and
- other factors described under "Risk Factors" and elsewhere in this offering memorandum.

Should one or more of these factors or situations materialize, or should the underlying assumptions prove to be incorrect, the actual results may differ considerably from those that are described, foreseen, considered, estimated, expected, predicted or intended in this offering memorandum.

These forward-looking statements speak only as of the date of this offering memorandum and we undertake no obligation to update our forward-looking statements or risk factors to reflect new information, future events or otherwise. Additional factors affecting our business emerge from time to time and it is not possible for us to predict all of these factors, nor can we assess the impact of all such factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statement. Although we believe that the plans, intentions and expectations reflected in or suggested by such forward-looking statements are reasonable, we cannot assure you that those plans, intentions or expectations will be achieved. In addition, you should not interpret statements regarding past trends or activities as assurances that those trends or activities will continue in the future. All written, oral and electronic forward-looking statements attributable to us or to the persons acting on our behalf are expressly qualified in their entirety by this cautionary statement.

CERTAIN DEFINITIONS

In this offering memorandum, except where otherwise indicated or the context otherwise requires, references to:

- Accounting terms have the definitions set forth under International Financial Reporting Standards, as issued by the International Accounting Standards Board;
- "2022 International Notes" means Alpek's outstanding US$650 million 4.500% Senior Notes due 2022. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—International Bonds—2022 International Notes;"
- "2023 International Notes" means Alpek's outstanding US$300 million 5.375% Senior Notes due 2023. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—International Bonds—2023 International Notes;"
- "Akra" means Akra Polyester, S.A de C.V., a subsidiary of Alpek Polyester with minority equity ownership of 6.65% by BP;
- "Alfa" means Alfa, S.A.B. de C.V., the Issuer's controlling shareholder;
- "Alpek Polyester" or "Petrotemex" means Grupo Petrotemex, S.A. de C.V.;
- "BASF" means BASF SE;
- "BP" means BP plc;
- "Brazilian Assets" means Companhia Petroquímica de Pernambuco – PetroquimicaSuape, and Companhia Integrada Têxtil de Pernambuco – CITEPE;
- "CAGR" means compound annual growth rate;
- "capacity share" refers to the installed capacity at our facilities divided by the total industry capacity reported by an independent consultant;
- "capacity utilization rate" means the percentage utilization of production capacity (as defined below);
- "CELCSA" means Cogeneración de Energía Limpia de Cosoleacaque, S.A. de C.V., a subsidiary of Alpek;
- "CGA" means Cogeneración de Altamira, S.A. de C.V., a subsidiary of Alpek;
- "CITEPE" or "Citepe" means Companhia Integrada Têxtil de Pernambuco – CITEPE;
- "Clear Path" or "Clear Path Recycling" means Clear Path Recycling, LLC, a strategic alliance between Shaw Industries Group, Inc. and DAK Americas LLC;
- "Cogeneration" or "combined heat and power" or "CHP" means a process that generates electricity and steam by using heat engine to generate electricity and steam at the same time;
- "Columbia Assets" means the three integrated petrochemicals plants located in Columbia, South Carolina, U.S.A. acquired in 2011 from Eastman, one producing PTA and the other two producing PET;
- "ContourGlobal" means ContourGlobal PLC and its subsidiaries;
- "CPL" means caprolactam;
- "DAK Americas" means DAK Americas LLC;
- "EPS" means expandable polystyrene;

- “Eastman” means Eastman Chemical Company;
- “Euro” or “€” means the lawful currency of the European Union;
- “Far Eastern” means Far Eastern Investment (Holding) Limited;
- “FENC” means Far Eastern New Century and its subsidiaries;
- “GAAP” means generally accepted accounting principles in the indicated country;
- “GDP” means gross domestic product;
- “IASB” means the International Accounting Standards Board;
- “IFRIC” means the International Reporting Interpretations Committee;
- “IFRS” means International Financial Reporting Standards, as issued from time to time by the IASB;
- “Indelpro” means Indelpro, S.A. de C.V.;
- “Indorama” means Indorama Ventures Public Company Limited and its subsidiaries;
- “Indorama Holdings” means Indorama Venture Holdings LP;
- “Installed capacity” means the annual production capacity calculated based on operations for 24 hours each day of a 365-day year;
- “Ktons” means kilotons, or 1,000 Tons (as defined below);
- “Libor” means London Interbank Offered Rate;
- “MEG” means monoethylene glycol;
- “Mexican Central Bank” means *Banco de México*, the Central Bank of Mexico;
- “M&G” means Mossi and Ghisolfi and its subsidiaries;
- “M&G México” means M&G Polímeros México, S.A. de C.V.;
- “M&G USA” means M&G USA Corp, M&G Resins USA LLC, M&G Polymers USA LLC and M&G Waters USA LLC;
- “NAFTA” means the North American Free Trade Agreement established on January 1, 1994;
- “NCPI” means the National Consumer Price Index (*Índice Nacional de Precios al Consumidor*), published from time to time by the Mexican Central Bank in the Official Gazette of Mexico (*Diario Oficial de la Federación*) or any index that may replace it;
- “Official Exchange Rate” means the exchange rate of Mexican Pesos for U.S. Dollars determined by the Mexican Central Bank for the payment of obligations denominated in foreign currency payable in Mexico, as published in the Mexican Federal Official Gazette (*Diario Oficial de la Federación*) on a determined date;
- “Pesos”, “Mexican Pesos”, “pesos” or “Ps.” means the lawful currency of Mexico;
- “Perpetual” means the PET recycling plant in Richmond, Indiana acquired from Perpetual Recycling Solutions LLC;
- “PET” means polyethylene terephthalate, in the form of resin;

- "Petrobras" means Petróleo Brasileiro S.A. - Petrobras;
- "Plastics & Chemicals Business" means the Company's plastics and chemicals line of business comprised of PP, EPS, CPL, fertilizers and specialty and industrial chemicals;
- "Polyester Chain Business" means the Company's polyester chain line of business comprised of PTA, PET resin, polyester fibers and rPET;
- "Polioles" means Polioles, S.A. de C.V.;
- "PP" means polypropylene;
- "Production capacity" means the annual production capacity which, in the case of Alpek, is calculated based on operations for 24 hours each day of a 365-day year and deducting 20 days per year of scheduled downtime for regular maintenance;
- "PTA" means purified terephthalic acid;
- "pX" means paraxylene;
- "R-PET" or "rPET" means polyester product manufactured using as a raw material recycled PET recovered from post-consumer sources (which can be transformed into high-quality food-grade or fiber-grade);
- "Selenis" means Selenis Canada Inc., a producer of PET;
- "Shaw Industries" means Shaw Industries Group, Inc.;
- "Suape" means Companhia Petroquímica de Pernambuco – PetroquimicaSuape;
- "Temex" means Tereftalatos Mexicanos, S.A. de C.V., a subsidiary of Alpek Polyester with minority equity ownership of 8.55% by BP;
- "Tons" means metric tons (one metric ton is equal to 1,000 kilograms or 2,204.6 pounds);
- "U.S. Dollars" "Dollars" or "US$" means the lawful currency of the United States of America; and
- "Wellman" means Wellman Holdings, Inc. (currently known as DAK Pearl River Inc.), the PET resin producer with assets in Bay St. Louis, Mississippi, U.S.A. that was acquired by DAK Americas LLC on August 31, 2011.

PRESENTATION OF FINANCIAL AND CERTAIN OTHER INFORMATION

Financial Information

Our annual audited consolidated financial statements as of December 31, 2016, 2017 and 2018 and for the years ended December 31, 2016, 2017 and 2018, together with the notes thereto (the "Annual Audited Financial Statements"), as well as the other financial information of Alpek included in this offering memorandum related to the Annual Audited Financial Statements, have been prepared in accordance with IFRS. Our unaudited condensed consolidated interim financial statements as of June 30, 2019 and for the six months ended June 30, 2018 and 2019, together with the notes thereto (the "Interim Unaudited Financial Statements"), as well as the other financial information of Alpek included in this offering memorandum related to these Interim Unaudited Financial Statements, have been prepared in accordance with International Accounting Standard 34 "Interim Financial Reporting" ("IAS 34"), as issued by the IASB, applicable to the preparation of interim financial statements. The Annual Audited Financial Statements and the Interim Unaudited Financial Statements include the Subsidiary Guarantors and the non-guarantor subsidiaries.

In making an investment decision, you must rely upon your own examination of the company, the terms of the offering and the financial information included herein. We urge you to consult your own advisors regarding the differences between IFRS and U.S. GAAP and how these differences might affect the financial information included in this offering memorandum.

On April 21, 2017, our board of directors approved the appointment of Galaz, Yamazaki, Ruiz Urquiza, S.C. (a Member of Deloitte Touche Tohmatsu Limited) as our new independent auditors effective for all periods after December 31, 2016.

Exchange Rate Information

This offering memorandum contains translations of certain peso amounts into U.S. Dollars at specified rates solely for the convenience of the reader. These convenience translations should not be construed as representations that the peso amounts actually represent such U.S. Dollar amounts or could be converted into U.S. Dollars at the specified rate or at all. Furthermore, the exchange rate for purposes of the convenience translation is not necessarily the same rate we used in preparing our financial statements, which means that U.S. Dollar-denominated items, including U.S. Dollar-denominated expenses and liabilities, may have been translated into Mexican Pesos using one exchange rate (or an average exchange rate) and have been retranslated into U.S. Dollars for the convenience of the reader using the convenience translation exchange rate.

Unless otherwise indicated, the exchange rate used for purposes of convenience translations is:

- with respect to statement of financial position data, the exchange rate published by the Mexican Central Bank in the Federal Official Gazette (*Diario Oficial de la Federación*) as the rate for the payment of obligations denominated in foreign currency (the "Official Exchange Rate") on December 31, 2018 (Ps. 19.6829 to US$1.00) with respect to annual financial data and on June 30, 2019 (Ps. 19.1685 to US$1.00) with respect to interim financial data; and

- with respect to financial information other than statement of financial position data, the average exchange rate for the year ended December 31, 2018, which consists of the average of the Official Exchange Rate on each day during the year ended December 31, 2018 (Ps. 19.2380 to US$1.00) with respect to annual financial data and the average exchange rate for the six months ended June 30, 2019 which consists of the average of the Official Exchange Rate on each day during the six months ended June 30, 2019 (Ps. 19.1726 to US$1.00) with respect to interim financial data.

See "Exchange Rates" for further information regarding the rates of exchange between the Mexican Peso and the U.S. Dollar.

Rounding Adjustments

Certain figures included in this offering memorandum have been rounded for ease of presentation. Any discrepancies in tables between the total and the amounts listed are due to rounding. Percentage figures included in this offering memorandum have not in all cases been calculated on the basis of such rounded figures but on the basis of such amounts prior to rounding. For this reason, certain percentage amounts in this offering memorandum may vary from those obtained by performing the same calculations using the figures in our financial statements included elsewhere in this offering memorandum. Certain other amounts that appear in this offering memorandum may not sum due to rounding.

Non-GAAP Financial Measures

A body of generally accepted accounting principles is commonly referred to as "GAAP." A non-GAAP financial measure is generally defined as one that purports to measure historical or future financial performance, financial position or cash flows but excludes or includes amounts that would not be so adjusted in the most comparable GAAP measure. We present "Adjusted EBITDA" in this offering memorandum, which is a non-GAAP financial measure. We define "Adjusted EBITDA" as operating income after adding back or subtracting, as the case may be, other income (expenses), depreciation and amortization and the impairment of long-lived assets.

In managing our business, we rely on Adjusted EBITDA as a means of assessing our operating performance. We believe that Adjusted EBITDA enhances the understanding of our financial performance and our ability to satisfy principal and interest obligations with respect to our indebtedness as well as to fund capital expenditures and working capital requirements. We also believe Adjusted EBITDA is a useful basis of comparing our results with those of other companies because it presents results of operations on a basis unaffected by capital structure. Adjusted EBITDA, however, is not a measure of financial performance under IFRS and should not be considered as an alternative to net income or operating income as a measure of operating performance or to cash flows from operating activities as a measure of liquidity. Adjusted EBITDA has material limitations that impair its value as a measure of our overall profitability since it does not address certain ongoing costs of our business that could significantly affect profitability such as financial expenses, income taxes, depreciation, amortization, impairment of long-lived assets and the impact of certain derivative instruments (except when designated as hedge accounting in accordance with IFRS). Our calculation of Adjusted EBITDA may not be comparable to other companies' calculation of similarly titled measures. For a reconciliation of Adjusted EBITDA to operating income (loss) for the years ended December 31, 2016, 2017 and 2018 and for the six months ended June 30, 2018 and 2019, see "Summary—Summary Financial Data and Other Information."

Industry and Market Data

Market data and other statistical information used throughout this offering memorandum are generally based on independent industry publications, government publications, reports by market research firms or other published independent sources, including independent consultants such as Wood Mackenzie Chemicals ("Wood Mackenzie"). Some data is also based on our estimates, which are derived from our review of internal surveys, as well as independent sources. Although we believe these sources are reliable, we have not independently verified the information and cannot guarantee its accuracy or completeness.

In addition, in many cases, we have based certain statements contained in this offering memorandum regarding our industry and our position in the industry on certain assumptions concerning our customers and competitors. These assumptions are based on our experience in the industry and our own investigation of market conditions. We cannot assure you as to the accuracy of any such assumptions, and such assumptions may not be indicative of our position in our industry.

The Issuer accepts responsibility for accurately reproducing this information and as far as the Issuer is aware and is able to ascertain from information published by these sources, no facts have been omitted which would render such reproduced information inaccurate or misleading.

Intellectual Property

This offering memorandum includes some of our trademarks and trade names, including our logos. Each trademark and trade name of any other company appearing in this offering memorandum belongs to its respective owner.

SUMMARY

This summary highlights certain information contained in this offering memorandum and may not include all the information relevant to you. For a more complete understanding of our business, you should read the following summary together with the more detailed information appearing elsewhere in this offering memorandum, including that set forth under "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our Annual Audited Financial Statements and our Interim Unaudited Financial Statements included elsewhere in this offering memorandum.

Overview

We are involved in the production, marketing and sale of a diversified portfolio of petrochemical products. We are one of the largest petrochemical companies in Mexico and in Latin America (based on 2018 revenues). For the year ended December 31, 2018, we sold our products in over 30 countries, with 70% of revenues from sales made to countries outside of Mexico. We have leadership positions across our product portfolio. For example, we were the largest producer of polyester and its precursor chemicals in the Americas based on installed capacity as of December 31, 2018 according to Wood Mackenzie. We are the largest purified terephthalic acid ("PTA") and polyethylene terephthalate ("PET") producer in the Americas and the second largest PET producer worldwide according to Wood Mackenzie, our internal estimates and publicly available market data. Furthermore, we believe we are one of the largest recyclers of PET bottles in the United States. Alpek is also the largest expandable polystyrene ("EPS") producer and owns the largest EPS plant in the Americas in terms of installed capacity, based on our internal estimates and our review of publicly available market data. We also operate the only polypropylene ("PP") plant in Mexico which is both the newest as well as one of the largest PP production facilities in North America. We are also the sole Mexican producer of caprolactam ("CPL"). For the year ended December 31, 2018, and the six months ended June 30, 2019, we derived approximately 74% and 76% respectively, of our revenues from our polyester group of products, which includes the production of PTA, PET resin, polyester fibers and recycled PET ("rPET"). The remainder of our revenues was derived primarily from our plastics and chemicals group products which include PP, EPS, CPL and specialty and industrial chemicals.

We focus on products and end markets that we believe offer the highest growth potential and ability to expand margins and that are more likely to provide stable financial performance through economic cycles. For the year ended December 31, 2018, 89% of our products (on the basis of sales volume) were used in what we believe are recession-resistant end markets such as the food and beverage packaging and consumer goods end markets. For the year ended December 31, 2018, we generated approximately 49% of our total revenues in high-growth emerging markets including Mexico.

Our businesses benefit from access to competitively sourced raw materials, large-scale integrated production sites, experienced sourcing personnel, proprietary state-of-the-art manufacturing technologies, strategic alliances and sustainable energy initiatives, which, together with our operational efficiency and expertise, allow us to maintain low-cost operations. We believe our recent growth in the Americas polyester market, our focus on product innovation and sustainability and our ability to maintain long-standing relationships with our key suppliers and customers have further enhanced our relevant market positions.

We believe we are not a typical petrochemical company. The capital intensity of our infrastructure is low and we are able to achieve a ratio of 3x sales over fixed assets. The segments where we participate are highly consolidated and due to our cost-plus pricing we are able to maintain stable margins. We also believe that due to our leading technology, we have been able to achieve significant cost efficiencies that place us within the first quartile of the industry.

We operate through two major business segments: polyester chain products ("Polyester Chain Business") and plastics and chemicals products ("Plastics & Chemicals Business"). Our Polyester Chain Business segment, comprising the production of PTA, PET, recycled PET and polyester fibers, serves the food and beverage packaging, textile and industrial filament end markets. Our Plastics & Chemicals Business segment, comprising the production of PP, EPS, CPL, fertilizers and other specialty and industrial chemicals, serves a wide range of markets, including the food and beverage packaging, consumer goods, automotive, construction, agriculture, oil industry and pharmaceutical end markets.

We own and operate nine plants in Mexico, seven plants in the United States, four plants in Brazil, three plants in Argentina, three plants in Chile and one plant in Canada. Our total assets as of June 30, 2019 were Ps. 115,177 million (US$6,009 million). The following table presents our total revenues and Adjusted EBITDA for the periods indicated.

	Year Ended December 31,				**Six Months Ended June 30,**		
	2016	**2017**	**2018**	**2018**	**2018**	**2019**	**2019**
	(Ps.)	**(Ps.)**	**(Ps.)**	**(US$)**	**(Ps.)**	**(Ps.)**	**(US$)**
					(Unaudited)		
				(in millions)			
Total revenues	90,192	98,998	134,523	6,993	62,888	62,992	3,286
Adjusted EBITDA[(1)].	12,425	7,483	20,607	1,071	12,569	5,761	300

(1) For a definition of Adjusted EBITDA, see "Presentation of Financial and Certain Other Information—Non-GAAP Financial Measures."

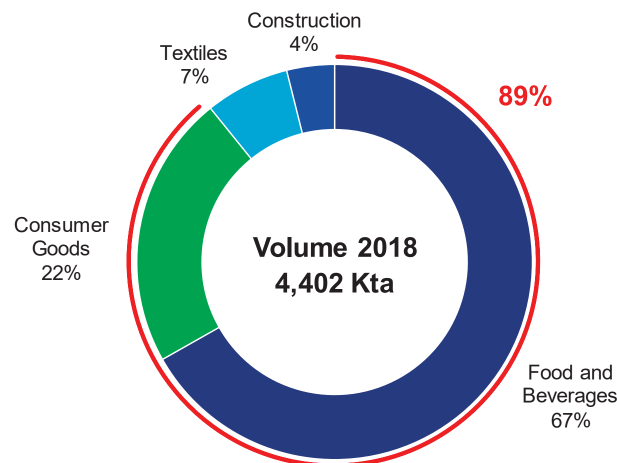
Our subsidiaries are involved in the production, marketing and sale of our products in the following industries:

Industry				**Alpek**	
Industry Segment	**Main Products**	**Representative End Markets**	**Typical End Users[(1)]**	**% of 2018 Revenues[(2)]**	**Main Geographic End Markets**
Polyester Chain Products	PTA, PET, rPET	- Food and beverage packaging - Personal care	- Coca Cola - Pepsi - Kraft Foods	Approx. 74%	- Mexico - United States - Brazil - Argentina - Canada - Colombia - Spain - Italy
	Polyester fibers	- Carpets - Non-woven - Apparel	- Hanes - Shaw - Fruit of the Loom		
Plastics & Chemicals Products	Polypropylene	- Food and beverage packaging - Consumer goods - Automotive - Medical	- Coca Cola - Pepsi - Alcoa - Becton Dickinson - Tupperware - Kimberly Clark	Approx. 25%	- Mexico - United States - Brazil - Chile - Argentina - China - Taiwan - Colombia - Central America and Caribbean [(3)] - Europe[(4)]
	Expandable polystyrene	- Construction - Packaging for appliances	- Whirlpool - Samsung - LG - Bosch		
	Caprolactam	- Textile/apparel - Tire cords - Engineering plastics	- Nike - Quadrant - Rhodia - Tornel - Mohawk		
	Industrial and specialty chemicals	- Crude oil industry - Automotive - Polyester - Hygiene - Pharmaceutical	- Bardahl - Procter & Gamble - Johnson & Johnson - Pemex		
	Fertilizers (ammonium sulfate)	- Agriculture	Diversified agricultural customers in central Mexico, mainly growers of sorghum and corn		

(1) Mix of current customers and non-customers of Alpek.
(2) Additional 1% represented by other small businesses.
(3) Central America and Caribbean includes Barbados, Belize, Costa Rica, Dominican Republic, Guatemala, Honduras, Jamaica, Nicaragua, Panama, El Salvador, Trinidad and Tobago and British Virgin Islands.
(4) Europe includes Germany, Spain, France, United Kingdom, Italy, Netherlands, Poland, Turkey and Lithuania.

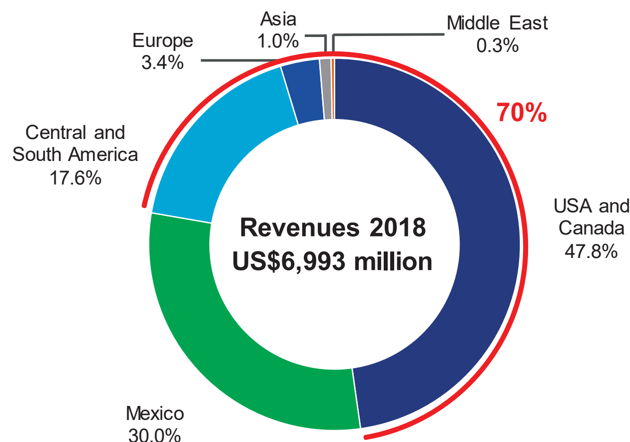
We estimate that for the year ended December 31, 2018, approximately 97% of of revenues were indexed to the US Dollar. Furthermore, approximately 89% of our products (based on sales volume) were used in the food and beverage packaging and consumer goods end markets, as shown by the following chart.

Breakdown of Sales Volume by End Market for the Year Ended December 31, 2018



For the year ended December 31, 2018, we sold our products in over 30 countries, with 70% of revenues from sales made to countries outside of Mexico, as shown by the following chart.

Breakdown of Revenues by Destination for the Year Ended December 31, 2018

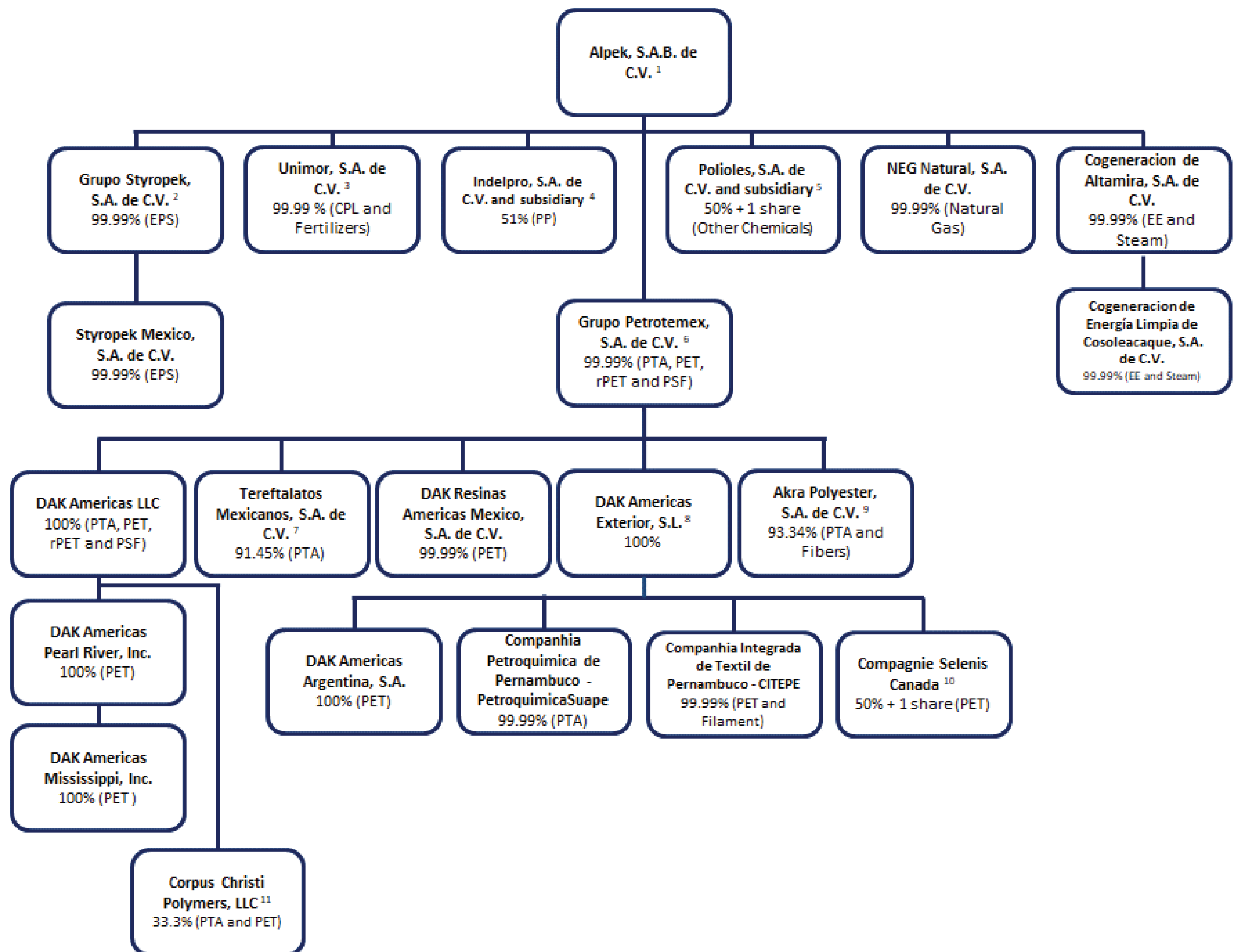


Corporate Information

Alpek is a sociedad anónima bursátil de capital variable (a publicly traded variable capital corporation) that is a holding company based in San Pedro Garza García, Nuevo León, and controlled by Alfa, a Mexican public company that is one of Mexico's largest conglomerates, based on revenues. Alpek was organized and exists under the laws of the United Mexican States. Alpek was incorporated on April 18, 2011, is registered with the Register of Property and Commerce of the State of Nuevo Leon under n. 126110*1, and has its principal executive office located at Ave. Gómez Morín 1111 Sur, Col. Carrizalejo, San Pedro Garza García, C.P. 66254, Nuevo León, México. Alpek's common shares are listed on the Mexican Stock Exchange (*Bolsa Mexicana de Valores, S.A.B. de*

C.V.). Our subsidiaries have operated for over 40 years. We have a successful history of managing strategic alliances, including our strategic alliances with BASF (since 1981), LyondellBasell (since 1992), Shaw Industries (since 2010) and with global chemical groups that provide us with access to what we believe are best-in-class manufacturing and applications technologies and technical expertise as well as advantageous sourcing of specialty products.

The following chart summarizes our corporate structure as of the date of this offering memorandum, including our principal subsidiaries, our percentage ownership in them and their principal products.



______

(1) Other non-material subsidiaries are Tereftalatos Mexicanos Gas, S.A. de C.V., Copeq Trading Co. and Grupo Alpek, S.A. de C.V.
(2) Other subsidiaries are Industrias Styropek, S.A. de C.V., Styropek, S.A., Styropek of Canada Corporation, Styropek USA, Inc., Styropek Exterior, SL, Aislapol, S.A., Styropek EPS DO Brasil, LTDA and Styropek Chile.
(3) Subsidiaries include Univex, S.A., among other non-material subsidiaries.
(4) LyondellBasell Industries Holdings B.V. owns 49.0% of the shares. Industrias Indelpro, S.A. de C.V. (personnel services company) is a subsidiary of this company.
(5) BASF de Mexico, S.A. de C.V. owns 50.0% minus one share. Industrias Polioles, S.A. de C.V. (personnel services company) is a subsidiary of this company.
(6) Among other non-material subsidiaries.
(7) BP Amoco Chemical Company owns approximately 8.55% of the shares.
(8) Other subsidiaries are DAK Americas Argentina and S.A, Ecopek, SA, among other non-material subsidiaries.
(9) BP Amoco Chemical Company owns approximately 6.65% of the shares. Industrias Fiqusa, S.A. de C.V. (personnel service company) is a subsidiary of this company.
(10) Control Pet, SA owns 49% minus one share of this company.

(11) APG Polytech USA Holdings, Inc. owns 33.3% and Indorama Ventures Corpus Christi Holdings, LLC owns 33.3%.

The following map and chart show the location of each of our production facilities and their installed capacity in Ktons per year.

		Site	PTA	PET	rPET	Fibers	PP	EPS	CPL	Other
Mexico	A	Monterrey				160				
(3,390 Kta)	B	Altamira	1,000				640	240		
	C	Salamanca							85	360
	D	Ocotlán								10
	E	Cosoleacaque	610	185						
	F	Lerma								100
USA	G	Cedar Creek		170	55					
(2,385 Kta)	H	Cooper River		170		150				
	I	Columbia	640	725						
	J	Pearl River		430						
	K	Richmond			45					
Canada *(144 Kta)*	L	Montreal		144						
Argentina	M	Zárate		190						
(224 Kta)	N	Pacheco			15					
	O	General Lagos						19		
Brazil	P	Guaratingueta						46		
(1,226 Kta)	Q	Ipojuca	640	450		90				
Chile	R	Santiago								5
(27 Kta)	S	Puerto Montt								2
	T	Concon						20		
Total Capacity: 7,396 Kta			2,890	2,464	115	400	640	325	85	477

Recent Acquisitions and Divestitures

Corpus Christi Acquisition

On March 21, 2018, Alpek announced that it had entered into a joint venture with Indorama Venture Holdings LP (“Indorama Holdings”) and Far Eastern Investment (Holding) Limited (“Far Eastern”), to create Corpus Christi Polymers LLC (“CC Polymers”). CC Polymers acquired the integrated PTA/PET site under construction and related assets in their current state in Corpus Christi, Texas, as well as certain intellectual property (the “Corpus Christi Project”), from M&G USA Corp, M&G Resins USA LLC, M&G Polymers USA LLC and M&G Waters USA LLC (together “M&G USA”). On December 21, 2018, we announced that CC Polymers obtained the necessary regulatory clearance from the United States Federal Trade Commission (“FTC”) to proceed with the purchase. Seven days later, the joint venture successfully completed the acquisition of the Corpus Christi Project for US$1.199 billion in cash and other capital contributions. For this purchase, Alpek contributed US$266 million in cash and US$133 million in other non-cash capital contributions associated with a portion of its secured claim with M&G with respect to supply rights in connection with amounts Alpek had paid to M&G under supply agreements prior to the M&G bankruptcy. In addition, Alpek obtained a US$67 million cash-credit for the remaining portion of its secured claim, subject to certain conditions. Upon completion of the project, each partner will have the right to receive one-third of the PTA and PET produced by the site, which is expected to have an annual capacity of 1.1 million tons of PET and 1.3 million tons of PTA. This will make this Corpus Christi plant the largest integrated PTA/PET plant in the Americas. Updated investment requirements and a specific timeline for

completion are expected by the end of 2019. However, we currently expect the PET section of the plant to begin operations in 2021 and the PTA section to begin operations in late 2022.

Petroquímica de Pernambuco - Acquisition of Brazilian Assets

In April 2018, we completed the purchase of Companhia Petroquímica de Pernambuco – PetroquímicaSuape ("Suape") and Companhia Integrada Têxtil de Pernambuco – CITEPE ("Citepe" and, together with Suape, the "Brazilian Assets") from Petróleo Brasileiro S.A. ("Petrobras"). We acquired Petrobras' 100% stake in the Brazilian Assets on a debt-free basis for an amount of US$435 million. Both companies operate the only integrated PTA/PET site in South America and added an annual installed capacity of 640 Ktons of PTA, 450 Ktons of PET, and 90 Ktons of texturized polyester filament. Furthermore, through this purchase, Alpek acquired the only PTA producer in South America and one of only three PET plants in South America, thereby becoming the owner of two of the three PET plants in South America.

Cogeneration Asset Sale

On January 6, 2019, Alpek announced that it had signed an agreement for the sale of its Cosoleacaque and Altamira cogeneration power plants, located in Mexico (the "Cogeneration Asset Sale"). Under the terms of the agreement, Alpek will sell all of its shares of the companies that own both facilities: Cogeneración de Altamira, S.A. de C.V. ("CGA") and Cogeneración de Energía Limpia de Cosoleacaque, S.A. de C.V. ("CELCSA"), for an aggregate amount of US$801 million to ContourGlobal Terra 3 S.à.r.l ("CG Terra 3"), a subsidiary of ContourGlobal PLC ("ContourGlobal"). In accordance with the purchase agreement, the price will be subject to certain post closing adjustments and is due on the closing date.

Additionally, Alpek has agreed under the terms of the purchase agreement for the Cogeneration Asset Sale to enter into a call option agreement in favor of CG Terra 3, whereby Alpek undertakes the obligation to sell all of its shares of the capital stock of Tereftalatos Mexicanos Gas, S.A. de C.V. (whose assets, among others, include gas pipelines that transport natural gas from the point of interconnection of the integrated national transport system to the point of consumption in Altamira) to CG Terra 3. The call option agreement will have a term of five years from the date of closing of the Cogeneration Asset Sale.

The transaction is subject to customary closing terms and conditions and has already received corporate approvals and authorization from the *Comisión Federal de Competencia Económica of Mexico*. This will be the largest asset sale in Alpek's history. We believe the net proceeds from the sale will further strengthen Alpek's financial position and will maintain a secure and competitive power and steam supply to our Mexican facilities from a world-class operator with a proven track-record. The Cogeneration Asset Sale is expected to close before the end of 2019 and could close before the consummation of this offering.

Acquisition of Perpetual Recycling Solutions

On January 9, 2019, Alpek announced that one of its subsidiaries had signed an agreement with Perpetual Recycling Solutions, LLC to acquire a PET recycling plant in Richmond, Indiana ("Perpetual"). The Perpetual PET recycling plant has an installed capacity to produce approximately 45,000 tons per year of high quality recycled PET flake. The acquisition was completed on January 31, 2019. This acquisition complements Alpek's existing food-grade PET recycling operations in Argentina and its fiber-grade PET recycling joint venture facility in Fayetteville, North Carolina.

Our Strengths

Throughout our history, we have developed a series of competitive strengths upon which we have built a successful business model. We believe that our key competitive strengths are:

- Market Leading Position in the Americas;
- Attractive Consumer-oriented Product Portfolio;
- Proven Track Record and Solid Growth;
- State-of-the-art Technology Yielding Low-Cost Position;
- Strong Free Cash Flow and Financial Performance;

- Portfolio Well Placed for Circular Economy Trends; and
- Experienced Management Team Supported by Strong Shareholder.

Market Leading Position in the Americas

We are one of the largest petrochemical companies in Mexico and in Latin America (based on 2018 revenues) with leading positions across our product offering in the Americas. According to Wood Mackenzie, we are one of the largest integrated players in the global polyester industry and the leading integrated polyester producer in North America.

The following table highlights our leading market positions as of December 31, 2018 based on installed capacity in our targeted geographies and end markets:

Products	Market Position(1)	Share(1)
PTA	#1 in the Americas	48%(2)
PET	#1 in the Americas	44%(2)
	#2 worldwide	8%(2)
rPET	Leading recycler in the United States(3)	
Polyester Staple Fiber(4)	#2 in North America	31%(2)
EPS	#1 in the Americas	47%(5)
PP	#1 in Mexico	100%(3)
CPL	#1 in Mexico	100%(3)

(1) Based on installed capacity.
(2) Source: Wood Mackenzie.
(3) Source: Alpek's internal estimates.
(4) Excludes filaments.
(5) Source: Alpek's review of publicly available market data.

Our leading market positions are reinforced by significant competitive advantages:

- Our ability to continuously innovate allows us to develop and improve manufacturing technologies and production processes, enhance value-added attributes of our products and reduce our cost structure.
- We are suppliers to important consumer goods brands. We maintain long-term relationships with customers across our portfolio through high-quality customer service and superior technical responsiveness. Our commercial, marketing, research and development organizations allow us to meet specific customer performance requirements and provide our customers with attractive and competitive value initiatives.
- Our long-standing relationships with our strategic alliance partners allow us to access key manufacturing technologies, technical expertise and products.
- We have grown our footprint in the Americas across our product portfolio through strategic acquisitions, particularly in the Polyester Chain Business and in the EPS Business, which has allowed us to further enhance our ability to establish valuable and attractive product offerings and broaden our customer base in that market. See "Business."
- Based on our experience and industry knowledge, we believe that our best-in-class infrastructure would require large capital investments and significant lead time to replicate.

Attractive Consumer-oriented Product Portfolio

We focus on products and end markets that we believe offer the highest growth potential and ability to expand margins and that are more likely to provide stable financial performance through economic cycles. Our products are used in what we believe are recession-resistant end markets such as the food and beverage packaging and consumer goods end markets.

In our Polyester Chain Business, our customer base comprises mainly major producers of PET that purchase our PTA, as well as companies that convert PET into plastic bottles and other containers, known in the industry as "converters," and in turn sell them to major consumer goods companies. Many of the world's most popular consumer brands use our products in their containers, including Coca Cola, Pepsi, Heinz, P&G, Nestle and Kraft Foods, among others.

In the Plastics & Chemicals Business we serve a variety of customers through our different products. For example, our PP is used by manufacturers to produce food and consumer grade packaging, which is then sold to major consumer goods companies. Our EPS business supplies the construction industry with a range of applications for insulation and/or structure design and supplies electronic and home appliances producers that use our products for packaging. Our Caprolactam business serves industrial customers through a variety of products, including gears, tire treads, carpets and textiles.

Proven Track Record and Solid Growth

Throughout our history, we have executed a focused strategy of organic growth and value-creating acquisitions. We have a proven track record of integrating and succesfuly managing acquired assets. In addition, we have built a product portfolio and trade leadership that have strategically positioned us to benefit from high-growth emerging markets and the U.S. economic recovery. As a result, since 1986, we have grown our sales volume at a CAGR of 8.8%.

We have grown our production capacity through high-return, capital-efficient debottleneckings and expansions. For example, in 1998 we debottlenecked our first PP line, increasing its capacity from 100 Ktons to 240 Ktons and further increased the site's capacity to 640 Ktons in 2008 by adding a second production line. Furthermore, we have converted our PP facility into what we believe is one of the most competitive in North America.

Similarly, in 2017 we completed the latest expansion of our EPS site in Altamira, Mexico, turning it into the largest EPS producing facility in the Americas and one of the top ten largest EPS sites worldwide. The site, which started in 1995 with an installed capacity of approximately 35 Ktons, has reached a nominal capacity of 240 Ktons, allowing Alpek to further leverage on its cost-efficient process and large-scale optimization.

In 2001 we acquired certain idle PTA, PET and polyester staple fiber assets in the United States. In January and August 2011, we executed the acquisitions of the Columbia Assets and Wellman, respectively. Most recently, we further enhanced our leading position in the Polyester Chain Business through our joint venture acquisition of Selenis in Canada in 2017, the acquisition of Suape and Citepe in Brazil in 2018 and the acquisition of Perpetual in January 2019. In our Plastics & Chemicals Business, we have continued to expand our EPS and molded EPS capacity in South America through the acquisition of a total of five different plants from BASF in 2015 and 2016.

We believe we have transformed these assets into leading producers within their respective markets. We improved the profitability of these assets by reducing fixed costs, increasing asset utilization, consolidating our product offerings, focusing our product mix on products and markets with higher margins and focusing on the elimination of waste and non-value-added activities. We believe these measures, when coupled with sustainability initiatives aimed at reducing energy needs and increasing environmental awareness, have helped transform these assets and businesses into trade leaders. With respect to the acquisition of the Brazilian Assets, we believe the integration process is occurring faster than expected, we have already improved the operations and margins of these assets and are in the process of extracting synergies from them.

We intend to continue to use our strengths and competency to grow our business both organically and through acquisitions.

State-of-the-art Techonology Yielding Low-Cost Position

We believe we are one of the lowest-cost producers in North America based on our:

- ***State-of-the-art production technology.*** We use industry leading production technologies across our product portfolio that help reduce our production costs by being more efficient than older technologies.

- ***Large-scale production facilities.*** According to Wood Mackenzie and industry consultants, we operate some of the largest manufacturing plants in the Americas for our products, including our world-scale polyester production facilities in Altamira and Cosoleacaque in Mexico, our polyester facilities in Columbia, South Carolina, and Pearl River, Mississippi, in the U.S., our polyester facilities in Ipojuca, Brazil, our EPS facilities in Altamira, Mexico, and our PP facility in Altamira, Mexico.

- ***High utilization rates and energy efficiency***. We believe that we operate our plants at industry leading utilization rates, which helps minimize our per-unit production costs as well as promote higher energy efficiency. According to internal calculations, our PTA and PET capacity utilization rate for the last three years was 96% and 89%, respectively.

- ***Strategically located assets.*** Our assets are in close proximity to raw material supplies (principally on the U.S. Gulf Coast or close to seaports in Brazil, Argentina and Chile), product transportation infrastructure and end markets, which helps reduce logistics costs. In addition, our long-term relationships with suppliers, supported by our large-scale consumption and long-term contracts, give us strategic access to raw materials;

- ***Low overhead costs.*** We maintain low overhead costs and a lean, flexible organizational structure throughout our facilities.

With respect to our Caprolacam business, we rank among the three lowest cost producers worldwide. Additionaly, in our polyprolelene business, Alpek has maintained a strong competitive position compared to its peers in the region. Industry benchmarks place Alpek's margin-over-conversion-cost ratio at a higher level than 75% of the North American producers. We intend to maintain and grow our cost advantage through continued investment in cost reduction and efficiency-enhancing projects.

We have developed and acquired cutting-edge production technologies that we believe have improved our cost position and enhanced the quality and performance of our products. We believe the IntegRex® technology provides us with state-of-the-art PTA and PET production technology. Our technology was licensed to increase the PTA capacity of a plant in The Netherlands and will be used in our joint-ownership PTA/PET plant under construction in Corpus Christi. The principal benefits of this technology are:

- conversion costs, which we estimate to be lower than competing technologies and lower capital investments, through the reduction of steps and machinery necessary for the production of PTA and PET;
- low investment per ton of installed capacity;
- suitable for large-scale application; and
- lower environmental impact, due to a reduction in wastewater and solid by-product, and savings in energy consumption.

Our PP production process also uses state-of-the-art technologies: Spheripol, the most widely used PP technology in the world, and Spherizone, the latest technology being licensed by LyondellBasell. These technologies allow us to produce PP with a wider range of properties. Additionally, our specialty and chemicals businesses benefit from close technological collaboration with our strategic alliance partner BASF.

This robust technological base underpins our low-cost advantage, our operational excellence and our ability to develop new products.

Strong Free Cash Flow and Financial Performance

We have demonstrated strong financial performance throughout the business cycle. For the years ended December 31, 2016, 2017 and 2018 and the six months ended June 30, 2019, we had revenues of Ps. 90,192 million (US$4,834 million), Ps. 98,998 million (US$5,230 million), Ps. 134,523 million (US$6,993 million) and Ps. 62,992 million (US$3,286 million) and Adjusted EBITDA of Ps. 12,425 million (US$666 million), Ps. 7,483 million

(US$395 million), Ps. 20,607 million (US$1,071 million) and Ps. 5,761 million (US$300 million), respectively. Our robust financial performance in the long term has been driven by the following key elements:

- for the year ended December 31, 2018, we estimate that approximately 89% of our products (on the basis of sales volume) were ultimately used to produce plastic products and containers for the beverage, food and consumer goods end markets, which tend to be less susceptible to economic downturns;
- for the year ended December 31, 2018, approximately 49% of our sales were in emerging markets, with high demand growth rates;
- access to competitively sourced raw materials;
- our ability to pass a substantial portion of raw material price increases to our customers; and
- our low-cost position.

We have also been able to turn potential hardships into opportunities. During 2017, M&G, one of our largest PTA customers at the time, faced significant financial difficulties. Several subsidiaries of M&G were in default on payments associated with the supply of PTA. This forced us to temporarily halt supply to both their Mexican and Brazilian operations. Additionally, one of their US subsidiaries, M&G Resins USA LLC, halted the construction on their integrated PTA-PET plant in Corpus Christi with which we had a 500 ktons supply rights based on our US$435 million investment. As a result, our Adjusted EBITDA was affected and temporarily brought our net leverage up from 1.7x as of December 31, 2016 to 3.4x as of December 31, 2017. However, based on Alpek's positioning within M&G's restructuring process, combined with strong operational performance from the rest of our businesses, we were able to post Adjusted EBITDA of US$1.1 billion in 2018 and reduce our net leverage to 1.7x as of December 31, 2018. We were also able to emerge from M&G's Corpus Christi bankruptcy with shared ownership of the Corpus Christi Project (along with Indorama and FENC) as well as US$200 million in credit towards the purchase and future capital expenditure contributions.

Portfolio Well Placed for Circular Economy Trends

Alpek is in a strong position to capitalize on new customer demand for recycled packaging content. Among plastics, PET, whose traits have made it the most used beverage packaging material, has the highest recycling rate in the world. Furthermore, Mexico has one of the highest PET recycling rates worldwide. PET's high recyclability rate is driven by the ability for consumenrs to easily identify and separate PET packaging as well as financial incentives for its collection, which vary by region and country. When compared to aluminum or glass, PET has both the lowest cost as well as the lowest carbon footprint per bottle. Alpek is already actively participating in the recycling market through its three recycling operations in the United States and Argentina. We expect to continue to grow out footprint in this segment and leverage our existing relationships with customers to sell both new and recycled PET to satisfy consumer product needs.

Experienced Management Team Supported by Strong Principal Shareholder

We have a senior management team with an average of more than 30 years of industry experience and a seasoned and knowledgeable group of operating and technical managers in each of our businesses. Our team has been responsible for the expansion of Alpek through organic growth and acquisitions, and has a proven track record of integrating and optimizing acquired assets and implementing new projects and start-up operations. For example, since our acquisition of the Brazilian Assets in April 2018, we have improved our operating rate, and we have also achieved important synergies in areas such as procurement and operations. Additionally, our principal shareholder, Alfa, is a leading Latin American conglomerate with an established culture of operational excellence, conservative corporate governance, prudent management policies and reliability as a partner. These values form the core of our businesses on which our management team intends to build.

Our Strategies

Throughout its history, Alpek has executed a growth strategy based on a combination of organic growth, acquisitions and strategic alliances. Alpek's focus has been to identify attractive petrochemical chains, develop competitive advantages, achieve operational excellence and strengthen its low-cost position in order to achieve

profitable growth, increase margins and generate a solid and sustainable cash flow. Our strategic priorities are divided into three main elements: Strengthen the Core Business, Sustained Growth and Product Sustainability.

Strengthen the Core Business

Improve Cost Competitiveness. We intend to continue to pursue operational excellence initiatives in order to ensure profitability throughout the industry cycles. We strive to maintain a low-cost structure through continued operating and safety excellence resulting in high-capacity utilization rates at our large-scale production facilities. We also intend to continue to implement additional cost and efficiency improvements, including the replacement of our older and less efficient operations with new large-scale plants using our latest proprietary low-cost technologies.

Enhance Position in the Americas. Alpek is a leading petrochemical player in the Americas and we intend to continue to offer high value solutions to our customers. We intend to maintain our standing as a trade leader, supported by close collaboration and long-standing relationships with our key customers. We plan to continue being our customers' supplier of choice by maintaining an emphasis on:

- unparalleled responsiveness to customer needs;
- superior technical support;
- continuous innovation in products and services by working closely with customers to better meet their needs; and
- sustainable products and solutions.

Secure competitive feedstock/power supply. We will continue developing long-term competitive sourcing for our key raw materials, leveraging our capacity, the convenient geographic location of our operations and our strong logistics infrastructure. Additionally, we will continue to seek further energy cost reduction opportunities and continue to seek opportunities to improve manufacturing efficiency through the use of diversified fuel sources and energy integration.

Attract, Develop and Retain the Best Human Capital. Our human capital has shaped us since our earliest stages. We do not believe we could have fostered and achieved the success we have had without the support of a top-performing, goal-oriented and highly skilled human capital base. Alpek will continue to actively invest in attracting, developing and retaining the best human capital in all jurisdictions in which we operate. We expect to further benefit from the practices of the businesses we acquire.

Sustained Growth

Deliver returns on recent investments. In recent years, Alpek has invested over US$1 billion in various projects, including the acquisitions of Suape and Citepe, the Corpus Christi Project, and the Perpetual acquisition, among others. We intend to leverage our capabilities and operational expertise to ensure the expected returns, improve our profitability and further enhance our capabilities in the markets we serve.

Growth in Adjacent Markets. We will continue to invest in capital efficient high-return organic growth opportunities throughout our product portfolio, ranging from large-scale expansions to debottlenecking projects. Additionally, we will further seek to diversify our product portfolio, with an emphasis on adjacent markets and higher margin products and plan to continue to broaden our customer base.

Pursue vertical integration. Alpek is currently exploring opportunities to invest in assets that would provide vertical integration into its raw material feedstocks (Paraxylene, MEG and Propylene among others). We believe that doing so would help secure the company's raw material needs at attractive prices into the future, as well as help capture additional margin associated with the production of these raw materials.

Strategic and Opportunistic M&A. We intend to continue evaluating and pursuing value-accretive acquisitions in the markets where we participate or in new regions with high potential such as Europe, in

order to enhance our position as a global petrochemical player while maintaining a prudent approach to financial management.

Invest in and Grow Our Technology Leadership Position. We will seek to leverage our industry leading technology portfolio and business knowledge, seeking licensing, strategic alliance and joint venture opportunities or pursuing new integrated projects worldwide through the use of IntegRex® technologies in our PTA/PET businesses. We intend to continue developing proprietary technologies to maintain our leadership in the PTA/PET industry. We also intend to continue investing in our research and development program to further develop and continually improve our proprietary technologies. We believe that investing in and growing our technology leadership position will help us sustain and enhance our profitability, improve the efficiency of our operations and enhance the return on our investment.

Product Sustainability

Enhance recycled content offering. Alpek is actively working on incorporating existing mechanical recycling solutions into its portfolio via acquisitions, while at the same time developing chemical recycling solutions, which would return PET to its base feedstocks. This will allow Alpek to continue to participate in the recycling of PET and offer our customers solutions to service both their rPET flake and single pellet requirements.

Expand PET recycling capacity. We actively participate in the recycling market with recycling operations in the United States and Argentina. We are one of the largest recyclers of PET bottles in the United States. With the recent acquisition of Perpetual, Alpek increased its rPET capacity to 115 Ktons of recycled material. Additionally, on July 24, 2019, the Company announced that it had joined The Recycling Partnership, a non-profit organization that leverages corporate partner funding to transform recycling in states, cities and communities across the United States. The organization estimates that by the end of 2019, it will have diverted 230 million pounds of new recyclables, saved 465 million gallons of water, avoided 250 thousand metric tons of greenhouse gases, and driven significant reductions in targeted contamination rates. Such initiatives demonstrate our commitment to the collection and recycling of plastics, and, as such, we will continue to invest in both organic or inorganic opportunities that will allow us to offer additional sustainable high-value products to our customers.

Support customer initiatives and drive circular economy growth. In recent years, Alpek's customers have developed a series of initiatives aimed at fostering a circular economy, incorporating a higher percentage of recycled materials and increasing the biodegradability rate of products. Given our long-standing relationships, as well as an alignment with these initiatives, Alpek will continue to expand its footprint and recyclying capabilities actively participating in supporting these activities.

Recent Developments

Alpek joins The Recycling Partnership

On July 24, 2019, Alpek announced that its subsidiary, Alpek Polyester, joined The Recycling Partnership as an active member of the organization. The Recycling Partnership helps communities strengthen their recycling programs by providing funding for curbside carts, the infrastructure needed to recover recyclables from multi-family homes, as well as critical recycling education and operational programs. The non-profit organization leverages corporate partner funding to transform recycling in states, cities and communities all across the United States. As the only organization in the United States that engages the full recycling supply chain from the corporations that manufacture products and packaging to local governments charged with recycling to industry end markets, haulers, material recovery facilities, and converters, it positively impacts recycling at every step in the process. Through initiatives like this, the Company supports its efforts to improve the availability of recycled rPET to meet growing customers' needs for higher rPET content in the end-use products as well as reaffirms its commitment to a sustainable circular economy.

THE OFFERING

The summary below describes the principal terms of the notes. Certain of the terms and conditions described below are subject to important limitations and exceptions. The "Description of the Notes" section of this offering memorandum contains a more detailed description of the terms and conditions of the notes.

Issuer	Alpek, S.A.B. de C.V.
Notes Offered	US$500,000,000 aggregate principal amount of 4.250% Senior Notes due 2029.
Issue Price	4.250%, plus accrued interest, if any, from September 18, 2019.
Maturity Date	September 18, 2029.
Issue Date	September 18, 2019.
Interest Rate and Payment Dates	Interest will accrue at an annual rate of 4.250% and will be payable in cash semi-annually on March 18 and September 18 of each year, beginning on March 18, 2020.
Subsidiary Guarantors	The notes will be fully and unconditionally guaranteed on a senior unsecured basis by certain of our subsidiaries identified in "Description of the Notes — General." As of and for the six months ended June 30, 2019, the Subsidiary Guarantors (in addition to Alpek, on a stand-alone basis) accounted for 64% of our total assets and 52% of our Adjusted EBITDA on a consolidated basis.
Ranking	The notes and subsidiary guarantees will be the senior unsecured obligations of the Issuer and the Subsidiary Guarantors, respectively, and will rank: • equal in right of payment to all other existing and future senior unsecured indebtedness of the Issuer and each of the respective Subsidiary Guarantors; and • junior to certain statutory obligations given preference under applicable law, including labor, social security and tax claims. The notes and the subsidiary guarantees will effectively rank junior to all existing and future secured indebtedness of the Issuer and each of the Subsidiary Guarantors, respectively, to the extent of the value of the assets securing such indebtedness. The notes and the subsidiary guarantees will be structurally subordinated to all claims of creditors (including trade creditors and preferred stockholders, if any), of each of our non-guarantor subsidiaries. As of June 30, 2019, we and our subsidiaries had total consolidated indebtedness of Ps. 45,360 million (US$2,366 million). Of this amount, Ps. 16,379 million (US$854 million) was unsecured indebtedness of the Subsidiary Guarantors, Ps. 1,814 million (US$95 million) was unsecured indebtedness of the non-guarantor subsidiaries, Ps. 2,108 million (US$110 million) was secured indebtedness of the Subsidiary Guarantors and Ps. 1,178 million

	(US$61 million) was secured indebtedness of the non-guarantor subsidiaries. As of June 30, 2019, on a stand-alone basis the Issuer had Ps. 23,880 million (US$1,246 million) of outstanding indebtedness, none of which was secured indebtedness. As of December 31, 2018, the Issuer had total assets of Ps. 7,859 million (accounting for 6% of our consolidated total assets), and total liabilities of Ps. 27,649 million (accounting for 36% of our consolidated total liabilities), and for the year ended December 31, 2018, the Issuer had Adjusted EBITDA of Ps. (125) million (accounting for (1)% of our consolidated Adjusted EBITDA). As of December 31, 2018, the Subsidiary Guarantors had total assets of Ps. 74,429 million (accounting for 58% of our consolidated total assets), and total liabilities of Ps. 33,524 million (accounting for 44% of our consolidated total liabilities), and for the year ended December 31, 2018, the Subsidiary Guarantors had Adjusted EBITDA of Ps. 13,338 million (accounting for 65% of our consolidated Adjusted EBITDA). As of December 31, 2018, our non-guarantor subsidiaries had total assets of Ps. 46,000 million (accounting for 36% of our consolidated total assets), and total liabilities of Ps. 15,561 million (accounting for 20% of our consolidated total liabilities), and for the year ended December 31, 2018, our non-guarantor subsidiaries had Adjusted EBITDA of Ps. 7,394 million (accounting for 36% of our consolidated Adjusted EBITDA). As of December 31, 2018, Grupo Petrotemex, S.A. de C.V., one of our Subsidiary Guarantors, had total assets of Ps. 6,527 million (accounting for 5% of our consolidated total assets), and total liabilities of Ps. 9,447 million (accounting for 12% of our consolidated total liabilities), and for the year ended December 31, 2018, Grupo Petrotemex, S.A. de C.V. had Adjusted EBITDA of Ps. 4,769 million (accounting for 23% of our consolidated Adjusted EBITDA). For more information on Grupo Petrotemex, S.A. de C.V., see "Business—Grupo Petrotemex, S.A. de C.V." As of December 31, 2018, DAK Americas LLC, one of our Subsidiary Guarantors, had had total assets of Ps. 27,176 million (accounting for 21% of our consolidated total assets), and total liabilities of Ps. 9,727 million (accounting for 13% of our consolidated total liabilities), and for the year ended December 31, 2018, the DAK Americas LLC had Adjusted EBITDA of Ps. 2,718 million (accounting for 13% of our consolidated Adjusted EBITDA). For more information on DAK Americas LLC, see "Business—DAK Americas LLC."
Optional Redemption	The Issuer may redeem the notes at its option, in whole or in part, at any time and from time to time, prior to June 18, 2029 (the date that is three months prior to the scheduled maturity of the notes), at a redemption price equal to the greater of 100% of the outstanding principal amount of the notes to be redeemed and the applicable "make-whole" amount, plus in each case accrued and unpaid interest and Additional Amounts, if any, to the redemption date. See "Description of the Notes—Redemption—Optional Make-Whole Redemption."

	In addition, the Issuer may redeem the notes at its option, in whole or in part, at any time and from time to time, beginning on June 18, 2029 (the date that is three months prior to the scheduled maturity of the notes), at a redemption price equal to 100% of the outstanding principal amount of the notes to be redeemed, plus accrued and unpaid interest and Additional Amounts, if any, to the redemption date. See "Description of the Notes—Redemption—Optional Redemption without a Make-Whole Premium."
Tax Redemption	The Issuer may redeem the notes, in whole but not in part, at 100% of their principal amount plus accrued interest and Additional Amounts, if any, to the redemption date, upon the occurrence of specified events relating to Mexican tax law that result in higher withholding taxes, with respect to payments of interest or amounts deemed interest under the notes, than the withholding taxes payable on the date hereof. See "Description of the Notes— Redemption — Optional Redemption upon Tax Event."
Additional Amounts	Payments of interest or amounts deemed interest on the notes to investors that are non-residents of Mexico for tax purposes will generally be subject to Mexican withholding taxes imposed at a rate of 4.9%. Subject to certain specified exceptions, the Issuer and the Subsidiary Guarantors will, jointly and severally, pay such additional amounts as may be required so that the net amount received by the holders of the notes in respect of principal, interest or other payments on the notes, after any such withholding or deduction, will not be less than the amount each holder of notes would have received if such withholding or deduction had not applied. See "Description of the Notes — Additional Amounts."
Change of Control	Upon the occurrence of a Change of Control Triggering Event (as defined in "Description of the Notes"), the Issuer will be required to make an offer to purchase the notes at a purchase price equal to 101% of the principal amount thereof, plus any accrued and unpaid interest and Additional Amounts, if any, through the purchase date. See "Description of the Notes — Change of Control Triggering Event."
Further Issuances......................................	The Issuer may, from time to time, without notice to or consent of the holders of the notes, create and issue an unlimited principal amount of additional notes offered pursuant to this offering memorandum, subject to limitations described in "Description of the Notes—General."
Certain Covenants	The indenture will contain certain covenants, including limitations on liens, limitations on sale and leaseback transactions, and limitations on consolidations, mergers, and transfers of assets. However, all of these limitations and restrictions are subject to a number of significant exceptions. See "Description of the Notes—Covenants."
Use of Proceeds...	We intend to use the net proceeds from this offering for general corporate purposes, which may include the repayment or retirement of indebtedness. See "Use of Proceeds."

Transfer Restrictions	We have not and will not register the notes under the Securities Act or the securities laws of any other jurisdiction. The notes are subject to restrictions on transfer and may only be offered in transactions exempt from or not subject to the registration requirements of the Securities Act. See "Transfer Restrictions." As required under the Mexican Securities Market Law, we will notify the CNBV of the offering of the notes outside of Mexico and the terms and conditions of the offering as required under applicable law. The notes will not be registered with the National Securities Registry and may not be offered or sold publicly or otherwise be subject to brokerage activities in Mexico, except that the notes may be sold to institutional and qualified investors that qualify as such under Mexican Law, pursuant to the private placement exemption set forth in Article 8 of the Mexican Securities Market Law and regulations therunder.
Taxation	You should consult your tax advisor with respect to the Mexican and U.S. tax considerations relating to purchasing, holding or disposing of the notes in light of your own particular situation and with respect to any tax consequences arising under the laws of any federal, state, local, foreign or other taxing jurisdiction. See "Taxation" for a summary of certain Mexican income tax considerations and U.S. federal income tax considerations of an investment in the notes.
Governing Law	The indenture, the notes and the subsidiary guarantees will be governed by the laws of the State of New York.
Listing of the Notes	Application has been made to Euronext Dublin for the notes to be admitted to the Official List and to trading on the Global Exchange Market of Euronext Dublin. We cannot assure you that this application will be accepted.
Trustee, Registrar, Transfer Agent and Paying Agent	The Bank of New York Mellon.
Irish Listing Agent	The Bank of New York Mellon SA/NV, Dublin Branch.
Form and Denomination	The Issuer will issue the notes in minimum denominations of US$200,000 and integral multiples of US$1,000 in excess thereof and the notes will, once issued, be represented by one or more global notes. The global notes representing the notes will be deposited with a custodian for DTC and registered in the name of Cede & Co., as nominee for DTC.
Settlement	The notes will be delivered in book-entry form through the facilities of DTC for the accounts of its direct and indirect participants, including Euroclear and Clearstream.
Risk Factors	See "Risk Factors" in this offering memorandum for a discussion of certain relevant factors you should carefully consider before deciding to invest in the notes.

SUMMARY HISTORICAL FINANCIAL DATA AND OTHER INFORMATION

You should read the following summary historical financial data and other information in conjunction with our Annual Audited Financial Statements and our Interim Unaudited Financial Statements, and the information set forth in the sections "Presentation of Financial and Certain Other Information," "Selected Historical Financial Data and Other Information" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this offering memorandum.

The financial information set forth below as of December 31, 2017 and 2018 and for the years ended December 31, 2016, 2017 and 2018 has been derived from our Annual Audited Financial Statements prepared in accordance with IFRS contained elsewhere in this offering memorandum. The financial information set forth below as of June 30, 2019 and for the six months ended June 30, 2018 and 2019 has been derived from our Interim Unaudited Financial Statements prepared in accordance with IAS 34 contained elsewhere in this offering memorandum.

	For the Year Ended December 31,				For the Six Months Ended June 30,		
	2016	2017	2018	2018[1]	2018	2019	2019[2]
	(Ps.)	(Ps.)	(Ps.)	(US$)	(Ps.)	(Ps.) (Unaudited)	(US$)
				(in millions)			
Income Statement Data:							
Revenues	90,192	98,998	134,523	6,993	62,888	62,992	3,286
Cost of sales	(76,943)	(88,598)	(116,519)	(6,057)	(53,978)	(57,071)	(2,977)
Gross profit	13,249	10,400	18,004	936	8,910	5,921	309
Selling expenses	(1,578)	(1,747)	(2,136)	(111)	(1,027)	(1,013)	(53)
Administrative expenses	(2,043)	(2,080)	(3,166)	(165)	(1,501)	(1,413)	(74)
Other income, net	235	335	4,564	237	4,773	326	17
Income before impairment of intangible assets and trade receivables	9,863	6,908	17,266	897	11,155	3,821	199
Reversal of impairment of intangible assets (impairment of intangible assets and trade receivables)	-	(9,762)	3,936	205	-	-	-
Operating income (loss)	9,863	(2,854)	21,202	1,102	11,155	3,821	199
Financial income	285	198	442	23	201	360	19
Financial expenses	(1,414)	(1,482)	(2,183)	(113)	(990)	(1,329)	(69)
Gain (loss) due to exchange fluctuation, net	(1,380)	(432)	(1,042)	(54)	499	185	10
Impairment of financial assets	-	(1,694)	-	-	-	-	-
Financial result, net	(2,509)	(3,410)	(2,783)	(145)	(290)	(784)	(41)
Equity in income of associates and joint ventures	(3)	(4)	(30)	(2)	(9)	(4)	-
Income (loss) before taxes	7,351	(6,268)	18,389	956	10,856	3,033	158
Income taxes	(2,358)	1,713	(3,455)	(180)	(1,305)	(944)	(49)
Net consolidated income (loss)	4,993	(4,555)	14,934	776	9,551	2,089	109
Earnings (losses) per share	1.71	(2.59)	6.44	0.33	4.17	0.75	0.04
Weighted average outstanding shares (millions of shares)	2,117	2,117	2,118	2,118	2,117	2,118	2,118

	As of December 31,			As of June 30,	
	2017	2018	2018[1]	2019	2019[2]
	(Ps.)	(Ps.)	(US$)	(Ps.)	(US$)
				(Unaudited)	
			(in millions)		
Statement of Financial Position Data:					
Current assets:					
Cash and cash equivalents	8,795	4,168	212	5,493	287
Restricted cash	763	3	0	3	0
Trade and other accounts receivable, net.	15,817	21,934	1,114	19,521	1,018
Inventories	16,364	24,511	1,245	18,923	987
Derivative financial instruments	148	30	2	9	0
Prepayments	305	469	24	577	30
Other	-	-	-	8,604	449
Total current assets	42,192	51,115	2,597	53,130	2,772
Non-current Assets:					
Property, plant and equipment, net	41,535	47,033	2,390	38,220	1,994
Right of use asset, net	-	-	-	3,243	169
Goodwill and intangible assets, net	4,065	4,368	222	4,166	217
Deferred income taxes	2,424	1,384	70	1,411	74
Prepayments	31	38	2	16	1
Other non-current assets	3,531	15,959	811	14,991	782
Total non-current assets	51,586	68,782	3,495	62,047	3,237
Total assets	93,778	119,897	6,092	115,177	6,009
Current liabilities:					
Debt	7,408	10,118	514	11,341	592
Lease liability	-	-	-	927	48
Trade and other accounts payable	19,783	26,051	1,324	19,258	1,005
Income taxes payable	573	1,279	65	654	34
Derivative financial instruments	230	1,047	53	1,450	76
Provisions	25	81	4	49	3
Other	-	-	-	761	40
Total current liabilities	28,019	38,576	1,960	34,440	1,797
Non-current liabilities:					
Debt	26,958	30,012	1,524	30,733	1,603
Lease liability	-	-	-	2,359	123
Derivative financial instruments	473	283	14	244	13
Provisions	155	1,107	56	1,100	57
Deferred income taxes	4,403	4,752	241	3,801	198
Income tax payable	623	469	24	403	21
Employees' benefits	1,061	1,099	56	1,121	58
Other non-current liabilities	422	436	22	391	20
Total non-current liabilities	34,095	38,158	1,939	40,152	2,095
Total liabilities	62,114	76,734	3,899	74,592	3,891
Total stockholders' equity	31,664	43,163	2,193	40,585	2,117

	For the Year Ended December 31,				For the Six Months Ended June 30,		
	2016	2017	2018	2018[1]	2018	2019	2019[2]
	(Ps.)	(Ps.)	(Ps.)	(US$)	(Ps.)	(Ps.)	(US$)
						(Unaudited)	
				(in millions)			
Cash Flow Data:							
Net cash generated from operating activities	6,019	7,225	8,261	429	4,436	5,324	278
Net cash used in investing activities	(6,212)	(7,601)	(15,489)	(805)	(9,262)	(1,743)	(91)
Net cash provided by (used in) financing activities	(4,209)	5,799	2,990	155	745	(2,210)	(115)
Other Financial Data:							
Adjusted EBITDA[3]	12,425	7,483	20,607	1,071	12,569	5,761	300

(1) Translated into U.S. Dollars, solely for the convenience of the reader, using an exchange rate of (i) Ps. 19.6829 per U.S. Dollar, the Official Exchange Rate in effect on December 31, 2018, with respect to statement of financial position data and

(ii) Ps. 19.2380 per U.S. Dollar, the average of the Official Exchange Rate on each day during the year ended December 31, 2018, with respect to financial information other than statement of financial position data. These convenience translations should not be construed as representations that the Mexican Peso amounts actually represent such U.S. Dollar amounts or could be converted into U.S. Dollars at the specified rate or at all. See "Exchange Rates."

(2) Translated into U.S. Dollars, solely for the convenience of the reader, using an exchange rate of (i) Ps. 19.1685 per U.S. Dollar, the Official Exchange Rate in effect on June 30, 2019, with respect to statement of financial position data and (ii) Ps. 19.1726 per U.S. Dollar, the average of the Official Exchange Rate on each day during the six months ended June 30, 2019, with respect to financial information other than statement of financial position data. These convenience translations should not be construed as representations that the Mexican Peso amounts actually represent such U.S. Dollar amounts or could be converted into U.S. Dollars at the specified rate or at all. See "Exchange Rates."

(3) Adjusted EBITDA has been included solely because we believe that Adjusted EBITDA enhances the understanding of our financial performance. We also believe Adjusted EBITDA is useful because it presents operating results on a basis unaffected by capital structure and taxes. Adjusted EBITDA, however, is not a measure of financial performance under IFRS and should not be considered as an alternative to net consolidated income or operating income as a measure of operating performance or to cash flows from operating activities as a measure of liquidity. Adjusted EBITDA has material limitations that impair its value as a measure of our overall profitability since it does not address certain ongoing costs of our business that could significantly affect profitability such as financial expenses, income taxes, depreciation and amortization. We define Adjusted EBITDA as operating income after adding back or subtracting, as the case may be, other income (expenses), depreciation and amortization and the impairment of long-lived assets. Our calculation of Adjusted EBITDA may not be comparable to other companies' calculation of similarly titled measures. See "Presentation of Financial Information and Certain Other Information - Non-GAAP Financial Measures." Our Adjusted EBITDA includes EBITDA attributable to our strategic alliances. The following table sets forth a reconciliation of Adjusted EBITDA to operating income (loss) for each of the periods presented:

	For the Year Ended December 31,				For the Six Months Ended June 30,		
	2016	**2017**	**2018**	**2018[(a)]**	**2018**	**2019**	**2019[(b)]**
	(Ps.)	**(Ps.)**	**(Ps.)**	**(US$)**	**(Ps.)**	**(Ps.)**	**(US$)**
						(Unaudited)	
				(in millions)			
Operating income (loss)	9,863	(2,854)	21,202	1,102	11,155	3,821	199
Depreciation and amortization	2,560	2,635	2,885	150	1,400	1,939	101
Impairment of long-lived assets	2	7,702	(3,480)	(181)	14	1	0
Adjusted EBITDA	12,425	7,483	20,607	1,071	12,569	5,761	300

(a) Translated into U.S. Dollars, solely for the convenience of the reader, using an exchange rate of Ps. 19.2380 per U.S. Dollar, the average of the Official Exchange Rate on each day during the year ended December 31, 2018. These convenience translations should not be construed as representations that the Mexican Peso amounts actually represent such U.S. Dollar amounts or could be converted into U.S. Dollars at the specified rate or at all. See "Exchange Rates."

(b) Translated into U.S. Dollars, solely for the convenience of the reader, using an exchange rate of Ps. 19.1726 per U.S. Dollar, the average of the Official Exchange Rate on each day during the six months ended June 30, 2019. These convenience translations should not be construed as representations that the Mexican Peso amounts actually represent such U.S. Dollar amounts or could be converted into U.S. Dollars at the specified rate or at all. See "Exchange Rates."

RISK FACTORS

An investment in the notes is subject to risks and uncertainties. You should carefully consider the risk described below, in addition to the other information contained in this offering memorandum before deciding whether to purchase the notes. Realization of any of these risks could have a material adverse effect on our business, financial condition, cash flows, results of operations and prospects, and could materially affect the value or liquidity of the notes and result in the loss of all or part of your investment in or failure to receive timely payments in respect of the notes. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial, and that as a result are not described below, may also materially adversely affect us, which could also result in the loss of all or part of your investment in the notes.

Risks Relating to Our Business

Global economic, political and regulatory conditions may adversely affect our business and financial performance.

Changes in economic, political and regulatory conditions in Mexico, the United States, Brazil, Argentina, Canada and Chile, as well as globally, or in laws and policies governing foreign trade, may negatively affect our business, results of operations, financial condition or prospects. When economic conditions deteriorate, the end markets for our products may experience declines and we may suffer reductions in our sales and profitability. In addition, the financial stability of our customers and suppliers may be affected, which could result in decreased, delayed or canceled purchases of our products, increases in uncollectable accounts receivable or non-performance by suppliers. We may also find it more costly or difficult to obtain financing to fund operations or investment or acquisition opportunities, or to refinance our debt in the future. If we are not able to access capital markets at competitive rates or at all, or obtain other forms of financing (including financings from banks), our ability to implement our business plan and strategy or to refinance debt may be negatively affected.

The global economy may continue to experience periods of slowdown and volatility, which in turn may further diminish expectations and consumer spending in the economies in which we operate. In addition, the global economy may be adversely affected by a lack of liquidity, loss of confidence in the financial sector, currency fluctuations, disruptions in the credit markets, difficulty in obtaining financing, reduced business activity, rising unemployment, uncertainty in the level of interest rates, erosion of consumer confidence and reduced consumer spending. Although our strategy is targeted at offsetting or taking advantage of market trends as appropriate, worsening of the global economic downturn in general has had, and may continue to have, a negative impact on our business, financial condition, results of operations and prospects.

The decision of the United Kingdom to withdraw from the European Union has caused and, along with events that could occur in the future as a consequence of such withdrawal may continue to cause, significant volatility in global financial markets, including in global currency and debt markets. This volatility could cause a slowdown in economic activity in the United Kingdom, Europe or globally, which could adversely affect our business, financial condition, results of operations and prospects. In addition, the current U.S. administration has called for substantial changes to United States foreign trade policy, including the possibility of imposing greater restrictions on international trade and significant increases in tariffs on goods imported into the United States. For example, in June 2019, the Trump administration announced plans to impose an escalating series of tariffs on Mexico unless the Mexican government enacted certain immigration policy changes. While the Mexican and U.S. governments were able to reach an understanding, we cannot assure you that such understanding will remain in place or that the U.S. government will not impose other tariffs on Mexico in the future and that we will not be materially adversely affected by such tariffs or policies. Further, the United States has recently enacted a series of tariffs on the import of Chinese products. The continued threats of tariffs, trade restrictions and trade barriers could have a generally disruptive impact on the global economy and, therefore, negatively impact our sales. Given the relatively fluid regulatory environment in China and the United States and uncertainty on how the United States or foreign governments will act with respect to tariffs, international trade agreements and policies, there could be additional tax or other regulatory changes in the future. Any such changes could adversely impact our business, financial condition, results of operations or prospects.

Our business may be affected by trade barriers.

We import a significant amount of our raw materials into certain countries in which we have production facilities, principally pX and polymer-grade propylene from the United States Golf Coast into Mexico, for the production of PTA and PP, respectively. Events that affect international trade may restrict our ability to import raw materials and could thereby result in our inability to sustain current production levels. Any such restrictions in any of the countries where we operate could limit our ability to import raw materials and consequently could have a material adverse effect on our business, financial condition, results of operations and prospects.

The petrochemical business is cyclical and may be adversely affected by events and conditions beyond our control.

The petrochemical business is cyclical. The earnings generated by our products vary from period to period based, in part, on the balance of supply relative to demand within the industry. The balance of supply relative to demand may be significantly affected by the addition of new capacity. In our industry, capacity is generally added in substantial increments as large-scale facilities are built. New capacity may disrupt industry balances and result in downward pressure on prices or margins due to the increase in supply, which could negatively impact our results of operations.

Our business may also be affected by other events or conditions that are beyond our control, including changes or developments in domestic or foreign economic markets, changes in industry pricing practices, increases in natural gas or other energy prices or the cost or availability of raw materials, competition from other petrochemical manufacturers, changes in the availability or supply of petrochemical products generally and unanticipated downtime of production plants. These external factors may cause fluctuations in the supply and demand levels for our products and fluctuations in our prices and our margins, which may adversely affect our financial performance.

Our operations are dependent on the availability and cost of our raw materials and energy sources.

Our operations are substantially dependent on the availability and cost of our primary raw materials and energy sources, including, but not limited to, pX, MEG, propylene, styrene monomer, acetic acid, cyclohexane, ammonia, ethylene and propylene oxide, natural gas, fuel oil, electricity and steam. Any prolonged interruption, discontinuation or other disruption in the supply of raw materials or energy, or substantial increases in their costs, or tariffs imposed in the markets where we operate, could have a material adverse effect on our financial condition and results of operations. The availability and prices of raw materials and energy may be negatively affected by a variety of factors, including interruptions in production by suppliers; accidents or other similar events at suppliers' premises or along the supply chain; allocations of raw materials by suppliers to other purchasers; wars, natural disasters (such as hurricanes in the Gulf of Mexico) or other similar events; the bargaining power of suppliers and our competitors; worldwide price fluctuations; the ability to negotiate terms and conditions that are satisfactory to us; and the availability and cost of transportation.

There were five key suppliers that in total accounted for approximately 47% of our total raw materials for the year ended December 31, 2018. Petróleos Mexicanos ("Pemex"), one of our key suppliers in the Plastics & Chemicals Business, accounted for approximately 9% of our total raw materials supply for the year ended December 31, 2018. There can be no assurance that Pemex or any other significant supplier of raw materials will continue to meet its obligations or will continue to provide raw materials on terms and conditions satisfactory to us. According to recent reports, Pemex is facing financial problems that may affect its future performance. The loss of any supplier, a disruption in its business or a failure to meet our product needs on a timely basis could lead to interruptions in our production and require us to find a suitable alternative source. In such an event, we may not be able to secure an alternative source of supply at a competitive cost or at all.

The prices of our primary raw materials and energy resources, which are typically purchased pursuant to long-term contracts, have fluctuated in the past and are expected to fluctuate in the future. For example, the price of pX, a key petroleum-derived raw material for our business, and the price of energy are sensitive to fluctuations in the global crude oil supply and changes in oil prices. Our prices and margins have been impacted by raw material

and energy price increases in the past and could be similarly impacted in the future if we are unable to hedge effectively against any such price increases or pass them through to our customers.

We have secured a large portion of our natural gas consumption for our operations in Mexico through long-term supply and transport agreements. However, we cannot ensure that our natural gas cost will not be impacted due to renegotiations of the terms and conditions of such agreements or as a result of an increase in transportation costs. Furthermore, we cannot ensure that there will not be an impact on our supply if new or existing pipelines to transport natural gas from the U.S. are not operating successfully or if domestic production continues to decrease, particularly in the south of Mexico.

On January 6, 2019, Alpek announced that it had signed a stock purchase agreement with CG Terra 3, a subsidiary of ContourGlobal, for the sale of Alpek's subsidiaries CELCSA and CGA, and their cogeneration power plants located in Cosoleacaque, Veracruz and Altamira, Tamaulipas México. Certain subsidiaries of Alpek are and will continue to be offtakers of the steam and electricity produced by these cogeneration assets. Even though their purchase is established under long-term contracts with ContourGlobal, we cannot guarantee that there will not be any future disruptions either because of administrative/operational circumstances or otherwise.

Imports of polyester chain products and plastics and chemicals products in the Americas could adversely impact our margins.

Producers of polyester chain products and plastics and chemicals products in the Americas could be adversely affected by imports of polyester chain products and plastics and chemicals products at a low cost, principally from Asian countries. In addition, the potential for such imports to compete on a cost-effective basis if prices rise above certain levels has the effect of limiting the ability of producers in the Americas to increase prices or margins in periods of increased demand in the Americas. The price and volume of imports of polyester chain products and plastics and chemicals products as well as the potential for such imports may negatively impact our margins.

Producers of polyester staple fiber in Mexico and the United States benefit from anti-dumping duties on certain polyester staple fiber products imported into their respective countries from South Korea and China, and, in the case of U.S. producers, from Taiwan and India, as well. In addition, producers of PET in the United States benefit from existing import duties on Canada, China, India and Oman, which were issued in April 2016. Changes in the existing tariffs or anti-dumping and import duties could lead to reduced demand for our products or cause us to lower our prices, which would result in lower revenues and could negatively affect our overall financial performance.

Our business is exposed to the risk of product substitution, and any substitution of our products by other materials in the future could have a material adverse effect on our business, financial condition, results of operations and prospects.

The substantial majority of our PET production and, indirectly, our production of PTA, is used for plastic bottles and other containers in the beverage, food and personal care industries, and the increased demand for PET has largely occurred as a result of the substitution of PET for other materials, such as glass and aluminum. If in the future another type of plastic or other material, based on its physical properties or for other economic, environmental or other reasons, becomes a substitute for PET in containers, then demand for PET may decrease, which would have a material adverse effect on our business, financial condition, results of operations and prospects. For example, a plant-based biodegradable plastic material, polylactic acid ("PLA"), is increasingly attracting attention as a substitute for petroleum-based plastic materials. Such substitution could become more prevalent if the technology and feedstock limitations, as well as the higher production costs, for such products improve in the future.

Our polyester fiber products compete with other fibers, principally cotton. Any significant substitution by our customers of polyester-based products with other fibers may adversely affect our profitability. In addition, our customers may use recycled polyester staple fiber in their end use products which would decrease the demand for virgin polyester staple fiber which we produce. Fashion and price trends may lead to a substitution of our polyester short fiber products for such competing fibers. If substitution levels increase, the demand for our polyester fiber products may fall and sales thereof decrease, possibly leading to downward pressure on the profitability of our

polyester fiber business, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our PP products compete with other plastics in some applications. Any significant substitution by our customers of PP-based products with other plastics in such applications, may adversely affect our profitability. If significant substitution were to occur, the demand for our PP products in some applications may be reduced and sales thereof decrease, possibly leading to downward pressure on the profitability of our PP business, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

In the case of our EPS products, there is significant competition for use in insulation products against alternative materials. If significant substitution occurs, the demand for our EPS products for insulation may be reduced and sales thereof decrease, possibly leading to downward pressure on the profitability of our EPS business, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our industry is highly competitive, and increased competition could adversely affect our profit margins and market share.

The petrochemical industry is highly competitive. Our existing and potential competitors include some of the world's largest petrochemical companies and the chemical divisions of major international oil companies that have their own raw material resources. Some of these companies may be able to produce products more economically than we can or have access to technology not available to us. In addition, some of our competitors are larger than us and may have greater financial and technical resources, which may enable them to invest significant capital into their businesses, including expenditures for research and development. If any of our current or future competitors develops proprietary technology that enables them to produce products at a significantly lower cost, our technology could be rendered uneconomical or obsolete, and we may not have access to any such technology at a reasonable price or at all. In addition, our customers that are significant producers of PET or polyester staple fiber may develop their own sources of PTA supply in lieu of seeking supplies from us. Further, petroleum-rich countries have become more significant participants in the petrochemical industry and may considerably expand this role in the future. Increased competition could compel us to reduce the prices of our products, which could result in reduced profit margins and loss of market share and have a material adverse effect on our business, financial condition, results of operations and prospects.

We cannot assure you that we will be able to compete on the basis of price or other factors with companies that in the future may benefit from favorable regulations, trading or other arrangements, more access to financial resources or at costs that are more competitive than our costs, or that we will be able to maintain the cost of the supplies that we require as well as our export costs. As a result, our revenues may decline over time, thereby materially and adversely affecting our business, results of operations and financial condition.

Our customer base is concentrated, and the loss of all or a portion of the business of a significant customer would have an adverse effect on us.

Our ten largest customers combined accounted for approximately 37% of our total revenues for the year ended December 31, 2018. Our single largest customer accounted for approximately 9% of our total revenues for the year ended December 31, 2018. Given that our profitability depends on our maintenance of a high capacity utilization rate, the loss of all or a substantial portion of the sales volume to a significant customer or end user would have an adverse effect on us. If any significant customer has financial difficulties, this could affect our results of operations by decreasing our sales and/or resulting in uncollectable accounts receivable. For example, during 2017, M&G, one of our largest PTA customers at the time, faced significant financial difficulties. Several subsidiaries of M&G were in default on payments associated with the supply of PTA. This forced us to temporarily halt supply to both their Mexican and Brazilian operations. Additionally, one of their US subsidiaries, M&G Resins USA LLC, halted the construction on their integrated PTA-PET plant in Corpus Christi with which we had a 500 ktons supply rights based on our US$435 million investment. In addition, the consolidation of our customers could reduce our revenues and profitability, particularly if one of our significant customers is acquired by a company that has a relationship with one of our competitors. For more information, see "Business—Principal Customers."

In the past, we have experienced losses, including losses in connection with derivative financial instruments and may do so in the future.

We use derivative financial instruments to manage the risk profile associated with interest rates and to hedge some of our commodity and financial market risks. Our internal policy is not to enter into derivative financial instruments for speculative purposes; however, we may continue to enter into derivative financial instruments as an economic hedge against certain business risks, even if these instruments do not qualify for hedge accounting under IFRS. In addition, we may be required to record fair value losses in the future that could be material. The mark-to-market accounting for derivative financial instruments is reflected in our statement of income and has resulted in volatility in our earnings. In addition, we may incur losses in the future in connection with our derivative financial instruments transactions, which could have a material adverse effect on our financial condition and results of operations.

Most of our derivative financial instruments are subject to margin calls in the event that the threshold set by the parties is exceeded. In certain stressed scenarios, the cash required to cover margin calls may reduce the funds available to us for our liquidity, debt service obligations, operations or other capital needs. As of June 30, 2019, we did not have any collateral posted in response to margin calls. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Quantitative and Qualitative Disclosures about Market Risk—Derivative Financial Instruments.”

In addition, we face the risk in the current global economic environment that the creditworthiness of our counterparties may deteriorate substantially. This could prevent our counterparties from honoring their obligations to us, which would expose us to market risks and could have a material adverse effect on us.

We intend to continue using derivative financial instruments in the future for non-speculative hedging purposes, in accordance with our risk policies. Nevertheless, we cannot assure you that we will not incur additional net losses from, or may be required to make cash payments or post cash as collateral in connection with, our derivative financial instruments in the future.

We face risks related to the “cost plus” pricing formula for the sale of PTA in North America.

The historical industry practice in North America has been to price PTA on a “cost plus” basis, using as a reference a pricing formula published by BP, a major producer of PTA in North America. This formula takes into account cost variances in the main factors involved in the PTA production process (pX, energy and labor costs and the U.S. Producer Price Index for other fixed costs), which allows us to transfer to the customer certain variations in the costs of key raw materials and energy and to achieve a more predictable margin. We cannot assure you that this industry pricing practice will continue in the future, which could subject us to increased risk that increases in our raw material and energy costs would not be offset by increases in our prices. If we cannot transfer such cost variations to the customer in a timely manner or at all, we would experience decreased or negative margins.

In addition, the margins implied by the existing formula have been adjusted in the past and may be adjusted upward or downward from time to time in the future, mainly due to market demand conditions. We cannot predict if further adjustments will take place in the future or, if they occur, the effect they would have on our business, financial condition, results of operations and prospects.

We face risks related to fixed price arrangements for the sale of PET.

To date, a portion of the volume of our expected 2019 and 2020 PET production has been committed to customers pursuant to annual sales contracts with fixed prices arrangements. When we enter into fixed price arrangements, we are subject to the risk that our own raw material costs and other expenses will be greater than what we were expecting and that variations in these costs could reduce our margins or cause us to incur losses. We seek to manage this risk mainly by entering into financial derivatives. However, these measures carry risk (including non-performance by counterparties) and do not in any event entirely eliminate the risk of decreased margins or incurring losses as a result of the fixed price arrangements.

In addition, we may not be able to adjust production volume in a timely or cost-efficient manner in response to any change that may occur in the fixed priced arrangements. Furthermore, we may be unable to increase prices of some of our products immediately after such changes, as a means to capture generalized price increases.

The conduct of our business may be adversely affected by risks inherent in international operations.

We currently maintain production facilities and operations in Mexico, the United States, Canada, Argentina, Brazil and Chile. Our ability to conduct and expand our business and our financial performance are subject to the risks inherent in international operations. Our operations may be adversely affected by trade barriers, currency fluctuations and exchange controls, high levels of inflation and increases in duties, taxes and governmental royalties, as well as changes in governments and local laws and policies (or the interpretation thereof) of the countries in which we conduct business. The governments of countries in which we operate, or may operate in the future, could take actions that materially adversely affect us. For risks relating to our operations in Mexico, see "Risks Relating to Mexico."

We face particular risks relating to our business in Argentina. The outcome of the presidential election, the recent devaluation of the exchange rate and any further changes in the country's economic policies may negatively affect our business. Any abrupt changes in the exchange rate, such as the ones that Argentina has experienced in recent years, would have an impact on inflation and growth, which may adversely negatively impact the operational and financial performance of the Company.

We also face additional risks related to our operations in Brazil. Changes in the economic policy together with the current political environment may result in civil and social unrest, labor strikes, expropriation, nationalization, forced renegotiation or modification of existing contracts and changes in taxation policies, including tax increases and retroactive tax claims, all of which could have a material adverse effect on our business.

Disruption of our supply chain or distribution network could adversely affect our business, financial condition, results of operations and prospects.

Our operations depend on the continuous operation of our supply chain and distribution network. Damage or disruption to our supply chain or distribution network due to weather, natural disasters, fire, electricity, gas or water shortages, terrorism, pandemics, strikes, disputes with, or the financial and/or operational instability of, key suppliers, distributors, warehousing and transportation providers, or other reasons could impair our ability to manufacture or distribute our products or to timely comply with our commitments.

To the extent that we are unable, or it is not financially feasible, to mitigate interruptions in our supply chain or distribution network, whether through insurance arrangements or otherwise, or their potential consequences, there could be an adverse effect on our business, financial condition, results of operations and prospects, and additional resources could be required to restore our supply chain and distribution network. These events could materially and adversely affect our business, financial condition, results of operations and prospects.

Natural disasters, terrorist activities, episodes of violence, geopolitical events and their respective consequences could disrupt our business and affect our business, financial condition, results of operations and prospects.

Hurricanes and other natural disasters, such as earthquakes, floods or tornadoes, have disrupted our business and the businesses of our suppliers and customers in the past and could do so in the future. If such weather-related events occur in the future, we may suffer business interruption or shutdown or damage to our production facilities, which could adversely and materially affect our business, financial condition, results of operations and prospects.

Terrorist attacks or the continued threat of terrorism or organized crime in the United States, Mexico and elsewhere in the world and the potential for military action and heightened security measures in response to such threats may cause significant disruptions to commerce on a global basis, including restrictions on cross-border transport and trade. The consequences of terrorism and the responses thereto are unpredictable and could have an adverse effect on our business operations. Economic and social instability, as well as political events, may cause periods of uncertainty in other regions of the world, including the United States, Canada, Brazil, Argentina and

Chile and may negatively affect our operations. Political and economic instability in the markets in which we operate could negatively impact our business, results of operations, financial condition and prospects.

We would be adversely affected by any significant or prolonged disruption to our production facilities.

Any prolonged and/or significant disruption to our production facilities, whether due to repair, maintenance or servicing, industrial accidents, mechanical equipment failure, human error or otherwise, would disrupt and adversely affect our operations. In particular, any major disruption to our production facilities may have an adverse impact on our ability to comply with our obligations under our contracts with our customers, which could result in sanctions or penalties under such contracts, including the termination thereof by our customers. In such a circumstance, we cannot assure you that we would be able to negotiate an amendment to the applicable contract, or a replacement thereof, which would have a material and adverse effect on our business, financial condition, results of operations and prospects.

Our production facilities process some volatile and hazardous materials that subject us to operating risks that could adversely affect our business, financial condition and results of operations.

We are dependent on the continued safe operation of our production facilities. Our operations are subject to the usual hazards associated with the manufacture of petrochemicals and the handling, storage and transportation of petrochemical materials, including:

- pipeline leaks and ruptures
- explosions
- fires
- floods
- earthquakes
- severe weather and natural disasters
- mechanical failure
- transportation interruptions.
- chemical spills
- discharges or releases of toxic or hazardous substances or gases
- storage tank leaks
- other environmental risks
- terrorist attacks

These hazards can cause personal injury and loss of life, severe damage to or destruction of property and equipment and environmental damage. A major accident at one of our facilities could force us to suspend our operations temporarily, cause production delays and result in significant remediation costs and lost revenues as well as liability for workplace injuries and fatalities. We cannot assure you that our insurance will be sufficient to cover fully all potential hazards incident to our business, including losses resulting from war risks or terrorist acts. As a result of market conditions, premiums and deductibles for certain insurance policies can increase substantially and, in some instances, certain insurance may become unavailable or available only for reduced amounts of coverage. If we were to incur a significant liability for which we were not fully insured, it could have a material adverse effect on our business, financial condition, results of operations. Because we have a limited number of production facilities and because those facilities are currently operating near capacity, the occurrence of any of the foregoing events may significantly reduce the productivity and profitability of a particular production facility and harm our overall results of operations.

Due to the integrated nature of our production facilities, problems in one part of our facilities may cause disruption to other parts of the production facilities, which could adversely affect our business.

Many of our production processes are integrated such that some of the products we produce are used as raw materials to make other products at our plants. Any problems that may develop in the production of one product may adversely affect the production of other petrochemicals in the same production chain. Production problems of this type may cause disruptions at upstream or downstream facilities and result in temporary shutdowns and reduced production. Some of our production processes also rely on common utilities and infrastructure shared amongst different plants at the same site, meaning that any problem with these shared utilities or infrastructure may adversely affect our production at more than one plant.

Compliance with environmental and other governmental laws and regulations could result in added expenditures or liabilities.

Our business is subject to extensive Mexican, U.S., Brazilian, Chilean, Canadian and Argentine federal, state and local laws and regulations concerning, among other things, the generation, storage, handling, use, remediation, disposal and transportation of hazardous materials and the emission and discharge of hazardous and non-hazardous materials into the ground, air or water. The operation of any manufacturing plant and the distribution of chemical products entail risks under environmental laws, many of which provide for substantial fines and criminal sanctions, burdensome remediation measures or even lead to the closure of our facilities for certain violations. We are also subject to extensive governmental regulation from Mexican, U.S., Brazilian, Chilean, Canadian and Argentine governmental entities concerning our competitive and marketplace conduct, which could affect our ability to make acquisitions within our industry, as well as the health, safety and working conditions of our employees. We currently believe all of our plants operate in accordance with all material applicable laws and regulations. However, subsequent changes in or additions to existing laws or regulations, or stricter enforcement or application or different interpretations of such laws or regulations, could force us to make significant additional expenditures, which could affect our profitability or financial condition in the future. Moreover, from time to time, new legislative initiatives may be introduced that may affect our operations and the conduct of our business, and we cannot provide assurances that the cost of complying with these initiatives or that the effects of these initiatives will not have a material adverse effect on our financial performance in the future.

Failure to comply with past, present or future environmental laws could result in the imposition of fines, third party claims, and investigation by environmental regulators. For example, the perceived effects of climate change may result in additional legal and regulatory requirements to reduce or mitigate the effects of our industrial facilities' emissions. If such requirements are enacted, or if the applicable laws are more strictly interpreted, our capital expenditures and expenses for environmental compliance in the future may increase, which may have a material and adverse effect on our business, financial condition, results of operations and prospects.

In addition, we may be exposed to liabilities relating to our facilities that arise from non-compliance with environmental laws by prior owners, for which we, as successor owner, may be responsible. For example, DuPont, the previous owner of our Cape Fear and Cedar Creek, North Carolina and Cooper River, South Carolina sites, in coordination with state and federal authorities, is currently conducting groundwater investigations at these sites. While DuPont has agreed to indemnify us for contamination and remediation costs associated with any pre-existing groundwater conditions, such indemnification may not be sufficient or available to cover our liabilities. The inability or refusal of DuPont or any other indemnitor to satisfy its environmental or other compliance and indemnification obligations could require us to incur costs or become the basis of new or increased liabilities that could have a material adverse effect on our business, financial condition, results of operations and prospects.

Failure to obtain, renew or maintain the permits and approvals required to operate our businesses may have an adverse effect on our business, financial condition, results of operations and prospects.

We require permits and approvals to operate our businesses and/or construct and operate our facilities. In the future, we may be required to renew such permits and approvals or to obtain new permits and approvals. While we believe that we will be able to obtain such permits and approvals and we have not experienced any difficulty in renewing and maintaining these permits and approvals in the past, as and when required, there can be no assurance that the relevant authorities will issue any such permits or approvals in the time frame anticipated by us, or at all, or that additional expenditures, that may be significant, will not be required in connection with such renewals. Any failure to renew, maintain or obtain the required permits and approvals and technology licenses, or the revocation or termination of existing permits and approvals, may interrupt our operations or delay or prevent the implementation of any capacity expansion programs, and may have an adverse effect on our business, financial condition, results of operations and prospects.

An increasing focus on environmental and social issues may lead to a decrease in demand for our products or require us to make further investments in recycling facilities.

The "green" movement and its focus on environmental and social issues may lead to a decrease in demand for our products. For example, there is growing social and industry pressure to increase the recycled content of PET used in packaging, in substitution of new PET production, as well as to decrease the weight and amount of plastic

used in plastic containers, which has decreased and may further decrease the amount of new PET (and, as a result, PTA) production required. In addition, one of the principal end uses of PET is for the packaging of bottled water. If as a result of the green movement, there is an appreciable decrease in the consumption of bottled water in the markets we serve, then demand for our products may also decrease.

In addition, some of our customers have set more stringent goals with respect to the level of recycled content in PET products. In order to meet such requirements, we may need to make further investments in recycling facilities and/or technologies and otherwise restructure our business to use more recycled material in our PET production.

A fall in demand, resulting from changes in consumer habits or other factors, could also decrease the volume of the products we sell and therefore materially and adversely impact our results of operations and financial condition.

We face risks related to fluctuations in interest rates which could adversely affect our results of operations and our ability to service our debt and other obligations.

We are exposed to fluctuations in interest rates. As of June 30, 2019, Ps. 17,781 million (US$928 million), or 43%, of our bank and bond debt (after taking into account the effect of interest rate swaps) accrued interest at a variable rate. Changes in interest rates would affect the cost of this debt. If interest rates increase, our debt service obligations on variable rate indebtedness would increase even though the amount borrowed would remain the same, and our net income and cash available for servicing our indebtedness would decrease. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Capital Resources." As a result, our financial condition, results of operations and liquidity could be materially adversely affected. Furthermore, our attempts to mitigate interest rate risk by financing long-term liabilities with fixed interest rates and using derivative financial instruments, such as floating-to-fixed interest rate swaps, in respect of our indebtedness could result in our failure to realize savings if interest rates fall and could adversely affect our results of operations and our ability to service our debt and other obligations.

Our level of indebtedness may affect our flexibility in operating and developing our business and our ability to satisfy our obligations.

As of June 30, 2019, we had total consolidated indebtedness of Ps. 45,360 million (US$2,366 million), Ps. 3,287 million (US$171 million) of which was secured indebtedness. Our level of indebtedness may have important consequences to investors, including:

- limiting our ability to generate sufficient cash flow to satisfy our obligations with respect to our indebtedness, particularly in the event of a default under one of our other debt instruments;
- limiting cash flow available to fund our working capital, capital expenditures or other general corporate requirements;
- increasing our vulnerability to adverse economic and industry conditions, including increases in interest rates, foreign currency exchange rate fluctuations and market volatility;
- limiting our ability to obtain additional financing to refinance debt or to fund future working capital, capital expenditures, other general corporate requirements and acquisitions on favorable terms or at all; and
- limiting our flexibility in planning for, or reacting to, changes in our business and the industry.

To the extent that we incur additional indebtedness, the risks outlined above could increase. In addition, our actual cash requirements in the future may be greater than expected. Our cash flow from operations may not be sufficient to repay all of the outstanding debt as it becomes due, and we may not be able to borrow money, sell assets or otherwise raise funds on acceptable terms, or at all, to refinance our debt.

We might not be able to obtain funding if a deterioration in the credit and capital markets or reductions in our credit ratings were to occur. This could hinder or prevent us from meeting our future capital needs and from refinancing our existing indebtedness when it comes due.

Global financial markets and economic conditions continue to be volatile. A deterioration of capital and credit markets could hinder our ability to access these markets. In addition, adverse changes in our credit ratings, which are based on various factors, including the level and volatility of our earnings, the quality of our management, the liquidity of our balance sheet and our ability to access a broad array of funding sources, may increase our cost of funding. If this were to occur, we cannot be certain that additional funding for our capital needs from credit and capital markets would be available if needed and, to the extent required, on acceptable terms. In addition, we might be unable to refinance our existing indebtedness when it comes due on terms that are acceptable to us or at all. If we were unable to meet our capital needs or refinance our existing indebtedness, it could have a material adverse effect on our financial position and results of operations.

Our operations could be adversely affected if a change in the terms of our suppliers' financing were to occur.

Our business operations depend to some extent on the relationships we sustain with our suppliers. A number of events, such as deterioration in the financial condition of our suppliers derived from a mechanical problem in one of their facilities, a natural disaster or any event of a similar nature, could restrict the suppliers' ability to fulfill their obligations to us, which could have a material adverse effect in our operations and financial condition. We currently manage payment terms which are considered standard in the markets in which we participate; however, a change, reduction or elimination of the financing terms with our strategic suppliers could have a material adverse effect on the performance and planning of our operations and on our liquidity and financial results. The current financing terms with our suppliers could change in the future, which could have an adverse effect on our financial results.

Cross-defaults under, and/or acceleration by lenders of, our debt obligations could result in significant liquidity problems and have a material adverse effect on our business, financial condition, results of operations and prospects.

We and our subsidiaries have entered into loan agreements and indentures and will, from time to time, enter into further agreements relating to debt obligations. Some of these agreements contain various financial and other covenants, including relating to the maintenance of certain ratios, including interest coverage ratios and leverage ratios. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Indebtedness." A breach of such covenants could give rise to a default, which could entitle our lenders to accelerate the loans provided under these agreements and/or refuse to provide us with any additional funds under the facilities. We cannot assure you that we will be in compliance with our financial or other covenants in the future or that lenders will grant waivers to us. We also cannot assure you that one or more of our lenders under these loan agreements would not seek to enforce any remedies following any breach of financial or other covenants or an event of default thereunder. In addition, most of our loan agreements and our indentures contain cross-default provisions, which would entitle the lenders or holders of notes to accelerate repayments under their respective loan facility or indenture upon the occurrence of a default in our other borrowings. Any acceleration of our indebtedness may have a significant effect on our liquidity and may materially and adversely affect our business, financial condition, results of operations and prospects.

Our frozen U.S. pension plans are currently underfunded, and we may have to make significant cash payments to these plans, which would reduce the cash available for our business.

We have unfunded obligations under our frozen pension plans that cover current and former employees at DAK Americas and Wellman. The funded status of our pension plans is dependent upon many factors, including returns on invested assets, the level of certain market interest rates and the discount rate used to determine pension obligations. Unfavorable returns on the plan assets or unfavorable changes in applicable laws or regulations could materially change the timing and amount of required plan funding, which would reduce the cash available for our business. Specifically, given the underfunded status of the pension plans, we may be required to contribute certain amounts in order to satisfy the minimum funding standards under the U.S. Internal Revenue Code of 1986. In addition, an increase or a decrease in the discount rate used to determine pension obligations could result in an

increase or a decrease in the valuation of pension obligations, which could affect the reported funding status of our pension plan and future contributions, as well as the periodic pension cost in subsequent fiscal years.

Under the U.S. Employee Retirement Income Security Act of 1974, as amended, the Pension Benefit Guaranty Corporation ("PBGC") has the authority to terminate an underfunded tax-qualified pension plan under limited circumstances. In the event our tax-qualified pension plan is terminated by the PBGC, we could be liable to the PBGC for some portion of the underfunded amount.

Our growth through mergers, acquisitions, joint ventures or strategic alliances may be impacted by antitrust laws, access to capital resources, and the costs and difficulties of integrating future acquired businesses and technologies, which could impede our future growth and adversely affect our competitiveness.

We have made acquisitions in the past in order to grow our business, such as the completion of our acquisition of the Brazilian Assets and the Corpus Christi acquisition in 2018 and the acquisition of Perpetual in 2019, and we may continue to make them in the future. As part of our strategy, we may seek further growth through acquisitions of other companies in order to maintain a competitive position within the industries in which we operate and to enhance our position in our core areas of operation. This strategy entails risks that could have a material adverse effect on our business, financial condition, results of operations and prospects, including:

- unidentified or unanticipated regulatory and other liabilities or risks in the operations of the companies which we may acquire;
- the need to incur debt, which may reduce our cash available for operations and other uses due to increased debt service obligations;
- potential failure to achieve the expected results, economies of scale, integration of operations, synergies or other benefits sought;
- greater than expected costs and management time and effort involved in completing and integrating the acquisitions;
- greater capital expenditures required in connection with the purchased facilities;
- potential disruption to our ongoing businesses and difficulty in maintaining our internal control environment, information systems technologies and procedures;
- inability to successfully integrate the services, products and personnel of the acquisitions into our operations or to realize any expected cost savings or other synergy benefits from the acquisitions;
- inability to retain employees, customers and supplier relationships;
- inability to fully integrate the acquired business as a result of antitrust law;
- restrictions or conditions imposed by antitrust and other regulatory authorities (including restrictions on reducing workforces or requiring the disposition of certain assets);
- customer overlap or loss of customers supplied prior to the acquisitions by us or by any acquired entity; and
- lack of return on our investment.

If we are unable to successfully integrate or manage our acquired businesses, among other consequences, we may not realize anticipated cost savings and revenue growth, which may result in reduced profitability or losses. If new expansion opportunities arise, we may not have sufficient resources to take advantage of these opportunities and additional financing may not be available to us on favorable terms, or at all, causing us to forfeit such opportunities. The impact on us of any of our future acquisitions or investments cannot be fully predicted and any of the risks outlined above, should they materialize, could have a material adverse effect on our business, financial condition, results of operations and prospects.

Approval of the antitrust authorities in the relevant jurisdictions is required for us to acquire and sell significant businesses or enter into significant joint ventures. We cannot assure you that the antitrust authorities will authorize our proposed strategic alliances, joint ventures, sales and acquisitions in the future, or will not order us to divest a portion of our assets or impose any other condition in order to consummate any proposed joint venture or acquisition, which may adversely affect our business strategy, financial condition and results of operations.

Regulation of merger and acquisition activity by the United States, Mexico or other jurisdictions may limit our ability to engage in future acquisitions, mergers, divestitures or commercial alliances. For example, the operations under which Alpek acquired the Brazilian Assets were reviewed by the *Tribunal del Consejo Administrativo de Defensa Económica ("CADE")*, Brazil's antitrust authority, to assess whether the acquisition compromised competition in that market. Alpek cannot ensure that the authorities in charge of enforcing competition laws in any of the countries in which we operate or in which we may pursue a future acquisition will approve the transaction in question or do so without imposing material conditions.

If new opportunities arise, we may not have sufficient resources to take advantage of these opportunities and additional financing may not be available to us on favorable terms, or at all, causing us to forfeit such opportunities.

In addition, our growth to date, in particular driven by acquisitions, has placed, and the anticipated further expansion of our operations will continue to place, a significant strain on our management, systems and resources. In addition to training, managing and integrating our workforce, we will need to continue to develop and improve our financial and management controls. We cannot assure you that we will be able to efficiently or effectively manage the growth and integration of our operations, and any failure to do so may materially and adversely affect our business, financial condition, results of operations and prospects.

The success of our strategic alliances depends on the satisfactory performance by our strategic alliance partners of their strategic alliance obligations. The failure of our strategic alliance partners to perform their strategic alliance obligations could impose on us additional financial and performance obligations that could result in reduced profits or, in some cases, losses for us with respect to our strategic alliances.

A portion of our operations are conducted through strategic alliances, including our strategic alliances with BP, Far Eastern, Indorama, LyondellBasell, BASF and Shaw Industries, where certain decisions must be made in a shared manner with unaffiliated third parties. Differences in views among our strategic alliance partners may result in delayed decisions, in failure to agree on major matters or in failure to timely react to actions by competitors or to customer opportunities, potentially negatively affecting the business and operations of the strategic alliances and in turn our business and operations.

In addition, we cannot control the actions of our strategic alliance partners, including any nonperformance, default or bankruptcy of strategic alliance partners. The success of our strategic alliances depends, in part, on the satisfactory performance by our strategic alliance partners of their strategic alliance obligations. If our strategic alliance partners fail to satisfactorily perform their strategic alliance obligations as a result of financial or other difficulties, the strategic alliance may be unable to adequately perform or deliver its contracted services. Under these circumstances, we may be required to make additional investments and provide additional services to ensure the adequate performance and delivery of the contracted services. These additional obligations could result in reduced profits or, in some cases, losses for us with respect to the strategic alliance. We cannot assure you that our business partnerships or strategic alliances will be successful in the future.

Significant capital investments including future development of new facilities have been, and may in the future continue to be, necessary to achieve our growth plans, which carry project and other risks.

Our business requires significant capital expenditures for maintenance and expansion. Our growth plans have required, and may continue to require, significant capital investments to expand, renovate, convert or upgrade existing facilities, develop new facilities or technologies or make major acquisitions or investments. For example, Alpek invested US$435 million in the acquisition of the Brazilian Assets. Projects that require significant capital expenditure carry risks including:

- failure to complete a project within the prescribed project timetable and/or within budget; and
- failure of the project to perform according to prescribed operating specifications following its completion.

There can be no assurance that technology we have acquired, including IntegRex®, or may acquire in the future will perform as expected or that we will be able to successfully integrate the acquired technology into our production facilities. Furthermore, if new technologies and more cost-efficient processes are developed in the petrochemical industry, our competitors may be able to access new technology which we do not possess.

In addition, any significant increases in raw material costs unforeseen in the project plan and any inability to sell the products produced at volumes and/or price levels envisaged in the project plan could adversely affect the success of our projects. Due to the significant amount of capital required and the long lead time between planning and completion of such projects, project failure could have a material adverse effect on our business, financial condition, results of operations and prospects.

Alpek is continuously evaluating future business opportunities, and it is possible that expected returns on these investments may not be fully achieved as a result of adverse market conditions and other factors. Moreover, it is possible that these projects may not be concluded in a timely manner, for reasons outside of our control.

Changes in laws and regulations relating to beverage containers and packaging could reduce demand for such end use products.

Legal requirements have been enacted in various jurisdictions in the United States and elsewhere requiring that deposits or certain ecotaxes or fees be charged for the sale, marketing and use of certain nonrefillable beverage containers. Other proposals relating to additional beverage container deposits, recycling, ecotax and/or product stewardship have been or may be introduced in various jurisdictions in the United States and elsewhere. Consumers' increased concerns and changing attitudes about solid waste streams and environmental responsibility and related publicity could result in the adoption of such legislation or regulations. This has encouraged some of our PET customers to reduce the amount of PET resin they use in their bottle production process. This process, known as "light weighting," has reduced the amount of PET resin used in each bottle and has impacted the demand for pX, PTA and PET resin.

If the legislation or regulations described above were to be adopted and implemented on a large scale, or increased light weighting of bottles or substitution of PET resin as the primary packaging material were to occur, in each case in any of the major markets in which we and/or our key PET customers operate, our PET customers' costs could increase and they may require changes to the packaging materials they use for their end use products. Such changes would reduce the demand for PET resin, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Any loss of key personnel may adversely affect our business.

Our success depends, in large measure, on the skills, experience and efforts of our senior management team and other key personnel. The loss of the services of one or more members of our senior management or other employees with critical skills could have a negative effect on our business, financial condition, results of operations and prospects. If we are not able to attract or retain highly skilled, talented and committed senior managers or other key personnel, our ability to achieve our business objectives may be adversely affected.

Any deterioration of labor relations with our employees or increase in labor costs could adversely affect our business, financial condition, results of operations and prospects.

Our operations are labor intensive and subject to various labor laws and regulations. As of June 30, 2019, we employed 5,925 employees. Any significant increase in labor costs, deterioration of employee relations, slowdowns or work stoppages at any of our locations, whether due to union activities, employee turnover or otherwise, could have a material adverse effect on our business, financial condition, results of operations and prospects. A strike, work slowdown or other labor unrest could, in some cases, impair our ability to supply our products to customers, which could result in reduced revenues.

Approximately 60.1% of our workforce was unionized as of June 30, 2019. We generally negotiate collective bargaining agreements with these trade unions every two years, though salary increases are applied annually. We cannot foresee the results of such negotiations or of any other relevant conflict that may arise, which may in turn have a material adverse effect on our business, financial condition, results of operations and prospects.

Under Mexican law, it is permissible for employees to engage in industrial action, including work stoppages, together with unionized employees of other companies who are engaged in a dispute, despite the absence of any dispute with their own employer. Although we believe our labor relations with our employees and contractors are satisfactory, there can be no assurance that a work slowdown, a work stoppage or strike will not occur at any of

our facilities.Increased labor unrest has developed in several regions in Mexico. Work slowdowns, stoppages, disputes with employee unions or other labor related developments or disputes could result in a decrease in our production levels and adverse publicity, which could have a material adverse effect on our business, results of operations and financial condition.

Our operations in Mexico are subject to the Federal Labor Law (*Ley Federal del Trabajo*) ("LFT") and other labor laws and regulations. On November 30, 2012, amendments to the LFT were published in the Federal Official Gazette of Mexico (*Diario Oficial de la Federación*). The amendments to the LFT included changes in the regulation of hourly wages, labor agreements, grounds for termination and outsourcing services, among other changes.

Furthermore, on January 5 and July 7, 2019, additional amendments to the LFT were published in the Federal Official Gazette of Mexico. The amendments to the LFT included (i) the elimination of the Conciliation and Arbitration Boards (*Juntas de Conciliación y Arbitraje*) and the settling of labor disputes before labor courts that are part of the Mexican Federal Judicial Power (*Poder Judicial de la Federación*), (ii) the creation of a National Conciliation Center (*Centro Federal de Conciliación y Registro Laboral*), as an initial authority for the resolution of labor disputes, (iii) the elimination of "white" unions (*i.e.*, unions amicable to the Company's management), and (iv) the opening of companies to more than one labor union. We are uncertain of the possible consequences of such amendments, as (a) we may need to interact with more labor unions in the future, (b) we may need to negotiate more collective bargaining agreements with different terms for each labor union, (c) we may incur increased costs and expenses for the resolution of labor disputes that may arise out of such amendments or as a means to prevent labor disputes and (d) the change in authorities resolving labor disputes may result in new interpretations by the courts of the LFT and its amendments. Developments in 2019 such as these LFT amendments might impact the way labor unions operate. Our business, results of operations and financial condition may be materially adversely affected as a result of these recent amendments or their implementation.

Our operations in the United States, Canada, Argentina, Brazil and Chile are also subject to the specific labor laws in each jurisdiction. Any change in these laws, may have a material adverse effect on our business, financial condition, results of operations and prospects. Even external situations related to the labor environment in each country may have an adverse effect on our business. For example, our plant in Zarate, Argentina has been affected by shutdowns caused by strikes related to unions or indirectly by shutdowns organized by the transportation union.

We are subject to anti-corruption, anti-bribery, anti-money laundering and antitrust laws and regulations. Any violation of any such laws or regulations could have a material adverse impact on our reputation and results of operations and financial condition.

We are subject to anti-corruption, anti-bribery, anti-money laundering, antitrust and other similar or equivalent international laws and regulations and are required to comply with the applicable laws and regulations of the countries in which we operate. In addition, we are subject to economic sanctions regulations that restrict our dealings with certain sanctioned countries, individuals and entities. There can be no assurance that our internal policies and procedures will be sufficient to prevent or detect any inappropriate practices, fraud or violations of law by our affiliates, employees, directors, officers, partners, agents and service providers or that any such persons will not take actions in violation of our policies and procedures. Any violations by us of anti-bribery and anti-corruption laws or sanctions regulations could have a material adverse effect on our business, reputation, results of operations and financial condition.

We may be subject to interruptions or failures in our information technology systems, including system security breaches or other cybersecurity attacks.

We rely on sophisticated information technology systems and infrastructure to support our business, including process control technology. Any of these systems may be susceptible to outages due to earthquakes, fire, floods, power loss, telecommunications failures, information technology system failures, network disruptions, viruses, corrupt programs, cybernetic attacks and breaches of data security. We take measures to protect and ensure the integrity of our technology systems and infrastructure. However, such measures may prove insufficient and any interruption or failure could disrupt our operations by causing delays or cancellation of customer orders, impeding the manufacture or shipment of products, processing transactions and reporting financial results, resulting in the

unintentional disclosure of customer or our information, or damage to our reputation. Such failures would adversely affect our revenues and profitability, and we cannot assure you that our business continuity plans will be completely effective during an information technology failure or interruption.

In recent years, cyberattacks and other tactics designed to gain access to and exploit sensitive information by breaching critical systems of large organizations have increased in volume and sophistication. We are dependent on internal information, and we are vulnerable to failure of these systems, including through system security breaches, data protection breaches or other cybersecurity attacks. We could be exposed to a cyberattack through an internal breach from servers connected to our internal network or an external breach due to disruptions from unauthorized access to our systems, which could impact our ability to operate our existing systems. If these events occur, including a cyberattack causing critical data loss or the disclosure or use of confidential information, the exposure of such information could have a material adverse effect on our reputation, which could adversely impact our financial condition and results of operations.

Our intellectual property rights and proprietary technologies may be used without our authorization by third parties.

Our intellectual property rights and proprietary technology are valuable assets in our business. Our ability to compete effectively in part depends on our ability to obtain, maintain, and protect our intellectual property rights and proprietary technology. However, we do not believe that any single patent, trademark, trade secret, or other intellectual property right of ours, or combination of our intellectual property rights, is likely to prevent others from competing with us using a similar business model. Despite our efforts, intellectual property laws of some of the jurisdictions in which we operate and the enforcement of such laws by the authorities in such jurisdictions may impair our ability to protect our intellectual property rights from competition or unauthorized use, lapse or expiration, or from being challenged, narrowed, invalidated, misappropriated or circumvented by third parties, or being deemed unenforceable or abandoned, which, as a result, could harm our business. In addition, we rely on in-licensed intellectual property rights, and such rights may be available to competitors, and thus affect the company's ability to assert rights against competitors, or hinder settlement disputes with third parties having similar licenses.

From time to time, we seek to protect and enforce our intellectual property and proprietary rights against third parties and may commence litigation with respect to the violation or the inappropriate use of our intellectual property rights. The violation of our intellectual property rights or unsuccessful litigation may adversely affect our operations. Moreover, we cannot guarantee that our intellectual property rights will not be used without our authorization. Policing unauthorized use of intellectual property can be difficult and expensive and may not result in in action being taken by the appropriate authorities.

We are part of a corporate group, and we enter into transactions with related parties and affiliates, which could result in conflicts of interest.

We have entered into and will continue to enter into transactions with Alfa, our parent company, and several entities directly or indirectly owned or controlled by our parent company. Specifically, we have entered into certain service contracts with our affiliates in exchange for certain fees. Mexican law applicable to public companies and our by-laws provide for several procedures designed to ensure that the transactions entered into with or among our subsidiaries and our parent company do not deviate materially from prevailing market conditions for those types of transactions, including requiring the approval of our Board of Directors for some of these transactions. We are likely to continue to engage in transactions with our parent and any of its subsidiaries and affiliates, and our subsidiaries and affiliates are likely to continue to engage in transactions among themselves, and no assurance can be given that the terms that we or our subsidiaries consider to be "substantially on market conditions" will be considered as such by third parties. In addition, future conflicts of interest between us and our parent company or any of its subsidiaries or affiliates, and among our subsidiaries and affiliates, may arise, which conflicts are not required to be and may not be resolved in our favor. See "Related Party Transactions."

We are controlled by Alfa, whose interests may not be aligned with your interests as a noteholder.

We are a subsidiary of Alfa, which beneficially owns 82.09% of our outstanding common shares. As such, Alfa has and will continue to have the power to control our affairs and operations. Alfa also controls the election of our Board of Directors, the appointment of our senior management, and our entering into mergers, acquisitions and

other extraordinary transactions. Most of the members of our Board of Directors are, and in the future will be, designated by Alfa. So long as Alfa controls us, it will continue to be able to strongly influence and effectively control decisions by our board and senior management team. Alfa, as our controlling shareholder, may exercise its control in a manner that differs from your interests as a noteholder.

We have entered into and expect to continue entering into transactions with Alfa and its affiliates, including contracts for administrative and corporate services. Many of these transactions occur in the ordinary course of business. Transactions with affiliates may create the potential for conflicts of interest. See "Principal Shareholders" and "Related Party Transactions."

We are subject to different corporate disclosure and accounting standards than U.S. companies.

As a non-U.S. issuer, investors may not be able to obtain as much publicly-available information about us as they would about U.S. issuers of publicly traded securities. Therefore, potential investors may not be able to easily ascertain the risks facing us as they would if we were a public U.S. company.

The closing of the Cogeneration Asset Sale and the long-term effects that this divestiture might have on our operations are uncertain.

On January 6, 2019, Alpek announced that it had signed a stock purchase agreement with ContourGlobal Terra 3 S.à.r.l, a subsidiary of ContourGlobal PLC, for the sale of its subsidiaries CELCSA and CGA, and their cogeneration power plants located in Cosoleacaque, Veracruz and Altamira, Tamaulipas México for a total of US$801 million subject to final customary adjustments. Although, the Company estimates that the transaction will close before the end of 2019, certain conditions precedent are not in its control and as such, the closing of this sale may be delayed. The Company may also incur additional unforeseen costs that could decrease the net amount received from such sale.

Certain subsidiaries of Alpek are and will continue to be offtakers of the steam and electricity produced by these cogeneration assets. Even though their purchase is established under long-term contracts with ContourGlobal, we cannot guarantee that there won't be any future disruptions either because of administrative/operational circumstances or otherwise. This would force Alpek to search for additional suppliers that may or may not be as competitive.

The Cogeneration Asset Sale contemplates certain agreements whereby Alpek as seller, through its subsidiaries Tereftalatos Mexicanos, S.A. de C.V. ("Temex") and Akra Polyester, S.A. de C.V. ("Akra"), agreed to provide fixed margin guarantees to CELCSA and CGA with respect to certain power purchase agreements. Upon closing, a commercial master agreement between CELCSA and Temex will become effective related to fixed margin guarantees to be granted by each other under certain power purchase agreements for the duration of such power purchase agreements. In addition, a commercial master agreement between Akra and CGA will become effective related to fixed margin guarantees to be granted by each other under certain power purchase agreements for the duration of such power purchase agreements. Additionally, Alpek and ContourGlobal signed a term sheet setting forth a payment mechanism whereby Alpek will compensate, as applicable, the ContourGlobal subsidiary buyer under the Cogeneration Asset Sale for all energy that is contracted as of closing but not interconnected.

We cannot assure you that the Cogeneration Asset Sale will occur on such terms or at all. Any material deviation from what has been agreed to may have a material adverse effect on our business, financial condition, results of operations and prospects.

Alpek has provided secured financing to support M&G Mexico's operations while its debt restructuring plan is undergoing.

On January 11, 2018, Alpek announced that it signed an agreement to provide secured financing to one of its clients, M&G Polímeros México, S.A. de C.V. ("M&G Mexico"), to help support its PET operation during its debt restructuring process. The US$60 million facility is secured by a second lien on M&G Mexico's PET production facility in Altamira, Mexico, and has a two-year term. Additionally, we acquired the credit rights to a US$100 million loan made to M&G Mexico, which is secured by a first lien on this same PET production facility in Altamira, Mexico. As of today, the plant's operations have been normalized and a pre-negotiated debt restructuring plan has already been submitted and accepted by the Mexican courts and a final ruling is expected by the end of 2019. We cannot predict the outcome and the timing of this process. Any disruption in operations or any deviation

from what has already been pre-negotiated could have a material adverse effect on our business, financial condition, and results of operations.

Risks Relating to the Countries in which we Operate

We are an international company subject to the market risk of the countries in which we produce and/or sell our products.

We currently maintain production facilities and operations in Mexico, the United States, Canada, Brazil, Chile and Argentina. Our ability to conduct and expand our business and our financial performance are subject to the risks inherent in international operations, such as changes in governmental policies, new laws and regulations and new interpretations of existing laws and regulations, currency controls, currency fluctuations, high levels of inflation, trade barriers, tariffs and customs regulations, increases in duties, taxes and governmental royalties, expatriation, expropriation, nationalization, forced negotiation, changes in local labor conditions, labor strikes, price instability, interest rates, modification of existing contracts, changes in local laws and policies, regulation, taxation, social instability and other political, social and economic developments affecting the countries in which we operate. We may also be subject to changes in environmental laws that could affect our manufacturing facilities or to health safety laws that could affect our products or our manufacturing process. We have no control over these factors and they could have a material adverse effect on our business, financial condition, results of operations and prospects.

Each of our foreign subsidiaries operates in their respective local currency and their results are later converted into Pesos for presentation purposes. Any fluctuation in the value of these respective currencies against the Peso may have a negative effect on our consolidated results.

Mexican federal governmental policies or regulations, as well as economic, political and social developments in Mexico, could adversely affect our business, financial condition, results of operations and prospects.

We are a Mexican corporation and a significant portion of our assets are located in Mexico, including many of our production facilities. As a result, our business, financial condition, results of operations and prospects are subject to political, economic, legal and regulatory risks specific to Mexico. The Mexican federal government has exercised, and continues to exercise, significant influence over the Mexican economy. Accordingly, Mexican federal governmental actions, fiscal and monetary policy and regulation of state-owned enterprises, such as Pemex, and of private industry could have an impact on Mexican private sector entities, including our company, and on market conditions, prices and returns on Mexican securities, including our securities. We cannot predict the impact that political conditions will have on the Mexican economy. Furthermore, our business, financial condition, results of operations and prospects may be affected by currency fluctuations, price instability, inflation, interest rates, regulation, taxation, social instability and other political, social and economic developments in or affecting Mexico, over which we have no control. We cannot assure potential investors that changes in Mexican federal governmental policies will not adversely affect our business, financial condition, results of operations and prospects. We do not have and do not intend to obtain political risk insurance.

In July 2018, Andrés Manuel López Obrador won the Mexican presidential elections. Additionally, his party obtained a majority stake in both chambers of the Mexican Congress. The Mexican president strongly influences new policies and governmental actions regarding the Mexican economy, and the new administration could implement substantial changes in law, policy and regulations in Mexico, which could negatively affect our business, financial condition, results of operations and prospects. We cannot provide any assurances that these events, over which we have no control, will not have an adverse effect on our business, financial condition, results of operations and prospects.

The Mexican federal government occasionally makes changes in policies and regulations and may do so again in the future. Furthermore, the Mexican government cut spending for the 2019 budget. On July 2, 2019, the new Mexican Federal Republican Austerity Law (*Ley de Austeridad Republicana*) was approved by the Mexican Senate. Such actions to control inflation, federal spending cuts and other regulations and policies have involved, among other measures, increases in interest rates, changes in tax policies, price controls, currency devaluations, capital controls and limits on imports. Our business, financial condition and results of operations may be adversely affected by changes in governmental policies or regulations involving or affecting our management, operations and

tax regime. Tax legislation in Mexico, in particular, is subject to continuous change, and we cannot assure you that the Mexican government will maintain existing political, social, economic or other policies or that such changes will not have a material adverse effect on our business, financial condition, results of operations and prospects.

In the past, Mexico has experienced several periods of slow or negative economic growth, high inflation, high interest rates, currency devaluation (in particular with respect to the Mexican peso-U.S. dollar exchange rate), convertibility restrictions and other economic problems. During 2018, the Mexican Central Bank increased its reference rate by 100 basis points, from 7.25% to 8.25% (currently at 8.00%). In addition a worsening of international financial or economic conditions, such as a slowdown in growth or recessionary conditions in Mexico's trading partners, including the United States, or the emergence of a new financial crisis, could have adverse effects on the Mexican economy, our financial condition and our ability to service our debt, including the notes.

Changes in the relative value of the Mexican Peso to the U.S. Dollar may have an adverse effect on us.

The peso-dollar exchange rate is an important factor for us because of its effect on our business, financial condition, results of operations and prospects.

In general, as described below, a depreciation of the Mexican Peso will likely result in an increase in our operating margins and an appreciation of the Mexican Peso will likely result in a decrease in our operating margins, in each case, when measured in Mexican Pesos. This is because the aggregate amount of our revenues denominated in or linked to U.S. Dollars exceeds the aggregate amount of our cost of sales and other selling, general and administrative expenses denominated in or linked to U.S. Dollars.

Substantially all of our revenues are either denominated in or linked to the value of the U.S. Dollar. As a result, when the Mexican Peso depreciates against the U.S. Dollar, the same level of U.S. Dollar sales as in a prior period will result in higher revenues as stated in Mexican Pesos in the more recent period. Conversely, when the Mexican Peso appreciates against the U.S. Dollar, the same level of U.S. Dollar sales as in a prior period will result in lower revenues as stated in Mexican Pesos in the more recent period. Moreover, because a portion of our cost of goods sold, including labor costs, and other selling, general and administrative expenses are invoiced in Mexican Pesos and are not directly affected by the relative value of the Mexican Peso to the U.S. Dollar, the real appreciation or depreciation of the Mexican Peso relative to the U.S. Dollar can have an effect on our operating margins. For this reason, in the past, when the Mexican Peso has appreciated compared to the U.S. Dollar, our profit margins have decreased. By contrast, when the Mexican Peso has lost value, our profit margins have increased.

Currently, the peso-dollar exchange rate is determined on the basis of the free market float in accordance with the policy set by the Mexican Central Bank. There is no guarantee that the Mexican Central Bank will maintain the current exchange rate regime or that the Mexican Central Bank will not adopt a different monetary policy that may affect the exchange rate itself. Any change in the monetary policy, the exchange rate regime or in the exchange rate itself, as a result of market conditions over which we have no control, could have a considerable impact, either positive or negative, on our business, financial condition, results of operations and prospects.

The Mexican Peso has been subject to significant devaluations against the U.S. dollar and may be subject to significant fluctuations in the future. In 2008, as a result of the negative economic conditions in the United States and in other parts of the world, local and international markets experienced high volatility, which contributed to the devaluation of the peso. The Mexican government has implemented a series of measures to limit the devaluation of the peso and stabilize the local economy. However, we cannot assure you that such measures will be effective or ongoing or predict how they will impact the Mexican economy.

The countries in which we operate may experience high levels of inflation in the future.

Certain countries in which we conduct our business may experience high inflation in the future. A substantial increase in the inflation rate in the countries where we operate would adversely affect consumer purchasing power, thereby negatively impacting demand for our products, would increase some of our costs, and would impact our results of operations when measured in our reporting currency, which could adversely affect our business, financial condition, results of operations and prospects.

For example, Mexico has a history of high levels of inflation and may experience high inflation in the future. Historically, inflation in Mexico has led to higher interest rates, depreciation of the Mexican Peso and the imposition of substantial government controls over exchange rates and prices, which at times has adversely affected our operating revenues and margins. The annual rate of inflation for the last three years, as measured by changes in the NCPI, as provided by the Mexican Central Bank, was 3.4% in 2016, 6.8% in 2017, 4.8% in 2018 and 4.0% for the six months ended June 30, 2019. Although inflation is less of an issue today than in past years, we cannot assure you that Mexico will not experience high inflation in the future, including in the event of a substantial increase in inflation in the United States.

In addition, Argentina has recently experienced periods of hyper-inflation and may continue to experience high inflation in the future. In 2017, the *Instituto Nacional de Estadística y Censos* ("INDEC") revaluated the way it calculated its annual rate of inflation. Under this new methodology the annual rate of inflation in 2017 and 2018 and for the six months ended June 30, 2019 was 24.7%, 47.6% and 55.8%, respectively.

Developments in other countries could adversely affect the Mexican economy, our business, financial condition and results of operations.

The Mexican economy may be, to varying degrees, affected by economic and market conditions in other countries. Although economic conditions in other countries may differ significantly from economic conditions in Mexico, investors' reactions to adverse developments in other countries may have an adverse effect on the market value of securities of Mexican issuers. In the past, the prices of both Mexican debt and equity securities decreased substantially as a result of the prolonged decrease in the United States securities markets.

A renegotiation of commercial treaties or changes in foreign policy among Mexico, Canada and the United States may negatively our business, financial condition, results of operations and prospects.

The re-negotiations of existing commercial treaties or any other changes in foreign policy between Mexico, Canada and the United States could adversely affect our business, financial condition, results of operations or prospects. On September 30, 2018, Mexico, Canada and United States reached an agreement on the terms and conditions of the USMCA, replacing NAFTA, after more than one year of negotiation and significant strain on the relationships among the three countries. On June 19, 2019, Mexico became the first country to ratify the USMCA trade agreement. As of the date of this offering memorandum, ratification and implementation of the USMCA is still pending in the United States and Canada. The implementation of the USMCA could have a significant adverse effect on the Mexican economy, which could in turn adversely affect our business and operating results. It remains unclear what the U.S. administration or foreign governments will or will not do with respect to tariffs, NAFTA, USMCA or other international trade agreements and policies. Furthermore, new restrictions and import duties applicable to the products that our subsidiaries manufacture and sell could be put in place. If those were to occur, Alpek may be forced to renegotiate some of its contracts or cancel others, which could adversely affect our business, financial condition, results of operations and prospects.

The increase in violence in Mexico in recent years, including violence associated with Mexican drug cartels, has had a negative impact on and could continue to adversely affect the Mexican economy and our business, financial condition, results of operations and prospects.

In recent years, Mexico has experienced prolonged periods of criminal violence, primarily due to the activities of drug cartels. This violence has been particularly pronounced in the northern states of the country that share a border with the United States, the south coast of the Pacific, the south-west coast and in the Yucatán peninsula. Drug-related violence and crime pose a significant threat to the Mexican economy and are a source of economic and political instability and uncertainty. Systemic criminal activity and isolated criminal acts may disrupt our operations, impact our ability to earn revenue and add to our cost of operations. Continued violence could result in the Mexican government taking additional measures, which may include restrictions on cross-border transport and trade. If the levels of violence in Mexico, over which we have no control, remain the same or increase, they could have an adverse effect on the Mexican economy and our business, financial condition, results of operations and prospects.

Changes in the tax law in countries where Alpek operates could adversely affect our business.

Any modification to the tax law of any country in which Alpek conducts its business may increase the Company's tax burden and affect our business, financial condition, results of operations and prospects.

Risks Relating to the Notes

Payments on the notes and the subsidiary guarantees will be effectively junior to any of our secured indebtedness and structurally junior to debt obligations of our non-guarantor subsidiaries.

The notes will constitute our senior unsecured obligations and will rank equal in right of payment with all of our and our subsidiary guarantors' other existing and future senior unsecured indebtedness, other than obligations preferred by law (such as tax, social security and labor claims). Although the holders of the notes will have a direct, but unsecured claim on our assets and property, payment on the notes will be subordinated in right of payment to any of our existing or future secured debt, to the extent of the value of the assets securing such debt. Although the indenture governing the notes will contain restrictions on the incurrence of additional liens, these restrictions are subject to important qualifications and exceptions, and the liens that we may incur in compliance with these restrictions or liens that arise from governmental or creditor action, could be substantial. Payment by us in respect of the notes will also be structurally subordinated to the payment of secured and unsecured debt and other creditors of our non-guarantor subsidiaries.

As of June 30, 2019, we had total consolidated indebtedness of Ps. 45,360 million (US$2,366 million), Ps. 40,259 million (US$2,100 million) of which was unsecured indebtedness of Alpek and our subsidiary guarantors, Ps. 2,108 million (US$110 million) of which was secured indebtedness of our subsidiary guarantors and Ps. 2,993 million (US$156 million) of which was indebtedness of our non-guarantor subsidiaries.

If we become insolvent or are liquidated, or we become subject to bankruptcy proceedings, or if payment under any secured debt is accelerated, the relevant lenders would be entitled to exercise the remedies available to a secured lender. Accordingly, any proceeds upon a realization of the collateral granted for the benefit of secured creditors would be applied first to amounts due under the secured debt obligations before any proceeds would be available to make payments on the notes. After such application of the proceeds from collateral, it is possible that there would be no assets remaining from which claims of the holders of the notes could be satisfied.

Under Mexican law, our obligations under the notes are subordinated to certain statutory preferences, including claims for salaries, wages, secured obligations (to the extent of the security provided), social security, employee housing fund contributions, taxes and court fees and expenses. Similar statutory preferences may be applicable in other jurisdictions where the subsidiary guarantors are incorporated. In the event of our liquidation, such statutory preferences will have preference over any other claims, including claims by any holder of the notes.

Further, if any assets remain after payment of these lenders, the remaining assets would be available to creditors preferred by law, such as holders of tax, social security and labor claims, and might be insufficient to satisfy the claims of the holders of the notes and holders of other unsecured debt including trade creditors that rank equal to holders of the notes.

In addition, the Company and the subsidiary guarantors' creditors may hold negotiable instruments or other instruments governed by local law that grant rights to attach the Company's or the subsidiary guarantors' assets at the inception of judicial proceedings in the relevant jurisdiction, which attachment is likely to result in priorities benefitting those creditors when compared to the rights of holders of the notes.

The subsidiary guarantees may not be enforceable under applicable laws.

The notes will be fully and unconditionally guaranteed by certain of our Mexican and U.S. subsidiaries. The subsidiary guarantees provide a basis for a direct claim against the subsidiary guarantors; however, it is possible that the guarantees of these subsidiaries may not be enforceable under applicable laws. While Mexican law does not prohibit the giving of subsidiary guarantees and, as a result, does not prevent the subsidiary guarantees of the notes from being valid, binding and enforceable against our Mexican subsidiary guarantors, in the event that a Mexican subsidiary guarantor becomes subject to a judicial reorganization proceeding (*concurso mercantíl*) or to bankruptcy

(*quiebra*), its guarantee may be deemed to have been a fraudulent transfer and declared void based upon the Mexican subsidiary guarantor being deemed not to have received fair consideration in exchange for such guarantee.

Under various fraudulent conveyance or fraudulent laws (including under the laws of the United States), a court could subordinate or void the obligations of our subsidiaries under the guarantees. Generally, to the extent that a court were to find that at the time one of our subsidiaries entered into a guarantee either (a) the subsidiary guarantor incurred the guarantee with the intent to hinder, delay or defraud any present or future creditor or contemplated insolvency with a design to favor one or more creditors to the exclusion of others or (b) the subsidiary guarantor did not receive fair consideration or reasonably equivalent value for issuing the guarantee and, at the time it issued that guarantee, the subsidiary guarantor (i) was insolvent or became insolvent as a result of issuing the guarantee, (ii) was engaged or about to engage in a business or transaction for which the remaining assets of the subsidiary guarantor constituted unreasonably small capital, (iii) intended to incur, or believed that it would incur, debts beyond its ability to pay those debts as they matured or (iv) was a defendant in an action for money damages, or had a judgment for money damages declared against such subsidiary guarantor if, after final judgment, the judgment is unsatisfied, then the court could void or subordinate the subsidiary's obligations under the guarantee in favor of the subsidiary guarantor's other obligations. In addition, any payment by any subsidiary guarantor could be voided and required to be returned to such subsidiary guarantor, or to a fund for the benefit of its creditors.

Among other things, a legal challenge of a subsidiary's obligations under a guarantee on fraudulent conveyance grounds could focus on the benefits, if any, realized by the subsidiary guarantors as a result of the issuance of the notes. To the extent a subsidiary guarantee is voided as a fraudulent conveyance or held unenforceable for any other reason, the holders of the notes would not have any claim against that subsidiary guarantor and would solely be our creditors and creditors of the subsidiary guarantors, if any, whose obligations under the guarantees were not held unenforceable. If any such event were to occur, the creditworthiness of the notes, and the market value of the notes in the secondary market, may be materially adversely affected.

We may be unable to purchase the notes upon a specified change of control event, which would result in a default under the indenture governing the notes.

The terms of the notes as described in the indenture governing the notes will require us to make an offer to repurchase the notes upon the occurrence of a change of control triggering event at a purchase price equal to 101% of the principal amount of the notes, plus accrued and unpaid interest and additional amounts, if any, to the date of the purchase. Any financing arrangements we may enter may require repayment of amounts outstanding upon the occurrence of a change of control event and limit our ability to fund the repurchase of the notes in certain circumstances. It is possible that we will not have sufficient funds at the time of the change of control to make the required repurchase of notes or that restrictions in our other financing arrangements will not allow the repurchase. If we fail to repurchase the notes in such circumstance, we would default under the indenture which may, in turn, trigger cross-default provisions in our other debt instruments. See "Description of the Notes—Certain Covenants—Change of Control Triggering Event."

The change of control offer provisions of the indenture governing the notes would not be triggered by a change of control of the Company's indirect parent company, Alfa, and, as a result, may fail to provide any protection to holders of the notes in such circumstances.

The change of control offer provisions of the indenture require the Company to offer to repurchase the notes in the event of a specified change of control event. However, these provisions do not address a change of control of Alfa itself, which would indirectly affect control of the Company. In the event of, for example, the sale by Alfa's shareholders of a substantial portion of the share capital of Alfa or a significant merger or other transaction affecting the ownership of Alfa, the change of control offer provisions of the indenture would likely not be triggered, even though such event may result in a change of control under our other indebtedness. Accordingly, the change of control offer provisions of the indenture may fail to protect holders of the notes in the case of certain transactions that indirectly affect control of the Company.

We may incur substantially more debt, which could further exacerbate the risks associated with our indebtedness.

As of June 30, 2019, we had total consolidated indebtedness of Ps. 45,360 million (US$2,366 million), of which Ps. 2,993 million (US$156 million) was indebtedness of our non-guarantor subsidiaries. We and our

subsidiaries may be able to incur substantial additional debt in the future. Adding new debt to our current indebtedness levels would increase our leverage and the related risks that we now face could intensify.

The instruments governing our indebtedness, including the notes offered hereby, contain cross-default provisions that may cause all of the debt issued under such instruments to become immediately due and payable as a result of a default under an unrelated debt instrument.

The indenture governing the notes contains restrictive covenants. Instruments governing our other indebtedness also contain certain affirmative and negative covenants and require us and our subsidiaries to meet certain financial ratios and tests. Our failure to comply with the obligations contained in the indentures or other instruments governing our indebtedness could result in an event of default under the applicable instrument, which could then result in the related debt and the debt issued under other instruments becoming immediately due and payable. In such event, we would need to raise funds from alternative sources, which may not be available to us on favorable terms, on a timely basis or at all. Alternatively, such default could require us to sell our assets and otherwise curtail operations in order to pay our creditors.

Alpek is a holding company and depends on the results of operations of its subsidiaries, including to meet its obligations under the notes.

Alpek is a holding company with no independent operations or substantial assets other than the capital stock of its operating companies. Accordingly, it depends on the results of operations of its subsidiary companies. Its ability to service its debt and other obligations, including under the notes, will depend on its subsidiaries' generation of cash flow and their ability to make such cash available to us in the form of interest payments, debt repayment, dividends or otherwise. Each of Alpek's subsidiaries is a distinct legal entity and, under certain circumstances, legal and contractual restrictions may limit its ability to obtain cash from its subsidiaries. For a description of certain of these restrictions, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources." In the event that Alpek does not receive dividends from its subsidiaries, or payments of interest, fees or otherwise, it may be unable to make required principal and interest payments on its indebtedness, including the notes, or honor its other obligations. Any adverse change in the financial condition or results of operations of our subsidiaries could affect our financial condition. Our non-guarantor subsidiaries will not be obligated to make funds available to us to make payments on the notes.

In addition, under Mexican law, Alpek's Mexican subsidiaries may only pay dividends (i) if the payment of dividends is approved by their respective shareholder´s meeting, (ii) out of retained earnings included in financial statements that have been approved by their respective shareholders' meeting, (iii) after all losses from prior fiscal years have been satisfied, and (iv) if the corresponding entity has allocated 5% of its net profit for such fiscal year to its legal reserve, which allocation must be made on an annual basis until its legal reserve represents at least 20% of such entity's capital stock.

The notes are subject to transfer restrictions, which could limit your ability to resell your notes.

The notes have not been registered under the Securities Act or any state securities laws, and we are not required to and currently do not plan on making any such registration in the immediate future. As a result, the notes may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and applicable state securities laws. Prospective investors should be aware that investors may be required to bear the financial risks of this investment for an indefinite period of time. See "Transfer Restrictions" for a full explanation of such restrictions.

An active trading market for the notes may not develop.

Currently there is no market for the notes. Application has been made to Euronext Dublin for the notes to be admitted to the Official List and to trading on the Global Exchange Market of Euronext Dublin. Even if the notes become listed on this exchange, we may delist the notes. A trading market for the notes may not develop, even if the notes are listed as specified above, or if a market for the notes were to develop, the notes may trade at a discount from their initial offering price, depending upon many factors, including prevailing interest rates, the market for similar securities, general economic conditions and our financial condition. The initial purchasers are not under any

obligation to make a market with respect to the notes, and we cannot assure you that trading markets will develop or be maintained. Accordingly, we cannot assure you as to the development or liquidity of any trading market for the notes. If an active market for the notes does not develop or is interrupted, the market price and liquidity of the notes may be adversely affected.

Trading in the clearing systems is subject to minimum denomination requirements.

The terms of the notes provide that notes will be issued in minimum denominations of US$200,000 and multiples of US$1,000 in excess thereof. It is possible that the clearing systems may process trades which could result in amounts being held in denominations smaller than the minimum denomination. If definitive notes are required to be issued in relation to such notes in accordance with the provisions of the relevant global note, a holder who does not have the minimum denomination or any integral multiple of US$1,000 in excess thereof in its account with the relevant clearing system at the relevant time may not receive all of its entitlement in the form of definitive notes unless and until such time as its holding satisfies the minimum denomination requirement.

Payments claimed in Mexico on the notes, pursuant to a judgment or otherwise, would be required to be made in Mexican Pesos.

In the event that proceedings are brought against us in Mexico, either to enforce a judgment or as a result of an original action brought in Mexican courts, or if payment is otherwise claimed from us in Mexico, we would not be required to discharge those obligations in a currency other than Mexican currency. Under the Monetary Law of the United Mexican States (*Ley Monetaria de los Estados Unidos Mexicanos*) an obligation, whether resulting from a judgment or by agreement, denominated in a currency other than Mexican currency, which is payable in Mexico, may be satisfied in Mexican currency at the rate of exchange in effect on the date on which payment is made. Such rate is currently determined by the Mexican Central Bank and published every banking day in the Official Gazette. As a result, you may suffer a U.S. Dollar shortfall if you obtain a judgment or a distribution in Mexico. You should be aware that, under Mexican law, no separate action exists or is enforceable in Mexico for compensation for any shortfall.

Our obligations under the notes would be converted in the event of bankruptcy.

Under Mexico's Bankruptcy Law (*Ley de Concursos Mercantiles*), if we or any of the Mexican subsidiary guarantors is declared bankrupt (*en quiebra*) or becomes subject to a reorganization proceeding (*concurso mercantil*), our or such Mexican subsidiary guarantor's obligations under the notes, (i) would be converted into Mexican Pesos and then from Mexican Pesos into UDIs (*unidades de inversión*), (ii) would be satisfied at the time claims of all our creditors are satisfied, (iii) would be subject to the outcome of, and priorities recognized in, the relevant proceedings (including priorities resulting from applicable law, such as tax, social security and labor claims, and claims of secured creditors (up to the value of the collateral provided to such creditors)), (iv) would cease to accrue interest from the date the *concurso mercantil* is declared, and (v) would not be adjusted to take into account any depreciation of the Mexican Peso against the U.S. Dollar (or any other currency) occurring after such declaration. As a result, upon the occurrence of any such events, payments under the notes by the Issuer or any Mexican subsidiary guarantor may be affected.

We may not be able to make payments in U.S. Dollars.

In the past, the Mexican economy has experienced balance of payments deficits and shortages in foreign exchange reserves. While the Mexican government does not currently restrict the ability of Mexican or foreign persons or entities to convert Mexican Pesos to foreign currencies, including U.S. Dollars, it has done so in the past and could do so again in the future. We cannot assure you that the Mexican government will not implement a restrictive exchange control policy in the future. Any such restrictive exchange control policy could prevent or restrict our

access to U.S. Dollars to meet our U.S. Dollar obligations and could also have a material adverse effect on our business, financial condition and results of operations.

It may be difficult to enforce civil liabilities against us or our directors, executive officers and controlling persons.

Most of our directors, executive officers and controlling persons are non-residents of the United States and substantially all of the assets of such non-resident persons and a significant portion of all of our and our subsidiary guarantors' assets are located in Mexico or elsewhere outside the United States. As a result, it may not be possible for investors to effect service of process within the United States upon such persons or on us or our subsidiary guarantors or to enforce judgments against them or us in the United States predicated upon the civil liability provisions of U.S. securities laws. We have been advised that there is doubt as to the enforceability in Mexican courts, in original actions or in actions for enforcement of judgments obtained in courts of jurisdictions outside of Mexico, of civil liabilities arising under the laws of any jurisdiction outside of Mexico, including any judgment predicated solely upon United States federal or state securities laws. No treaty is currently in effect between the United States and Mexico that covers the reciprocal enforcement of foreign judgments. In the past, Mexican courts have enforced judgments rendered in the United States by virtue of principles of reciprocity and comity as well as the provisions of Mexican law relating to the enforcement of foreign judgments in Mexico, consisting of the review by Mexican courts of the United States judgment in order to ascertain whether Mexican legal principles of due process and public policy (*orden público*), among other requirements, have been duly complied with, without reviewing the merits of the subject matter of the case, provided that U.S. courts would grant reciprocal treatment to Mexican judgments issued in analogous cases. Therefore, holders of the notes may face greater difficulties in protecting their interests through actions against us, our directors, executive officers and controlling persons than would holders of notes of a corporation incorporated in the United States or in other jurisdictions outside of Mexico.

We cannot assure you that the credit ratings for the notes will not be lowered, suspended or withdrawn by the rating agencies.

The credit ratings of the notes may change after issuance. Such ratings are limited in scope, and do not address all material risks relating to an investment in the notes, but rather reflect only the views of the rating agencies at the time the ratings are issued. An explanation of the significance of such ratings may be obtained from the rating agencies. We cannot assure you that such credit ratings will remain in effect for any given period of time or that such ratings will not be lowered, suspended or withdrawn entirely by the rating agencies, if, in the judgment of such rating agencies, circumstances so warrant. Any lowering, suspension or withdrawal of such ratings may have an adverse effect on the market price and marketability of the notes.

The consolidated financial information included in this offering memorandum may be of limited use in assessing the financial position of the Subsidiary Guarantors.

The consolidated financial information included in this offering memorandum includes the financial information for our non-guarantor subsidiaries. As of June 30, 2019 and December 31, 2018, our non-guarantor subsidiaries had total assets of Ps. 44,076 million and Ps. 46,000 million, respectively (accounting for 36% and 36%, respectively, of our consolidated total assets), and total liabilities of Ps. 13,459 million and Ps. 15,561 million, respectively (accounting for 18% and 20%, respectively, of our consolidated total liabilities), and for the six months ended June 30, 2019 and the year ended December 31, 2018, our non-guarantor subsidiaries had an Adjusted EBITDA of Ps. 2,785 million and Ps. 7,394 million, respectively (accounting for 48% and 36%, respectively, of our consolidated Adjusted EBITDA). As a result, for the six months ended June 30, 2019 and the year ended December 31, 2018, our non-guarantor subsidiaries account for over 25% of our consolidated total assets and Adjusted EBITDA and the consolidated financial information included in this offering memorandum may be of limited use in assessing the financial position of the Subsidiary Guarantors.

EXCHANGE RATE INFORMATION

This offering memorandum contains translations of certain Mexican Peso amounts into U.S. Dollars at specified rates solely for the convenience of the reader. These convenience translations should not be construed as representations that the Mexican Peso amounts actually represent such U.S. Dollar amounts or could be converted into U.S. Dollars at the specified rate or at all. Furthermore, the exchange rate for purposes of the convenience translation is not necessarily the same rate we used in preparing our financial statements, which means that U.S. Dollar-denominated items, including U.S. Dollar-denominated expenses and liabilities, may have been translated into Mexican Pesos using one exchange rate (or an average exchange rate) and have been re-translated into U.S. Dollars for the convenience of the reader using the convenience translation exchange rate.

Unless otherwise indicated, the exchange rate used for purposes of the convenience translations is:

- with respect to statement of financial position data, the Official Exchange Rate on December 31, 2018 (Ps. 19.6829 to US$1.00) with respect to annual financial data and on June 30, 2019 (Ps. 19.1685 to US$1.00) with respect to interim financial data; and

- with respect to financial information other than statement of financial position data, the average exchange rate for the year ended December 31, 2018 which consists of the average of the Official Exchange Rate on each day during the year ended December 31, 2018 (Ps. 19.2380 to US$1.00) with respect to annual financial data and the average exchange rate for the six months ended June 30, 2019 which consists of the average of the Official Exchange Rate on each day during the six months ended June 30, 2019 (Ps. 19.1726 to US$1.00) with respect to interim financial data.

The following table sets forth, for the periods indicated, the high, low, average and period-end exchange rates for the Official Exchange Rate, all expressed in nominal Mexican Pesos per U.S. Dollar.

	High	Low	Average[1]	Period-End[2]
Year				
2014	14.79	12.85	13.30	14.72
2015	17.38	14.56	15.85	17.21
2016	21.05	17.18	18.66	20.66
2017	21.91	17.49	18.93	19.74
2018	20.72	17.98	19.24	19.68
Month				
March 2019	19.52	18.87	19.25	19.38
April 2019	19.38	18.77	19.02	18.94
May 2019	19.26	18.98	19.09	19.24
June 2019	19.76	18.98	19.27	19.17
July 2019	19.24	18.91	19.06	19.09
August 2019	20.10	18.99	19.59	20.10
September 2019 (through September 11)	20.13	19.54	19.85	19.54

(1) The average exchange rate means the average of the exchange rate on each day during the relevant period.
(2) As published by the Mexican Central Bank as the rate for the payment of obligations denominated in foreign currency payable in Mexico in effect on the period end date.

Source: The Mexican Central Bank.

On September 11, 2019, the Official Exchange Rate in effect was Ps. 19.54 per US$1.00.

USE OF PROCEEDS

We estimate that the net proceeds to us from the sale of the notes will be approximately Ps.9.5 billion (US$495 million), after deducting the initial purchasers' discount and the payment of the estimated offering expenses. We intend to use the net proceeds from this offering for general corporate purposes, which may include the repayment or retirement of indebtedness.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and consolidated capitalization as of June 30, 2019 (i) on a historical basis and (ii) as adjusted to reflect our receipt of the net proceeds from the sale of the notes and the application of the net proceeds in the manner described under "Use of Proceeds."

This table should be read in conjunction with, and is qualified in its entirety by reference to, "Management's Discussion and Analysis of Financial Condition and Results of Operations", "Selected Historical Financial Data and Other Information," "Use of Proceeds" and our Interim Unaudited Financial Statements included elsewhere in this offering memorandum.

	As of June 30, 2019 (Unaudited)			
	Actual		As Adjusted	
	(Ps.)	(US$)[1]	(Ps.)	(US$)[1]
	(in millions)			
Cash and cash equivalents	5,493	287	5,493	287
Liabilities:				
Current liabilities	34,440	1,797	24,955	1,302
Non-current liabilities:				
Alpek's 2022 International Notes	12,388	646	12,388	646
Alpek's 2023 International Notes	5,723	299	5,723	299
Alpek's 4.250% Senior Notes due 2029, offered hereby[2]	-	-	9,485	495
Other non-current liabilities	22,041	1,150	22,041	1,150
Total non-current liabilities	40,152	2,095	49,637	2,589
Total liabilities	74,592	3,891	74,592	3,891
Equity:				
Capital stock	6,050	316	6,050	316
Share premium	9,098	475	9,098	475
Retained earnings	15,846	827	15,846	827
Other reserves	4,883	255	4,883	255
Non-controlling interest	4,708	246	4,708	246
Total Stockholders' Equity	40,585	2,117	40,585	2,117
Total capitalization[3]	115,177	6,009	115,177	6,009

(1) Translated into U.S. Dollars, solely for the convenience of the reader, using an exchange rate of Ps. 19.1685 per U.S. Dollar, the Official Exchange Rate in effect on June 30, 2019. These convenience translations should not be construed as representations that the Peso amounts actually represent such U.S. Dollar amounts or could be converted into U.S. Dollars at the specified rate or at all. See "Exchange Rates."
(2) The notes offered hereby are presented net of estimated issuance costs of Ps.99 million (US$5 million).
(3) Consists of the sum of stockholders' equity plus total debt.

SELECTED HISTORICAL FINANCIAL DATA AND OTHER INFORMATION

You should read the following selected historical financial data and other information in conjunction with our Annual Audited Financial Statements and our Interim Unaudited Financial Statements, and the information set forth in the sections "Presentation of Financial and Certain Other Information," "Summary Historical Financial Data and Other Information" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this offering memorandum.

The financial information set forth below as of December 31, 2017 and 2018 and for the years ended December 31, 2016, 2017 and 2018 has been derived from our Annual Audited Financial Statements prepared in accordance with IFRS contained elsewhere in this offering memorandum. The financial information set forth below as of June 30, 2019 and for the six months ended June 30, 2018 and 2019 has been derived from our Interim Unaudited Financial Statements prepared in accordance with IAS 34 contained elsewhere in this offering memorandum.

	For the Year Ended December 31,				For the Six Months Ended June 30,		
	2016	2017	2018	2018[(1)]	2018	2019	2019[(2)]
	(Ps.)	(Ps.)	(Ps.)	(US$)	(Ps.)	(Ps.) (Unaudited)	(US$)
				(in millions)			
Income Statement Data:							
Revenues	90,192	98,998	134,523	6,993	62,888	62,992	3,286
Cost of sales	(76,943)	(88,598)	(116,519)	(6,057)	(53,978)	(57,071)	(2,977)
Gross profit	13,249	10,400	18,004	936	8,910	5,921	309
Selling expenses	(1,578)	(1,747)	(2,136)	(111)	(1,027)	(1,013)	(53)
Administrative expenses	(2,043)	(2,080)	(3,166)	(165)	(1,501)	(1,413)	(74)
Other income, net	235	335	4,564	237	4,773	326	17
Income before impairment of intangible assets and trade receivables	9,863	6,908	17,266	897	11,155	3,821	199
Reversal of impairment of intangible assets (impairment of intangible assets and trade receivables)	-	(9,762)	3,936	205	-	-	-
Operating income (loss)	9,863	(2,854)	21,202	1,102	11,155	3,821	199
Financial income	285	198	442	23	201	360	19
Financial expenses	(1,414)	(1,482)	(2,183)	(113)	(990)	(1,329)	(69)
Gain (loss) due to exchange fluctuation, net	(1,380)	(432)	(1,042)	(54)	499	185	10
Impairment of financial assets	-	(1,694)	-	-	-	-	-
Financial result, net	(2,509)	(3,410)	(2,783)	(145)	(290)	(784)	(41)
Equity in income of associates and joint ventures	(3)	(4)	(30)	(2)	(9)	(4)	-
Income (loss) before taxes	7,351	(6,268)	18,389	956	10,856	3,033	158
Income taxes	(2,358)	1,713	(3,455)	(180)	(1,305)	(944)	(49)
Net consolidated income (loss)	4,993	(4,555)	14,934	776	9,551	2,089	109
Earnings (losses) per share	1.71	(2.59)	6.44	0.33	4.17	0.75	0.04
Weighted average outstanding shares (millions of shares)	2,117	2,117	2,118	2,118	2,117	2,118	2,118

	As of December 31,			As of June 30,	
	2017	2018	2018[(1)]	2019	2019[(2)]
	(Ps.)	(Ps.)	(US$)	(Ps.)	(US$)
				(Unaudited)	
			(in millions)		
Statement of Financial Position Data:					
Current assets:					
Cash and cash equivalents	8,795	4,168	212	5,493	287
Restricted cash	763	3	0	3	0
Trade and other accounts receivable, net.	15,817	21,934	1,114	19,521	1,018
Inventories	16,364	24,511	1,245	18,923	987
Derivative financial instruments	148	30	2	9	0
Prepayments	305	469	24	577	30
Other	-	-	-	8,604	449
Total current assets	42,192	51,115	2,597	53,130	2,772
Non-current Assets:					
Property, plant and equipment, net	41,535	47,033	2,390	38,220	1,994
Right of use asset, net	-	-	-	3,243	169
Goodwill and intangible assets, net	4,065	4,368	222	4,166	217
Deferred income taxes	2,424	1,384	70	1,411	74
Prepayments	31	38	2	16	1
Other non-current assets	3,531	15,959	811	14,991	782
Total non-current assets	51,586	68,782	3,495	62,047	3,237
Total assets	93,778	119,897	6,092	115,177	6,009
Current liabilities:					
Debt	7,408	10,118	514	11,341	592
Lease liability	-	-	-	927	48
Trade and other accounts payable	19,783	26,051	1,324	19,258	1,005
Income taxes payable	573	1,279	65	654	34
Derivative financial instruments	230	1,047	53	1,450	76
Provisions	25	81	4	49	3
Other	-	-	-	761	40
Total current liabilities	28,019	38,576	1,960	34,440	1,797
Non-current liabilities:					
Debt	26,958	30,012	1,524	30,733	1,603
Lease liability	-	-	-	2,359	123
Derivative financial instruments	473	283	14	244	13
Provisions	155	1,107	56	1,100	57
Deferred income taxes	4,403	4,752	241	3,801	198
Income tax payable	623	469	24	403	21
Employees' benefits	1,061	1,099	56	1,121	58
Other non-current liabilities	422	436	22	391	20
Total non-current liabilities	34,095	38,158	1,939	40,152	2,095
Total liabilities	62,114	76,734	3,899	74,592	3,891
Total stockholders' equity	31,664	43,163	2,193	40,585	2,117

	For the Year Ended December 31,				For the Six Months Ended June 30,		
	2016	2017	2018	2018[(1)]	2018	2019	2019[(2)]
	(Ps.)	(Ps.)	(Ps.)	(US$)	(Ps.)	(Ps.)	(US$)
						(Unaudited)	
				(in millions)			
Cash Flow Data:							
Net cash generated from operating activities	6,019	7,225	8,261	429	4,436	5,324	278
Net cash used in investing activities	(6,212)	(7,601)	(15,489)	(805)	(9,262)	(1,743)	(91)
Net cash provided by (used in) financing activities	(4,209)	5,799	2,990	155	745	(2,210)	(115)
Other Financial Data:							
Adjusted EBITDA[(3)]	12,425	7,483	20,607	1,071	12,569	5,761	300

(1) Translated into U.S. Dollars, solely for the convenience of the reader, using an exchange rate of (i) Ps. 19.6829 per U.S. Dollar, the Official Exchange Rate in effect on December 31, 2018, with respect to statement of financial position data and

(ii) Ps. 19.2380 per U.S. Dollar, the average of the Official Exchange Rate on each day during the year ended December 31, 2018, with respect to financial information other than statement of financial position data. These convenience translations should not be construed as representations that the Mexican Peso amounts actually represent such U.S. Dollar amounts or could be converted into U.S. Dollars at the specified rate or at all. See "Exchange Rates."

(2) Translated into U.S. Dollars, solely for the convenience of the reader, using an exchange rate of (i) Ps. 19.1685 per U.S. Dollar, the Official Exchange Rate in effect on June 30, 2019, with respect to statement of financial position data and (ii) Ps. 19.1726 per U.S. Dollar, the average of the Official Exchange Rate on each day during the six months ended June 30, 2019, with respect to financial information other than statement of financial position data. These convenience translations should not be construed as representations that the Mexican Peso amounts actually represent such U.S. Dollar amounts or could be converted into U.S. Dollars at the specified rate or at all. See "Exchange Rates."

(3) Adjusted EBITDA has been included solely because we believe that Adjusted EBITDA enhances the understanding of our financial performance. We also believe Adjusted EBITDA is useful because it presents operating results on a basis unaffected by capital structure and taxes. Adjusted EBITDA, however, is not a measure of financial performance under IFRS and should not be considered as an alternative to net consolidated income or operating income as a measure of operating performance or to cash flows from operating activities as a measure of liquidity. Adjusted EBITDA has material limitations that impair its value as a measure of our overall profitability since it does not address certain ongoing costs of our business that could significantly affect profitability such as financial expenses, income taxes, depreciation and amortization. We define Adjusted EBITDA as operating income after adding back or subtracting, as the case may be, other income (expenses), depreciation and amortization and the impairment of long-lived assets. Our calculation of Adjusted EBITDA may not be comparable to other companies' calculation of similarly titled measures. See "Presentation of Financial Information and Certain Other Information - Non-GAAP Financial Measures." Our Adjusted EBITDA includes EBITDA attributable to our strategic alliances. The following table sets forth a reconciliation of Adjusted EBITDA to operating income (loss) for each of the periods presented:

	For the Year Ended December 31,				For the Six Months Ended June 30,		
	2016	**2017**	**2018**	**2018[(a)]**	**2018**	**2019**	**2019[(b)]**
	(Ps.)	**(Ps.)**	**(Ps.)**	**(US$)**	**(Ps.)**	**(Ps.)**	**(US$)**
						(Unaudited)	
				(in millions)			
Operating income (loss)	9,863	(2,854)	21,202	1,102	11,155	3,821	199
Depreciation and amortization	2,560	2,635	2,885	150	1,400	1,939	101
Impairment of long-lived assets	2	7,702	(3,480)	(181)	14	1	0
Adjusted EBITDA	12,425	7,483	20,607	1,071	12,569	5,761	300

(a) Translated into U.S. Dollars, solely for the convenience of the reader, using an exchange rate of Ps. 19.2380 per U.S. Dollar, the average of the Official Exchange Rate on each day during the year ended December 31, 2018. These convenience translations should not be construed as representations that the Mexican Peso amounts actually represent such U.S. Dollar amounts or could be converted into U.S. Dollars at the specified rate or at all. See "Exchange Rates."

(b) Translated into U.S. Dollars, solely for the convenience of the reader, using an exchange rate of Ps. 19.1726 per U.S. Dollar, the average of the Official Exchange Rate on each day during the six months ended June 30, 2019. These convenience translations should not be construed as representations that the Mexican Peso amounts actually represent such U.S. Dollar amounts or could be converted into U.S. Dollars at the specified rate or at all. See "Exchange Rates."

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

You should read this discussion in conjunction with our Annual Audited Financial Statements, our Interim Unaudited Financial Statements and the other financial information included elsewhere in this offering memorandum. This section contains forward-looking statements that involve risks and uncertainties. Our actual results may vary materially from those discussed in the forward-looking statements as a result of various factors, including, without limitation, those set forth in "Risk Factors" and other matters set forth in this offering memorandum. See "Forward-Looking Statements."

Overview

We are involved in the production, marketing and sale of a diversified portfolio of petrochemical products. We are one of the largest petrochemical companies in Mexico and in Latin America (based on 2018 revenues). For the year ended December 31, 2018, we sold our products in over 30 countries, with 70% of revenues from sales made to countries outside of Mexico. We have leadership positions across our product portfolio. For example, we were the largest producer of polyester and its precursor chemicals in the Americas based on installed capacity as of December 31, 2018 according to Wood Mackenzie. We are the largest purified terephthalic acid ("PTA") and polyethylene terephthalate ("PET") producer in the Americas and the second largest PET producer worldwide according to Wood Mackenzie, our internal estimates and publicly available market data. Furthermore, we believe we are one of the largest recyclers of PET bottles in the United States. Alpek is also the largest expandable polystyrene ("EPS") producer and owns the largest EPS plant in the Americas in terms of installed capacity, based on our internal estimates and our review of publicly available market data. We also operate the only polypropylene ("PP") plant in Mexico which is both the newest as well as one of the largest PP production facilities in North America. We are also the sole Mexican producer of caprolactam ("CPL"). For the year ended December 31, 2018, and the six months ended June 30, 2019, we derived approximately 74% and 76% respectively, of our revenues from our polyester group of products, which includes the production of PTA, PET resin, polyester fibers and recycled PET ("rPET"). The remainder of our revenues was derived primarily from our plastics and chemicals group products which include PP, EPS, CPL and specialty and industrial chemicals.

We focus on products and end markets that we believe offer the highest growth potential and ability to expand margins and that are more likely to provide stable financial performance through economic cycles. For the year ended December 31, 2018, 89% of our products (on the basis of sales volume) were used in what we believe are recession-resistant end markets such as the food and beverage packaging and consumer goods end markets. For the year ended December 31, 2018, we generated approximately 49% of our total revenues in high-growth emerging markets including Mexico.

Our businesses benefit from access to competitively sourced raw materials, large-scale integrated production sites, experienced sourcing personnel, proprietary state-of-the-art manufacturing technologies, strategic alliances and sustainable energy initiatives, which, together with our operational efficiency and expertise, allow us to maintain low-cost operations. We believe our recent growth in the Americas polyester market, our focus on product innovation and sustainability and our ability to maintain long-standing relationships with our key suppliers and customers have further enhanced our relevant market positions.

We believe we are not a typical petrochemical company. The capital intensity of our infrastructure is low and we are able to achieve a ratio of 3x sales over fixed assets. The segments where we participate are highly consolidated and due to our cost-plus pricing we are able to maintain stable margins. We also believe that due to our leading technology, we have been able to achieve significant cost efficiencies that place us within the first quartile of the industry.

We operate through two major business segments: polyester chain products ("Polyester Chain Business") and plastics and chemicals products ("Plastics & Chemicals Business"). Our Polyester Chain Business segment, comprising the production of PTA, PET, recycled PET and polyester fibers, serves the food and beverage packaging, textile and industrial filament end markets. Our Plastics & Chemicals Business segment, comprising the production of PP, EPS, CPL, fertilizers and other specialty and industrial chemicals, serves a wide range of markets,

including the food and beverage packaging, consumer goods, automotive, construction, agriculture, oil industry and pharmaceutical end markets.

Economic Environment

Our business is closely tied to general economic conditions in the countries where we operate. As a result, our economic performance and our ability to implement our business strategies may be affected by changes in general economic conditions in those regions. In addition, exchange rate fluctuations may result from weaker macroeconomic conditions. Prices for our raw materials may fluctuate as a result of changes in the price of oil and natural gas, which may be affected by overall trends in GDP and demand.

Even though the global economy had a favorable performance in 2018, risks persist as a result of economic policies, the geopolitical environment and commercial tensions, among others. In the United States, 2018 began with a positive economic environment and new tax incentives offered by the current administration; however, towards the end of the year, things started to decelerate. The international price of oil increased during most of 2018, although it fell sharply in the fourth quarter. The price of Brent crude fluctuated within a range between US$56 and US$80 per barrel in 2018, while the average price was US$71 per barrel, 31% above the average price in 2017.

The behavior of GDP and other variables in Mexico and the United States are key to understanding the context of Alpek's results. The GDP of the United States grew 2.9% in 2018, higher than the 2.4% reported in 2017. On the other hand, consumer inflation was 1.9% in 2018, lower than 2.1% observed in 2017. Mexico's GDP was 2.0% in 2018, lower than 2.4% in 2017. Consumer inflation was 4.8% in 2018, lower than 6.8% in 2017. Additionally, the nominal annual average exchange rate had a depreciation of 1.6%, increasing from Ps. 18.93 per U.S. Dollar in 2017 to Ps. 19.24 per U.S. Dollar in 2018. With respect to interest rates, the average 3-month nominal LIBOR rate in U.S. Dollars, was 2.3% in 2018 compared to 1.3% in 2017. In Mexico, the average TIIE in 2018 was 8.0% in nominal terms, compared to 7.1% in 2017.

Factors Affecting Our Results of Operations

Revenues

Our revenues consist primarily of revenue generated from sales of our products and are a function of sales volumes, price and product mix. The principal drivers of sales volumes of our products include:

- available production capacity, including through the acquisition of new production facilities or the expansion of existing plant capacity (see "—Effect of Acquisitions, Dispositions, Capacity Expansion and Plant Closure" below);
- our operating rate, the existence or absence of operational disruptions and demand in North America and globally for most of our products by end users, particularly demand for plastic bottles, containers for the food and beverage industries, and construction and packaging material, which indirectly drives demand for our products;
- demand for our products in the countries where we operate, as well as economic growth or contraction in those respective countries;
- demand in the Americas and globally for our Polyester Chain Business and other polyester products by end users, particularly demand for plastic bottles and other containers for the food and beverage industries; and
- regional market conditions and the regional supply and demand balance for our Polyester Chain Business products and Plastics & Chemicals Business products, and global trends regarding supply and demand.

The principal factors affecting the price of our products include:

- changes in raw material prices and other price escalators (energy, inflation and labor), which in accordance with industry pricing practices for polyester chain products in North America are reflected in our PTA prices pursuant to the "cost plus" pricing formula for PTA sales described in "Industry—PTA—Pricing;" these costs are also directly and indirectly reflected in our pricing for PET and polyester staple fiber as we seek to manage the margin between our prices and costs; and
- regional market conditions, the regional supply and demand balance for our products and global trends regarding supply and demand of our products.

Cost of Sales

Our cost of sales consists primarily of raw materials (particularly pX, MEG, propylene, propylene oxide, ethylene oxide, acetic acid, styrene monomer, ammonia and cyclohexane (together, "main raw materials")), energy (natural gas, fuel oil and electricity), other catalysts and minor raw materials used in the production processes, labor costs related to production facilities, transportation costs and depreciation and amortization of our plant and equipment. The principal factors that affect our cost of sales include:

- raw material and energy prices, which in the case of our main raw materials are closely related to the price of oil and natural gas;
- high start-up costs associated with new production facilities; and
- our ability to streamline or create efficiencies in production processes.

Realized gains or losses on derivative financial instruments related to commodities designated as hedge accounting are also included in cost of sales.

Gross Margin

Gross margin is defined as revenues less cost of sales. As described below under "—Key Drivers of Profitability," the profit margin per ton of our products produced and sold is a key driver of our profitability. Gross margin as a percentage of revenues is a less meaningful measure to us. For example, an increase in cost of sales will normally lead under our pricing practices to increased prices and revenues, and even if the absolute margin on a per ton basis remains constant, the gross margin expressed as a percentage of revenues will decrease in such event.

Selling, General and Administrative Expenses

Our selling, general and administrative expenses include a corporate service fee paid to Alfa in respect of administrative and other services provided by Alfa. See "Related Party Transactions."

Financial result, net

The components of financial result, net include:

- interest expense, which is primarily a function of the principal amount of debt outstanding, finance leases and the interest rates in effect, including the effects of the derivative financial instruments related to interest rates designated as hedge accounting;
- interest income, which includes interest income earned on cash and cash equivalents;
- exchange gain (loss), net, which includes net gains or losses relating to foreign currency exchange rate movements, as further described below under "—Effects of Foreign Currency Exchange Rate Fluctuations"; and
- loss from derivative financial instruments, which reflects changes in the fair market value of derivative financial instruments that from an economic point of view we entered into for hedging purposes but that are designated as held for trading because they do not satisfy the accounting requirements for hedge accounting.

Changes in the fair value of our derivative financial instruments are recognized in financial result, net, except when designated as a hedge. Their designation as a hedge is documented at the inception of the transaction, specifying the related objective, initial position, risk to be hedged, type of relationship, characteristics, accounting recognition and how their effectiveness will be assessed. Our policy is not to enter into derivative financial instruments for speculative purposes; however, we may enter into derivative financial instruments as an economic hedge against certain business risks, even if these instruments do not qualify for hedge accounting under IFRS.

In connection with our consumption of natural gas, we have entered, and expect to continue to enter, into derivative contracts with various counterparties to protect our financial results against increases in natural gas prices that could negatively affect our costs. Additionally, we use commodities-related derivative financial instruments in order to fix a significant portion of our PET production costs, which, in turn, allows us to offer a fixed price to some of our PET customers.

Effect of Acquisitions, Dispositions, Capacity Expansion and Plant Closure

Our results of operations for the periods under review were materially affected by acquisitions, dispositions and capacity expansion.

In April 2016, we acquired an EPS plant in Concón, Chile from BASF Chile, S.A. The facility's installed capacity of 20 Ktons per year complemented the EPS operations that Alpek had acquired during 2015 and increased the EPS capacity Alpek had at the time in the region by more than 30%.

During the third quarter of 2016, Alpek acquired a controlling interest in Selenis Canada Inc., Canada's only PET producer, which operates a plant in Quebec, Montreal, with an annual capacity of 144 Ktons per year. In addition to expanding Alpek's operations in North America, this transaction resulted in synergies from PTA integration and provided the opportunity to complement the Company's portfolio with differentiated PET products.

During 2017, and following a US$23 million investment, Alpek, through its PP subsidiary, finished the expansion of its propylene tanks. Two additional propylene storage spheres were built, resulting in an additional 5 Ktons per year capacity. The spheres benefited our PP business by enhancing our domestic propylene supply chains within Mexico and by providing greater flexibility for imports.

In 2017, Styropek, Alpek's EPS business unit, completed a US$33 million investment in a 75 Kton per year capacity expansion at the Altamira plant. With the annual increase, the plant reached a total installed capacity of 240 Ktons, making it one of the five largest worldwide.

Recent Acquisitions and Divestitures

Corpus Christi Acquisition

On March 21, 2018, Alpek announced that it had entered into a joint venture with Indorama Venture Holdings LP ("Indorama Holdings") and Far Eastern Investment (Holding) Limited ("Far Eastern"), to create Corpus Christi Polymers LLC ("CC Polymers"). CC Polymers acquired the integrated PTA/PET site under construction and related assets in their current state in Corpus Christi, Texas, as well as certain intellectual property (the "Corpus Christi Project"), from M&G USA Corp, M&G Resins USA LLC, M&G Polymers USA LLC and M&G Waters USA LLC (together "M&G USA"). On December 21, 2018, we announced that CC Polymers obtained the necessary regulatory clearance from the United States Federal Trade Commission ("FTC") to proceed with the purchase. Seven days later, the joint venture successfully completed the acquisition of the Corpus Christi Project for US$1.199 billion in cash and other capital contributions. For this purchase, Alpek contributed US$266 million in cash and US$133 million in other non-cash capital contributions associated with a portion of its secured claim with M&G with respect to supply rights in connection with amounts Alpek had paid to M&G under supply agreements prior to the M&G bankruptcy. In addition, Alpek obtained a US$67 million cash-credit for the remaining portion of its secured claim, subject to certain conditions. Upon completion of the project, each partner will have the right to receive one-third of the PTA and PET produced by the site, which is expected to have an annual capacity of 1.1 million tons of PET and 1.3 million tons of PTA. This will make this Corpus Christi plant the largest integrated PTA/PET plant in the Americas. Updated investment requirements and a specific timeline for completion are expected by the end of 2019. However, we currently expect the PET section of the plant to begin operations in 2021 and the PTA section to begin operations in late 2022.

Petroquímica de Pernambuco - Acquisition of Brazilian Assets

In April 2018, we completed the purchase of Companhia Petroquímica de Pernambuco – PetroquímicaSuape ("Suape") and Companhia Integrada Têxtil de Pernambuco – CITEPE ("Citepe" and, together with Suape, the "Brazilian Assets") from Petróleo Brasileiro S.A. ("Petrobras"). We acquired Petrobras' 100% stake in the Brazilian Assets on a debt-free basis for an amount of US$435 million. Both companies operate the only integrated PTA/PET site in South America and added an annual installed capacity of 640 Ktons of PTA, 450 Ktons of PET, and 90 Ktons of texturized polyester filament. Furthermore, through this purchase, Alpek acquired the only PTA producer in South America and one of only three PET plants in South America, thereby becoming the owner of two of the three PET plants in South America.

Cogeneration Asset Sale

On January 6, 2019, Alpek announced that it had signed an agreement for the sale of its Cosoleacaque and Altamira cogeneration power plants, located in Mexico (the "Cogeneration Asset Sale"). Under the terms of the agreement, Alpek will sell all of its shares of the companies that own both facilities: Cogeneración de Altamira, S.A. de C.V. ("CGA") and Cogeneración de Energía Limpia de Cosoleacaque, S.A. de C.V. ("CELCSA"), for an aggregate amount of US$801 million to ContourGlobal Terra 3 S.à.r.l ("CG Terra 3"), a subsidiary of ContourGlobal PLC ("ContourGlobal"). In accordance with the purchase agreement, the price will be subject to certain post closing adjustments and is due on the closing date.

Additionally, Alpek has agreed under the terms of the purchase agreement for the Cogeneration Asset Sale to enter into a call option agreement in favor of CG Terra 3, whereby Alpek undertakes the obligation to sell all of its shares of the capital stock of Tereftalatos Mexicanos Gas, S.A. de C.V. (whose assets, among others, include gas pipelines that transport natural gas from the point of interconnection of the integrated national transport system to the point of consumption in Altamira) to CG Terra 3. The call option agreement will have a term of five years from the date of closing of the Cogeneration Asset Sale.

The transaction is subject to customary closing terms and conditions and has already received corporate approvals and authorization from the *Comisión Federal de Competencia Económica of Mexico*. This will be the largest asset sale in Alpek's history. We believe the net proceeds from the sale will further strengthen Alpek's financial position and will maintain a secure and competitive power and steam supply to our Mexican facilities from a world-class operator with a proven track-record. The Cogeneration Asset Sale is expected to close before the end of 2019 and could close before the consummation of this offering.

Acquisition of Perpetual Recycling Solutions

On January 9, 2019, Alpek announced that one of its subsidiaries had signed an agreement with Perpetual Recycling Solutions, LLC to acquire a PET recycling plant in Richmond, Indiana ("Perpetual"). The Perpetual PET recycling plant has an installed capacity to produce approximately 45,000 tons per year of high quality recycled PET flake. The acquisition was completed on January 31, 2019. This acquisition complements Alpek's existing food-grade PET recycling operations in Argentina and its fiber-grade PET recycling joint venture facility in Fayetteville, North Carolina.

Effect of Consumption in the EPS Market

Alpek has the largest EPS production site in the Americas and consequently, as in our other operations, has a low production cost. Alpek sells its broad, high-quality EPS product line in the U.S., Mexican and Canadian markets and in some Central and South American and Caribbean markets. Alpek focused its EPS business in the construction and packaging segments. Therefore, our EPS business is tightly linked to the dynamics of the construction and manufacturing industries in the Americas.

Effects of Foreign Currency Exchange Rate Fluctuations on Results of Operations

We operate in several countries and as such we are exposed to foreign exchange rate risk when we translate revenue and expenses from foreign currencies, most notably the U.S. Dollar and Brazilian *Reais*, into Pesos. Most of our revenues are either denominated in or linked to the value of the U.S. Dollar. Similarly, a substantial majority of our costs of sales and other selling, general and administrative expenses are either denominated in or linked to the value of the U.S. Dollar, including our purchases of several raw materials and the costs of our operations in the United States. As a result, when the Mexican Peso depreciates against the U.S. Dollar, the same level of U.S. Dollar revenues or expenses in a prior period will result in higher reported revenues or expenses in Mexican Peso terms in the most recent period. Conversely, when the Mexican Peso appreciates against the U.S. Dollar, the same level of U.S. Dollar revenues or expenses in a prior period will result in lower reported revenues or expenses in Mexican Peso terms in the most recent period. In general, a depreciation of the Mexican Peso will likely result in an increase in our operating margins and a real appreciation of the Mexican Peso will likely result in a decrease in our operating margins, in each case, when measured in Mexican Pesos. This is because we have certain expenses in Mexican Pesos such as labor costs in connection with our Mexican operations, and our revenues denominated in or linked to U.S. Dollars exceed our cost of sales and other selling, general and administrative expenses denominated in or linked to U.S. Dollars. For more information, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Quantitative and Qualitative Disclosures about Market Risk—Derivative Financial Instruments."

Effects of Derivative Financial Instruments on Results of Operations

Our results of operations can be significantly impacted by mark-to-market gains or losses in connection with derivative financial instruments, including natural gas and other commodities-related derivatives. A substantial change in prices of these commodities could lead to the creation of mark-to-market losses and a significant potential liability in connection with these instruments. While we would expect over time to experience a related decrease in our cost of goods sold due to decreases in raw material and energy prices, the full savings would not be immediately recognized in our financial statements, but the fair value of the liability would be required to be recognized immediately. In addition, if we exceed certain thresholds of potential liability, we are required by counterparties to post collateral, which is reflected as restricted cash on the balance sheet and entails additional expense to fund the cash position. As of June 30, 2019, and December 31, 2016 and 2017 and 2018, we did not have any collateral or restricted cash related to derivative financial instruments.

Our internal policy is not to enter into derivative financial instruments for speculative purposes; however, we may enter into derivative financial instruments as an economic hedge against certain business risks, even if these instruments do not qualify for hedge accounting under IFRS. In addition, we may be required to record fair value losses in the future that could be material. The mark-to-market accounting for derivative financial instruments is reflected in our statement of income and may result in volatility in our earnings. In addition, we may incur losses in the future in connection with our derivative financial instruments transactions, which could have a material adverse

effect on our financial condition and results of operations. See "—Quantitative and Qualitative Disclosures about Market Risk—Derivative Financial Instruments."

Limited Seasonality

Our results of operations are not materially affected by seasonality. Although end markets such as water, carbonated soft drinks, food packaging, construction, appliance packaging, certain apparel and fertilizers experience some seasonality, the historical impact on the demand for our products has not been material. Furthermore, our diversified portfolio of products and geographical presence throughout the Americas serve to reduce the effects of any steep cyclical or seasonal behavior in the demand for any of our products.

Key Drivers of Profitability

The key drivers of our profitability include:

Profit margin per ton produced*. The* profit margin per ton of our products produced and sold is a key driver of our profitability. With respect to the Polyester Chain Business, the historical industry practice in North America of pricing PTA on a "cost plus" basis has allowed us to define through negotiation with our customers the margin on the PTA production we sell with regard to our most significant (but not all) costs. In the case of PET, a significant portion of the volume of our expected 2019 PET production has been committed to customers pursuant to annual sales contracts with fixed price arrangements; we will seek to follow the same practice in the future. For these fixed price arrangements, we seek to ensure a desired margin between the price and our own raw material and other costs by entering into arrangements with our suppliers of raw materials or by entering into financial derivatives related to commodities. For the Plastics & Chemicals Business, we follow market pricing dynamics, which are affected by the supply and demand balance and the price fluctuations of raw materials. We aim to maintain the margin of our products by passing through to our customers any effects on our cost bases. In the case of PP, we have contracts with several converters in the larger segments of the market that are linked to market propylene prices in the U.S. Gulf Coast.

Production and capacity operating rate. Because of the significant fixed cost that is required to operate our production facilities, a certain level of production is required for a production facility to break even. Thus, we seek to operate at a high operating rate, which allows us to increase profitability by leveraging our fixed-cost base (*i.e.*, obtain an incremental profit per ton produced and sold without an incremental increase in fixed costs).

Large-scale and low-cost production. In general, Alpek has traditionally focused on achieving large-scale, low-cost competitiveness. We believe many of our operations are positioned among the lowest cost producers of the industries in which we participate.

Our ability to integrate acquisitions. Our expertise in carrying out M&A and post-merger integration in different markets has enabled us to successfully execute and integrate a number of acquisitions. Our due diligence and post-merger integration process helps us identify and execute value generating strategies that result in significant synergies and efficiencies.

Critical Accounting Estimates and Judgments

We have identified certain key accounting estimates on which our financial condition and results of operations are dependent. These key accounting estimates most often involve complex matters or are based on subjective judgments or decisions that require management to make estimates and assumptions which affected the amounts reported in the financial statements. We base our estimates on historical information, where applicable and other assumptions that we believe are reasonable under the circumstances.

Actual results may differ from our estimates under different assumptions or conditions. In addition, estimates routinely require adjustments based on changing circumstances and the receipt of new or more accurate information. In the opinion of our management, our most critical accounting estimates under IFRS are those that require management to make estimates and assumptions that affect the reported amounts related to the accounting for fair value of derivatives and other financial instruments, valuation of non-current assets, goodwill, other intangible assets, income taxes and employee benefit obligations. For a full description of all of our accounting

policies, see our Annual Audited Financial Statements and Interim Unaudited Financial Statements included in this offering memorandum.

There are certain critical estimates that we believe required significant judgment in the preparation of our financial statements. We consider an accounting estimate to be critical if:

- it requires us to make assumptions because information was not available at the time or it included matters that were highly uncertain at the time we were making the estimate; and
- changes in the estimate or different estimates that we could have selected would have had a material impact on our financial condition or results of operations.

Critical accounting estimates and assumptions

The Company makes estimates and assumptions concerning the future. The resulting accounting estimates often vary from actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below:

- *Estimated impairment of goodwill and intangible assets with indefinite useful lives*

  The Company performs annual tests to determine whether goodwill and intangible assets with indefinite useful lives have suffered any impairment. For impairment testing, goodwill and intangible assets with indefinite lives are allocated to those groups of cash-generating units ("CGUs") from which the Company has considered that economic and operational synergies of business combinations are generated. The recoverable amounts of the CGUs have been determined based on the calculations of their value in use, which require the use of estimates. The most significant of these estimates are as follows:

  - Estimates of future gross and operating margins, according to the historical performance and industry expectations for each CGU group;
  - Discount rate based on the weighted average cost of capital (WACC) of each CGU or group of CGUs; and
  - Long-term growth rates.

- *Recoverability of deferred tax assets*

  Alpek has tax loss carryforwards, which can be used in the following years until their expiration. Based on the projections of taxable income that Alpek will generate in the subsequent years, management has determined that current tax losses will be used before they expire and, therefore, it was considered probable that the deferred tax assets for such losses will be recovered.

- *Long-lived assets*

  The Company estimates the useful lives of long-lived assets in order to determine the depreciation and amortization expenses to be recorded during the reporting period. The useful life of an asset is calculated when the asset is acquired and is based on past experience with similar assets, considering anticipated technological changes or any other type of changes. Were technological changes to occur faster than estimated, or differently than anticipated, the useful lives assigned to these assets could have to be reduced. This would lead to the recognition of a greater depreciation and amortization expense in future periods. Alternatively, these types of technological changes could result in the recognition of a charge for impairment to reflect the reduction in the expected future economic benefits associated with the assets.

  The Company reviews depreciable and amortizable assets on an annual basis for signs of impairment, or when certain events or circumstances indicate that the book value may not be recovered during the remaining useful life of the assets. For intangible assets with an indefinite useful life, the Company performs impairment tests annually and at any time that there is an indication that the asset may be impaired.

  To test for impairment, the Company uses projected cash flows, which consider the estimates of future transactions, including estimates of revenues, costs, operating expenses, capital expenses and debt service. In accordance with IFRS, discounted future cash flows associated with an asset or CGU are compared

to the book value of the asset or CGU being tested to determine if an impairment or a reversal of an impairment exist.

- *Estimation of default probabilities and recovery rate to apply the model of expected losses in the calculation of impairment of financial assets*

  The Company assigns to customers with which it maintains an account receivable at each reporting date, either individually or as a group, an estimate of the probability of default on the payment of accounts receivable and the estimated recovery rate, with the purpose of reflecting the cash flows expected to be received from the outstanding balances on such reporting date.

- *Business combinations*

  When business combinations are concluded, the acquisition method is required to recognize the identifiable net assets acquired at fair value, at the date of acquisition; any excess of the consideration paid on the identified net assets is recognized as goodwill, which is subject to impairment tests at least once a year. On the other hand, any excess of the net assets acquired over the consideration paid is recognized as a gain in profit or loss.

  To estimate the fair value of the assets acquired and liabilities assumed, the Company uses observable market data to the extent it is available. When the input data of Level 1 is not available, the Company hires an independent qualified appraiser to perform the valuation. Management works closely with the independent qualified appraiser to establish the valuation techniques, the premises, the appropriate input data and the criteria to be used in the valuation models.

- *Estimation of the discount rate to calculate the present value of future minimum lease payments*

  The Company estimates the discount rate to use in the determination of the lease liability, based on the incremental borrowing rate ("IBR").

  The Company uses a three-tier model, with which it determines the three elements that comprise the discount rate: (i) reference rate, (ii) credit risk component and (iii) adjustment for characteristics of the underlying asset. In this model, management also considers its policies and practices to obtain financing, distinguishing between the one obtained at the holding company level or at the level of each subsidiary. Finally, for real estate leases, or in which there is significant and observable evidence of their residual value, the Company estimates and evaluates an adjustment for characteristics of the underlying asset, based on the possibility that said asset is granted as collateral or guarantee against the risk of default.

- *Estimation of the lease term*

  The Company defines the lease term as the period for which there is a contractual payment commitment, considering the non-cancelable period of the contract, as well as the renewal and early termination options that are probable to be exercised. The Company participates in lease contracts that do not have a defined non-cancellable term, a defined renewal period (in case it contains a renewal clause), or automatic annual renewals, so, to measure the lease liability, it estimates the contracts term considering their contractual rights and limitations, their business plan, as well as management's intentions for the use of the underlying asset.

  Additionally, the Company considers the clauses of early termination of its contracts and the probability of exercising them, as part of its estimate of the lease term.

Critical judgments in applying the entity's accounting policies

Determination of exercise of control over certain investments in shares

The Company has evaluated critical control factors and has concluded that it should consolidate the financial statements of its subsidiaries Polioles and Indelpro. The analysis performed by the Company included the assessment of the substantive decision making rights of the respective shareholders set forth in their bylaws, resulting in management's conclusion that it has the power to govern their relevant activities.

New Accounting Policies and Standards

The Company adopted all new standards and interpretations in effect as of January 1, 2019, including the annual improvements to IFRS, as described below.

IFRS 16, Leases

IFRS 16, *Leases*, supersedes IAS 17, Leases, and the related interpretations. This new standard brings most leases on balance sheet for lessees under a single model, eliminating the distinction between operating and financial leases, while the model for lessees remains without significant changes. IFRS 16 is effective beginning January 1, 2019, and the Company decided to adopt it with the recognition of all the effects as of that date, without changing prior years.

Under IFRS 16, lessees will recognize a right-of-use asset and the corresponding lease liability. The right of use will be depreciated based on the contractual term or, in some cases, on its economic useful life. On the other hand, the financial liability will be measured at initial recognition, discounting future minimum lease payments at present value according to a term, using the discount rate that represents the lease funding cost; subsequently, the liability will accrue interest through maturity.

The Company will apply the exemptions to not to recognize an asset and a liability as described above, for lease agreements with a term of less than 12 months (provided that they do not contain purchase or term renewal options) and for those agreements where the acquisition of an individual asset of the contract was less than US$5,000. Therefore, payments for such leases will continue to be recognized as expenses subtracted from operating income.

The Company adopted IFRS 16 on January 1, 2019 and recognized a right-of-use asset and a lease liability of Ps. 3,252 million.

In addition, the Company adopted and applied the following practical expedients provided by IFRS 16:

- Account for as leases the payments made in conjunction with the rent, and that represent services (for example, maintenance and insurance).
- Create portfolios of contracts that are similar in terms, economic environment and characteristics of assets, and use a funding rate by portfolio to measure leases.
- Not to revisit the previously reached conclusions for service agreements which were analyzed to December 31, 2018 under the IFRIC 4, *Determining Whether a contract Contains a Lease*, and where it had been concluded that there was no implicit lease.

The Company has taken the required steps to implement the changes that the standard represents in terms of internal control, tax and systems affairs, from the adoption date.

IFRIC 23, Interpretation on uncertainty over income tax treatments

This new interpretation clarifies how to apply the recognition and measurement requirements in IAS 12, *Income Tax*, when there is uncertainty over income tax treatments. Uncertain tax treatments is a tax treatment for which there is uncertainty over whether the relevant taxation authority will accept the tax treatment under tax law. In such circumstances, the Company shall recognize and measure its current or deferred tax assets or liabilities by applying the requirements in IAS 12 based on taxable profit (tax loss), tax bases, unused tax losses, unused tax credits, and the tax rates determined by applying this interpretation.

The Company applied IFRIC 23 on January 1, 2019. As an initial adoption method, the Company chose to recognize an adjustment in the initial balance of retained earnings, without modifying comparative periods. However, the Company determined that the impacts of the implementation of this Interpretation as of January 1, 2019 are not material considering the prevailing conditions of the tax positions that it has taken at the date of adoption and the faculties of the competent authorities to assess tax positions held by the Company at the same date.

Results of Operations

Results of Operations for the Six Months Ended June 30, 2019 compared to the Six Months Ended June 30, 2018

The following financial information has been derived from our Interim Unaudited Financial Statements, appearing elsewhere in this offering memorandum:

	For the Six Months Ended June 30,				Percentage Change
	2018	Percent of Revenues	2019	Percent of Revenues	2019 vs. 2018
	(in millions of Pesos, except percentages)				
Revenues	62,888	100.0%	62,992	100.0%	0.2%
Cost of sales	(53,978)	(85.8)	(57,071)	(90.6)	5.7
Gross profit	8,910	14.2	5,921	9.4	(33.6)
Selling and administrative expenses	(2,528)	(4.0)	(2,426)	(3.9)	(4.0)
Other income (expenses), net	4,773	7.6	326	0.5	(93.1)
Income before impairment of intangible assets and trade receivables	11,155	17.7	3,821	6.1	(65.7)
Operating income	11,155	17.7	3,821	6.1	(65.7)
Financial income	201	0.3	360	0.6	79.1
Financial expenses	(990)	(1.6)	(1,329)	(2.1)	34.2
Loss due to exchange fluctuation, net	499	0.8	185	0.3	(62.9)
Financial result, net	(290)	(0.5)	(784)	(1.2)	170.3
Equity in income of associated and joint ventures	(9)	-	(4)	-	(55.6)
Income before taxes	10,856	17.3	3,033	4.8	(72.1)
Income taxes	(1,305)	(2.1)	(944)	(1.5)	(27.7)
Net consolidated income	9,551	15.2	2,089	3.3	(78.1)
Adjusted EBITDA[(1)]	12,569	20.2%	5,761	9.1%	(54.2)%

(1) For a definition of Adjusted EBITDA, see "Presentation of Financial and Certain Other Information—Non-GAAP Financial Measures."

The following table provides a breakdown of revenues by business segment, including intercompany sales, for the six months ended June 30, 2018 and 2019:

	For the Six Months Ended June 30,				Percentage Change
	2018	Percent of Revenues	2019	Percent of Revenues	2019 vs. 2018
	(in millions of Pesos, except percentages)				
Business Segment:					
Polyester Chain Business	46,475	73.9%	47,630	75.6%	2.5%
Plastics & Chemicals Business	16,602	26.4	14,471	23.0	(12.8)
Other[(1)]	(189)	(0.3)	891	1.4	(571.4)
Total	62,888	100.0%	62,992	100.0%	0.2%

(1) Intercompany sales between business segments that are eliminated plus other revenues.

The following table provides a breakdown of revenues by country of origin for the six months ended June 30, 2018 and 2019:

	For the Six Months Ended June 30,				Percentage Change
	2018	Percent of Revenues	2019	Percent of Revenues	2019 vs. 2018
	(in millions of Pesos, except percentages)				
Country of origin:					
Mexico	26,680	42.4%	25,043	39.8%	(6.1)%
United States	28,104	44.7	25,549	40.6	(9.1)
Argentina	3,174	5.0	2,707	4.3	(14.7)
Brazil	2,851	4.5	7,832	12.4	174.7
Chile	545	0.9	505	0.8	(7.3)
Canada	1,534	2.4	1,356	2.2	(11.6)
Total	62,888	100.0%	62,992	100.0%	0.2%

The following table provides a breakdown of sales volume by business segment, for the six months ended June 30, 2018 and 2019:

	For the Six Months Ended June 30,				Percentage Change
	2018	Percent of Revenues	2019	Percent of Revenues	2019 vs. 2018
	(in Ktons, except percentages)				
Polyester Chain Busines	1,699	78.4%	1,744	79.0%	2.6%
Plastics & Chemicals Business	468	21.6	463	21.0	(1.1)
Total	2,167	100.0%	2,207	100.0%	1.8%

Revenues by Business Segment

Revenues of the Polyester Chain Business for the six months ended June 30, 2019, including intercompany sales between business segments, were Ps. 47,630, an increase of 2.5% from the Ps. 46,475 million reported for the same period in 2018. This increase was primarily due to the consolidation of Suape and Citepe's results for the full six months in 2019 compared to only three months of consolidation of such results in the first half of 2018. This was partially offset by lower average prices (-0.5% in US Dollar terms and -0.2% in Peso terms).

Revenues of the Plastics & Chemicals Business for the six months ended June 30, 2019, including intercompany sales between business segments, were Ps. 14,471 million, a decrease of 12.8% from the Ps. 16,602 million reported for the same period in 2018. This decrease was primarily due to a 1.1% decrease in sales volume as a result of lower caprolactam demand and lower average prices (-11.9% decrease in US Dollar terms and -11.6% decrease in Peso terms) as a result of lower prices in some of our raw materials (principally propylene and styrene) which was partially offset by the sales volume increase in polypropylene.

Revenues by Country of Origin

Revenues from Mexico for the six months ended June 30, 2019 were Ps. 25,043 million, a decrease of 6.1% from the Ps. 26,680 million reported for the same period in 2018. This decrease was primarily due to lower PTA sales volume, resulting from a decrease in demand, with relatively lower prices when compared to the same period in 2018.

Revenues from the United States for the six months ended June 30, 2019 were Ps. 25,549 million, a decrease of 9.1% from the Ps. 28,104 million reported for the same period in 2018. This decrease was primarily due to a combination of lower PET sales volume caused by market conditions and lower prices, reflecting a decrease in raw materials, when compared to the first half of 2018. This decrease was partially offset by a positive impact on revenues due to an average depreciation of the Mexican peso against the US Dollar.

Revenues from Argentina for the six months ended June 30, 2019 were Ps. 2,707 million, a decrease of 14.7% from the Ps. 3,174 million reported for the same period in 2018. This decrease was primarily due to lower PET sales volume in the region.

Revenues from Brazil for the six months ended June 30, 2019 were Ps. 7,832 million, an increase of 174.7% from the Ps. 2,851 million reported for the same period in 2018. This increase was primarily due to the consolidation of Suape and Citepe's results for the full six months in 2019 compared to only three months of consolidation of such results in the first half of 2018.

Revenues from Chile for the six months ended June 30, 2019 were Ps. 505 million, a decrease of 7.3% from the Ps. 545 million reported for the same period in 2018. This decrease was primarily due to a 10.3% decrease in the average price of EPS.

Revenues from Canada for the six months ended June 30, 2019 were Ps. 1,356 million, a decrease of 11.6% from the Ps. 1,534 million reported for the same period in 2018. This decrease was primarily due to lower prices when compared to the first half of 2018, partially offset by an increase of 3.5 Ktons of PET sales volume.

General

Revenues for the six months ended June 30, 2019 were Ps. 62,992 million, an increase of 0.2% from the Ps. 62,888 million reported for the same period in 2018. This increase was primarily due to an increase in PTA sales volume that was offset by lower average prices (-2.0% in US Dollar terms and -1.7% in Peso terms). By business segment, polyester chain products average prices were lower by -0.5% and -0.2% in US Dollar and Peso terms, respectively, while plastics and chemicals products average prices were lower by -11.9% and -11.6% in US Dollar and Peso terms, respectively.

Cost of sales for the six months ended June 30, 2019 was Ps. 57,071 million, an increase of 5.7% from the Ps. 53,978 million reported for the same period in 2018. This increase was primarily due to an increase in PTA sales volume and the inclusion of Suape and Citepe's results for the full six months in 2019.

Gross profit, defined as the difference between revenues and cost of sales, for the six months ended June 30, 2019 was Ps. 5,921 million, a decrease of 33.6% from the Ps. 8,910 million reported for the same period in 2018. This decrease was primarily due to the factors described above.

Selling and administrative expenses for the six months ended June 30, 2019 were Ps. 2,426 million, a decrease of 4.0% from the Ps. 2,528 million reported for the same period in 2018. This decrease was primarily due to synergies in the polyester segment.

Other income, net for the six months ended June 30, 2019 was Ps. 326 million, a decrease of 93.1% from the Ps. 4,773 million reported for the same period in 2018. This decrease was primarily due to the extraordinary gain of Ps. 4,597 million (US$220 million) in 2018 associated with the business combination related to the acquisition of Suape and Citepe.

Operating income for the six months ended June 30, 2019 was Ps. 3,821 million, a decrease of 65.7% from the Ps. 11,155 million reported for the same period in 2018. This decrease was primarily due to a decrease in gross profit.

Financial result, net for the six months ended June 30, 2019 reflected an expense of Ps. 784 million, compared to an expense of Ps. 290 million reported for the same period in 2018. This change was primarily due to additional interest expense related to the adoption of IFRS 16 and a lower gain from exchange fluctuations in 2019.

Income tax for the six months ended June 30, 2019 was Ps. 944 million, a decrease of 27.7% from the Ps. 1,305 million reported for the same period in 2018. This decrease was primarily due to a decrease in income before taxes, resulting in an effective tax rate of 31% for the six months ended June 30, 2019.

Net consolidated income for the period for the six months ended June 30, 2019 was Ps. 2,089 million, a decrease of 78.1% from the Ps. 9,551 million reported for the same period in 2018. This change was primarily due to the factors discussed above.

Results of Operations for the Year Ended December 31, 2018 compared to the Year Ended December 31, 2017

The following financial information has been derived from our Annual Audited Financial Statements, appearing elsewhere in this offering memorandum:

	For the Year Ended December 31,				Percentage Change
	2017	**Percent of Revenues**	**2018**	**Percent of Revenues**	**2018 vs. 2017**
	(in millions of Pesos, except percentages)				
Revenues	98,998	100.0%	134,523	100.0%	35.9%
Cost of sales	(88,598)	(89.5)	(116,519)	(86.6)	31.5
Gross profit	10,400	10.5	18,004	13.4	73.1
Selling and administrative expenses	(3,827)	(3.9)	(5,302)	(3.9)	38.5
Other income (expenses), net	335	0.3	4,564	3.4	1,262.4
Income before impairment of intangible assets and trade receivables	6,908	7.0	17,266	12.8	149.9
Reversal of impairment (impairment) of intangible assets and trade receivables	(9,762)	(9.9)	3,936	2.9	(140.3)
Operating income (loss)	(2,854)	(2.9)	21,202	15.8	(842.9)
Financial income	198	0.2	442	0.3	123.2
Financial expenses	(1,482)	(1.5)	(2,183)	(1.6)	47.3
Loss due to exchange fluctuation, net	(432)	(0.4)	(1,042)	(0.8)	141.2
Impairment of financial assets	(1,694)	(1.7)	-	-	(100.0)
Financial result, net	(3,410)	(3.4)	(2,783)	(2.1)	(18.4)
Equity income of associated and joint ventures	(4)	-	(30)	-	650.0
Income (loss) before taxes	(6,268)	(6.3)	18,389	13.7	(393.4)
Income taxes	1,713	1.7	(3,455)	(2.6)	(301.7)
Net consolidated income (loss)	(4,555)	(4.6)	14,934	11.1	(427.9)
Adjusted EBITDA[1]	7,483	7.6%	20,607	15.3%	175.4%

(1) For a definition of Adjusted EBITDA, see “Presentation of Financial and Certain Other Information—Non-GAAP Financial Measures.”

The following table provides a breakdown of revenues by business segment, including intercompany sales, for the years ended December 31, 2017 and 2018:

	For the Year Ended December 31,				Percentage Change
	2017	**Percent of Revenues**	**2018**	**Percent of Revenues**	**2018 vs. 2017**
	(in millions of Pesos, except percentages)				
Business Segment:					
Polyester Chain Business	70,589	71.3%	99,664	74.1%	41.2%
Plastics & Chemicals Business	28,724	29.0	33,204	24.7	15.6
Others[1]	(315)	(0.3)	1,655	1.2	(625.4)
Total	98,998	100.0%	134,523	100.0%	35.9%

(1) Intercompany sales between business segments that are eliminated plus other revenues.

The following table provides a breakdown of revenues by country of origin for 2017 and 2018:

	For the Year Ended December 31,				Percentage Change
	2017	Percent of Revenues	2018	Percent of Revenues	2018 vs. 2017
	(in millions of Pesos, except percentages)				
Country of origin:					
Mexico	47,516	48.0%	54,282	40.4%	14.2%
United States	41,438	41.9	57,894	43.0	39.7
Argentina	5,341	5.4	6,784	5.0	27.0
Brazil	1,462	1.5	11,291	8.4	672.3
Chile	921	0.9	1,094	0.8	18.8
Canada	2,320	2.3	3,178	2.4	37.0
Total	98,998	100.0%	134,523	100.0%	35.9%

The following table provides a breakdown of sales volume by business segment, for 2017 and 2018:

	For the Year Ended December 31,				Percentage Change
	2017	Percent of Revenues	2018	Percent of Revenues	2018 vs. 2017
	(in Ktons, except percentages)				
Polyester Chain Busines	3,105	77.4%	3,490	79.3%	12.4%
Plastics & Chemicals Business	907	22.6	912	20.7	0.7
Total	4,012	100.0%	4,402	100.0%	9.7%

Revenues by Business Segment

Revenues of the Polyester Chain Business for the year ended December 31, 2018, including intercompany sales between business segments, were Ps. 99,664, an increase of 41.2% from the Ps. 70,589 million reported in 2017. This increase was primarily due to higher average prices in raw materials and the acquisition of Suape and Citepe. The segment registered an approximate increase of average prices (23.6% in US Dollar terms and 25.7% in Peso terms) and an increase in volume of approximately 12%.

Revenues of the Plastics & Chemicals Business for the year ended December 31, 2018, including intercompany sales between business segments, were Ps. 33,204 million, an increase of 15.6% from the Ps. 28,724 million reported in 2017. This increase was primarily due to an increase of in average prices (13.1% in US Dollar terms and 14.7% in Peso terms).

Revenues by Country of Origin

Revenues from Mexico for the year ended December 31, 2018 were Ps. 54,282 million, an increase of 14.2% from the Ps. 47,516 million reported in 2017. This increase was primarily due to higher average prices driven by higher raw material prices and higher sales volumes, as Alpek was able to capture additional PET volume driven by M&G's bankruptcy. Additionally, revenues were positively impacted by an average depreciation of the Mexican peso against the US Dollar.

Revenues from the United States for the year ended December 31, 2018 were Ps. 57,894 million, an increase of 39.7% from the Ps. 41,438 million reported in 2017. This increase was primarily due to higher average prices (in US Dollar terms) of approximately 18.5% driven by higher raw material prices and 8.1% higher sales volumes in PET, as Alpek was able to capture additional PET volume driven by M&G's bankruptcy, as well as higher sales volume of EPS. Additionally, revenues were positively impacted by an average depreciation of the Mexican peso against the US Dollar.

Revenues from Argentina for the year ended December 31, 2018 were Ps. 6,784 million, an increase of 27.0% from the Ps. 5,341 million reported in 2017. This increase was primarily due to an increase of 5 Ktons in PET volume and 30.8% higher average prices (in US Dollar terms).

Revenues from Brazil for the year ended December 31, 2018 were Ps. 11,291 million, an increase of 672.3% from the Ps. 1,462 million reported in 2017. This increase was primarily due to our acquisition of the Brazilian Assets and an increase of 5.8 Ktons in EPS sales volume.

Revenues from Chile for the year ended December 31, 2018 were Ps. 1,094 million, an increase of 18.8% from the Ps. 921 million reported in 2017. This increase was primarily due to an increase of 3 Ktons in EPS sales volume.

Revenues from Canada for the year ended December 31, 2018 were Ps. 3,178 million, an increase of 37.0% from the Ps. 2,320 million reported in 2017. This increase was primarily due to an increase of 10 Ktons of PET sales volume, a full year of consolidated operations of Selenis, product optimization and average price increases of approximately 31% (in US Dollar terms).

General

Revenues for the year ended December 31, 2018 were Ps. 134,523 million, an increase of 35.9% from the Ps. 98,998 million reported in 2017. This increase was primarily due to an increase in sales volume as discussed above and higher average prices (21.8% in US Dollar terms and 23.8% in Peso terms) driven by an increase in feedstock prices. By business segment, polyester chain products average prices were higher by 23.6% and 25.7% in US Dollar and Peso terms, respectively, while plastics and chemicals products average prices were higher by 13.0% and 14.7% in US Dollar and Peso terms, respectively.

Cost of sales for the year ended December 31, 2018 was Ps. 116,519 million, an increase of 31.5% from the Ps. 88,598 million reported in 2017. This increase was primarily due to higher prices of raw materials.

Gross profit, defined as the difference between revenues and cost of sales, for the year ended December 31, 2018 was Ps. 18,004 million, an increase of 73.1% from the Ps. 10,400 million reported in 2017. This increase was primarily due to the factors described above.

Selling and administrative expenses for the year ended December 31, 2018 were Ps. 5,302 million, an increase of 38.5% from the Ps. 3,827 million reported in 2017. This increase was primarily due to additional expenses incurred as a result of the Suape and Citepe acquisition.

Other income, net for the year ended December 31, 2018 was Ps. 4,564 million, an increase of 1,262.4% from the Ps. 335 million reported in 2017. This increase was primarily due to an extraordinary gain of Ps. 4,597 million (US$220 million) in 2018 associated with the business combination related to the acquisition of Suape and Citepe.

Reversal of impairment (impairment) of intangible assets and trade receivables for the year ended December 31, 2018 was Ps. 3,936 million. As part of the acquisition of the Corpus Christi Project (through CC Polymers, Alpek's joint venture with Indorama Holdings and Far Eastern), Alpek was able to reverse Ps. 3,936 million of the Ps. 9,762 million impairment reflected in 2017.

Operating income (loss) for the year ended December 31, 2018 was an income of Ps. 21,202 million, an increase of 842.9% from the loss of Ps. 2,854 million reported in 2017. This change was primarily due to an increase in gross profit lead by higher sales and the reversal of impairment of intangible assets and trade receivables discussed above.

Financial result, net for the year ended December 31, 2018 reflected an expense of Ps. 2,783 million, compared to an expense of Ps. 3,410 million reported in 2017. The financial result, net in 2017 included a Ps. 1,694 million financial impairment related to the effects of the bankruptcy of certain subsidiaries of M&G. During 2018, the expense was primarily due to Alpek's indebtedness. We also recognized a loss in 2018 due to exchange fluctuation, net of Ps. 1,042 million.

Income tax for the year ended December 31, 2018 was a tax expense of Ps. 3,455 million compared to a tax benefit of Ps. 1,713 million reported in 2017. This change was primarily due to an increase in income before taxes, resulting in an effective tax rate of 19% for the year ended December 31, 2018.

Net consolidated income (loss) for the period for the year ended December 31, 2018 was an income of Ps. 14,934 million, compared to the loss of Ps. 4,555 million reported in 2017. This change was primarily due to the factors discussed above.

Results of Operations for the Year Ended December 31, 2017 compared to the Year Ended December 31, 2016

The following financial information has been derived from our Annual Audited Financial Statements, appearing elsewhere in this offering memorandum:

	For the Year Ended December 31,				Percentage Change
	2016	**Percent of Revenues**	**2017**	**Percent of Revenues**	**2017 vs. 2016**
	(in millions of Pesos, except percentages)				
Revenues	90,192	100.0%	98,998	100.0%	9.8%
Cost of sales	(76,943)	(85.3)	(88,598)	(89.5)	15.1
Gross profit	13,249	14.7	10,400	10.5	(21.5)
Selling and administrative expenses	(3,621)	(4.0)	(3,827)	(3.9)	5.7
Other income (expenses), net	235	0.3	335	0.3	42.6
Income before impairment of intangible assets and trade receivables	9,863	10.9	6,908	7.0	(30.0)
Impairment of intangible assets and trade receivables	-	0.0	(9,762)	(9.9)	
Operating income (loss)	9,863	10.9	(2,854)	(2.9)	(128.9)
Financial income	285	0.3	198	0.2	(30.5)
Financial expenses	(1,414)	(1.6)	(1,482)	(1.5)	4.8
Loss due to exchange fluctuation, net	(1,380)	(1.5)	(432)	(0.4)	(68.7)
Impairment of financial assets	-	0.0	(1,694)	(1.7)	
Financial result, net	(2,509)	(2.8)	(3,410)	(3.4)	35.9
Equity in income of associates and joint ventures	(3)	(0.0)	(4)	(0.0)	33.3
Income (loss) before taxes	7,351	8.2	(6,268)	(6.3)	(185.3)
Income taxes	(2,358)	(2.6)	1,713	1.7	(172.6)
Net consolidated income (loss)	4,993	5.5	(4,555)	(4.6)	(191.2)
Adjusted EBITDA[1]	12,425	13.8%	7,483	7.6%	(39.8)%

(1) For a definition of Adjusted EBITDA, see "Presentation of Financial and Certain Other Information—Non-GAAP Financial Measures."

The following table provides a breakdown of revenues by business segment, including intercompany sales, for the years ended December 31, 2016 and 2017:

	For the Year Ended December 31,				Percentage Change
	2016	**Percent of Revenues**	**2017**	**Percent of Revenues**	**2017 vs. 2016**
	(in millions of Pesos, except percentages)				
Business Segment:					
Polyester Chain Business	64,336	71.3%	70,589	71.3%	9.7%
Plastics & Chemicals Business	26,151	29.0	28,724	29.0	9.8
Other[1]	(295)	(0.3)	(315)	(0.3)	6.8
Total	90,192	100.0%	98,998	100.0%	9.8%

(1) Intercompany sales between business segments that are eliminated plus other revenues.

The following table provides a breakdown of revenues by country of origin for 2016 and 2017:

	For the Year Ended December 31,				Percentage Change
	2016	Percent of Revenues	2017	Percent of Revenues	2017 vs. 2018
	(in millions of Pesos, except percentages)				
Country of origin:					
Mexico	43,657	48.4%	47,516	48.0%	8.8%
United States	39,271	43.5	41,438	41.9	5.5
Argentina	4,405	4.9	5,341	5.4	21.2
Brazil	1,301	1.4	1,462	1.5	12.4
Chile	766	0.8	921	0.9	20.2
Canada	792	0.9	2,320	2.3	192.9
Total	90,192	100.0%	98,998	100.0%	9.8%

The following table provides a breakdown of sales volume by business segment, for 2016 and 2017:

	For the Year Ended December 31,				Percentage Change
	2016	Percent of Revenues	2017	Percent of Revenues	2017 vs. 2016
	(in Ktons, except percentages)				
Polyester Chain Busines	3,004	76.3%	3,105	77.4%	3.4%
Plastics & Chemicals Business	934	23.7	907	22.6	(2.9)
Total	3,938	100.0%	4,012	100.0%	1.9%

Revenues by Business Segment

Revenues of the Polyester Chain Business for the year ended December 31, 2017, including intercompany sales between business segments, were Ps. 70,589 million, an increase of 9.7% from the Ps. 64,336 million reported in 2016. This increase was primarily due to an increase in average prices reflecting an increase in raw materials (4.6% in US Dollar terms and 6.1% in Peso terms).

Revenues of the Plastics & Chemicals Business for the year ended December 31, 2017, including intercompany sales between business segments, were Ps. 28,724 million, an increase of 9.8% from the Ps. 26,151 million reported in 2016. This increase was primarily due to an increase in average prices (11.0% in US Dollar terms and 12.9% in Peso terms) which was partially offset by a 3.4% decrease in volume.

Revenues by Country of Origin

Revenues from Mexico for the year ended December 31, 2017 were Ps. 47,516 million, an increase of 8.8% from the Ps. 43,657 million reported in 2016. This increase was primarily due to an increase in average prices as a result of an increase in the price of our feedstock. Additionally, revenues were positively impacted by an average depreciation of the Mexican peso against the US Dollar.

Revenues from the United States for the year ended December 31, 2017 were Ps. 41,438 million, an increase of 5.5% from the Ps. 39,271 million reported in 2016. This increase was primarily due to an increase of 4.6% in average prices (in US Dollars terms) reflecting an increase in raw materials. Additionally, revenues were positively impacted by an average depreciation of the Mexican peso against the US Dollar.

Revenues from Argentina for the year ended December 31, 2017 were Ps. 5,341 million, an increase of 21.2% from the Ps. 4,405 million reported in 2016. This increase was primarily due to an increase of 12.5 Ktons in PET sales volume in the region and 14.2% higher average prices (in US Dollar terms) reflecting an increase in raw materials.

Revenues from Brazil for the year ended December 31, 2017 were Ps. 1,462 million, an increase of 12.4% from the Ps. 1,301 million reported in 2016. This increase was primarily due to an increase in EPS prices of 11.8%, partially offset by a slight decrease in EPS sales volume.

Revenues from Chile for the year ended December 31, 2017 were Ps. 921 million, an increase of 20.2% from the Ps. 766 million reported in 2016. This increase was primarily due to a 2 Ktons increase in EPS sales volume and higher average EPS prices reflecting an increase in the price of styrene.

Revenues from Canada for the year ended December 31, 2017 were Ps. 2,320 million, an increase of 192.9% from the Ps. 792 million reported in 2016. This increase was primarily due to the additional volume from the integration of Selenis.

General

Revenues for the year ended December 31, 2017 were Ps. 98,998 million, an increase of 9.8% from the Ps. 90,192 million reported in 2016. This increase was primarily due to an increase of average prices (6.1% in US Dollar terms and 7.7% in Peso terms). By business segment, polyester average prices were higher by 4.6% and 6.1% in US Dollar and Peso terms, respectively, while plastics and chemicals average prices were higher by 11.0% and 11.9% in US Dollar and Peso terms.

Cost of sales for the year ended December 31, 2017 was Ps. 88,598 million, an increase of 15.1% from the Ps. 76,943 million reported in 2016. This increase was primarily due to higher prices of raw materials.

Gross profit, defined as the difference between revenues and cost of sales, for the year ended December 31, 2017 was Ps. 10,400 million, a decrease of 21.5% from the Ps. 13,249 million reported in 2016. This decrease was primarily due to the factors described above.

Selling and administrative expenses for the year ended December 31, 2017 were Ps. 3,827 million, an increase of 5.7% from the Ps. 3,621 million reported in 2016. This increase was primarily due to the integration of Selenis.

Other income, net for the year ended December 31, 2017 was Ps. 335 million, an increase of 42.6% from the Ps. 235 million reported in 2016. This increase was primarily due to the acquisition of Selenis in 2017 and gain from insurance proceeds received in 2017 in connection with an incident in one of our plants in Argentina.

Impairment of intangible assets and trade receivables for the year ended December 31, 2017 was Ps. 9,762 million. This was due to the bankruptcy of certain subsidiaries of M&G, which resulted in the recognition of an impairment on intangible assets of Ps. 7,745 million and an impairment on trade receivables of Ps. 2,017 million. We had no such expense in 2016.

Operating income (loss) for the year ended December 31, 2017 was a loss of Ps. 2,854 million, compared to an income of Ps. 9,863 million reported in 2016. This change was primarily due to a decrease in gross profit and the impairment of intangible assets and trade receivables discussed above.

Financial result, net for the year ended December 31, 2017 reflected an expense of Ps. 3,410 million, compared to an expense of Ps. 2,509 million reported in 2016. This decrease was primarily due to an impairment of financial assets related to the bankruptcy of M&G of Ps. 1,694 million, an increase in Alpek's indebtedness. We also recognized a loss due to exchange fluctuation, net of Ps. 432 million due to depreciation of the Peso against the Dollar.

Income tax for the year ended December 31, 2017 was a tax benefit of Ps. 1,713 million, compared to the tax expense of Ps. 2,358 million reported in 2016. This was primarily due to a net loss before taxes principally related to the bankruptcy of certain subsidiaries of M&G which resulted in a benefit for the year ended December 31, 2017.

Net consolidated income (loss) for the period for the year ended December 31, 2017 was a loss of Ps. 4,555 million, compared to the income of Ps. 4,993 million reported in 2016. This change was primarily due to the factors discussed above.

Liquidity and Capital Resources

Overview

Historically, we have generated and expect to continue to generate positive cash flow from operations. Cash flow from operations primarily represents inflows from net earnings (adjusted for depreciation and other non-cash items) and outflows from increases in working capital needed to grow our business. Cash flow used in investing activities represents our investment in property and capital equipment required for our growth, as well as our acquisition activity. Cash flow from financing activities is primarily related to changes in indebtedness borrowed to grow the business or indebtedness repaid with cash from operations or refinancing transactions as well as dividends paid.

Our principal capital needs are for working capital, capital expenditures related to maintenance, expansions and acquisitions and debt service. Our ability to fund our capital needs depends on our ongoing ability to generate cash from operations, overall capacity and terms of financing arrangements and our access to the capital markets. We believe that our future cash flow from operations together with our access to funds available under such financing arrangements and the capital markets will provide adequate resources to fund both short-term and long-term operating requirements, capital expenditures, acquisitions and new business development activities.

Liquidity

We are a holding company and, as such, have no operations of our own. Our ability to meet our debt and other obligations is primarily dependent on the earnings and cash flows of our subsidiaries and the ability of those subsidiaries to pay interest or principal payments on intercompany loans, dividends or other amounts to us.

As part of the ongoing Cogeneration Asset Sale, Alpek's expects to receive (subject to final customary adjustments) an aggregate amount of US$801 million from ContourGlobal. The proceeds from such sale will be used to pay down debt, including under the Syndicated Credit Facility, to finance the payment of the dividend described in the final sentence of this paragraph and for general corporate purposes. The Cogeneration Asset Sale is expected to close at any time before the end of 2019 and could close before the consummation of this offering. During Alpek's general ordinary shareholders' meeting held on February 27, 2019, a US$143 million dividend, subject to the completion of the Cogeneration Asset Sale, was discussed, but has not yet been approved by our shareholders.

As of June 30, 2019 we had US$923 million in bank obligations that mature through 2021. As of June 30, 2019, the average life of our bank and bonds maturity profile was of 2.7 years. After taking into consideration the refinancing of short-term debt as a result of the issuance of the notes offered hereby, such average life is expected to improve to approximately 4.5 years. After taking into account an expected net proceeds of US$550 million from the Cogeneration Asset Sale (after taking into account the US$143 million dividend described above), such average life is expected to improve to approximately 5.3 years.

The following table summarizes the cash flows from operating, investing and financing activities for the years ended December 31, 2016, 2017 and 2018 and for the six months ended June 30, 2019 and 2018.

	For the Year Ended December 31,			For the Six Months Ended June 30,	
	2016	2017	2018	2018	2019
	(in millions of Pesos)				
Net resources provided by operating activities	6,019	7,225	8,261	4,436	5,324
Net resources (used in) investing activities	(6,212)	(7,601)	(15,489)	(9,262)	(1,743)
Net resources provided by (used in) financing activities	(4,209)	5,799	2,990	745	(2,210)
Cash and cash equivalents at period end [(1)]	2,935	8,795	4,168	4,426	5,493

(1) Does not include restricted cash.

Operating Activities

In the six months ended June 30, 2019, net resources provided by operating activities were Ps. 5,324 million, primarily attributable to the profit for the period, partially offset by investments in working capital and the payment of taxes.

In 2018, net resources provided by operating activities were Ps. 8,261 million, primarily attributable to the integration of Suape and Citepe and higher margins in the polyester and polypropylene business, partially offset by investments in working capital and the payment of taxes.

In 2017, net resources provided by operating activities were Ps. 7,225 million, primarily attributable to better results in our plastics and chemicals business segments.

In 2016, net resources provided by operating activities were Ps. 6,019 million, primarily attributable to the profit for the period, partially offset by investments in net working capital and income tax paid.

Investing Activities

In the six months ended June 30, 2019, net resources used in investing activities were Ps. 1,743 million, primarily attributable to the acquisition of Perpetual Recycling Solutions and the final stages of the construction of a cogeneration power plant in Altamira, Mexico.

In 2018, net resources used in investing activities were Ps. 15,489 million, primarily attributable to the acquisition of Suape and Citepe, the Corpus Christi Project and the construction of a cogeneration power plant in Altamira, Mexico.

In 2017, net resources used in investing activities were Ps. 7,601 million and primarily comprised the resources used in our facilities located in Altamira, Mexico for the construction of the Altamira cogeneration power plant, the construction of certain spheres to increase our propylene storage capacity and our expansion of our production capacity of EPS.

In 2016, net resources used in investing activities were Ps. 6,212 million, primarily attributable to the construction of the Altamira cogeneration power plant, the investment in M&G USA and the MEG supply agreement with Huntsman.

Financing Activities

In the six months ended June 30, 2019, net resources used in financing activities were Ps. 2,210 million, primarily attributable to the repayment of loans and the payment of interest and dividends.

In 2018, net resources used in financing activities were Ps. 2,990 million, primarily attributable to the financing of the acquisition of Suape and Citepe and the Corpus Christi Project, as well as the repayment of loans and the payment of interest and dividends.

In 2017, net resources provided by financing activities were Ps. 5,799 million, primarily used for the repayment of loans and the payment of interest and dividends.

In 2016, net resources used in financing activities were Ps. 4,209 million, primarily used for the repayment of loans and the payment of interest and dividends.

Indebtedness

The following table shows our debt as of December 31, 2017 and 2018 and as of June 30, 2019:

	As of December 31,		As of June 30,
	2017	2018	2019
	(in millions of Pesos)		
Current debt	7,132	9,646	11,106
Current portion of long-term debt	276	472	235
Non-current debt	26,958	30,012	30,733
Total Debt[1]	34,366	40,130	42,074

(1) Includes notes payable, interest payable, bank loans and senior notes.

As of June 30, 2019, we had total indebtedness of Ps. 45,360 million (US$2,366 million), of which 99% was denominated in U.S. Dollars. Of this amount, Ps. 12,268 million (US$640 million) constituted short-term debt. Of our total indebtedness, Ps. 23,880 million (US$1,246 million) was incurred by the Issuer, Ps. 15,579 million (US$813 million) was incurred by Alpek Polyester, and Ps. 5,901 million (US$308 million) was incurred by our other subsidiaries. The primary use of funds from our debt has been to fund acquisitions and capital expenditures. As of June 30, 2019, we had available committed credit lines under which we may borrow up to US$846 million to finance our working capital and other requirements; as of June 30, 2019, we had borrowed approximately US$364 million under these committed credit lines.

We are currently in compliance with our material obligations under our and our subsidiaries' credit agreements and indentures; such obligations, among other conditions and subject to certain exceptions, either require or limit our and our subsidiaries' ability to:

- disclose certain financial information;
- maintain accounting books and registries;
- maintain assets in good condition;
- comply with applicable laws and regulations;
- enter into transactions with affiliates;
- effect a consolidation, merger or purchase of all or substantially all of the assets;
- create liens on assets;
- dispose of assets;
- pay dividends;
- incur additional debt;
- carry out sale and lease-back operations; and
- maintain certain financial ratios

The following description summarizes material terms of certain of our and our subsidiaries credit arrangements, including a description of certain covenants contained in such credit arrangements. We are currently in compliance with these covenants. The following description is only a summary and does not purport to describe all of the terms of the credit arrangements that may be important.

International Bonds

2022 International Notes

In November 2012, Alpek issued notes in the international capital markets in an aggregate principal amount of US$650 million. The 2022 International Notes bear interest at a fixed rate of 4.50% per annum, which is payable on May 20 and November 20 of each year. The 2022 International Notes mature on November 20, 2022. The outstanding amount of the 2022 International Notes as of June 30, 2019 was US$650 million.

The indenture governing the 2022 International Notes contains customary events of default. Alpek's obligations under the 2022 International Notes are guaranteed by the following subsidiaries: (i) Grupo Petrotemex, S.A. de C.V., (ii) DAK Americas LLC, (iii) DAK Resinas Americas Mexico, S.A. de C.V., (iv) Tereftalatos Mexicanos, S.A. de C.V., (v) Akra Polyester, S.A. de C.V. and (vi) DAK Americas Mississippi, Inc.

Alpek has the right, at its option, to redeem any of the 2022 International Notes, in whole or in part, at any time prior to their maturity at a redemption price equal to the greater of (1) 100% of the then outstanding principal amount of the 2022 International Notes and (2) the sum of the present values of the remaining scheduled payments of principal and interest thereon (exclusive of interest accrued to the date of redemption) discounted to the redemption date on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the applicable treasury rate plus 45 basis points, in each case plus accrued interest thereon to the date of redemption and any additional amounts payable with respect to the 2022 International Notes.

2023 International Notes

In August 2013, Alpek issued notes in the international capital markets in an aggregate principal amount of US$300 million. The 2023 International Notes bear interest at a fixed rate of 5.375% per annum, which is payable on February 8 and August 8 of each year. The 2023 International Notes mature on August 8, 2023. The outstanding amount of the 2023 International Notes as of June 30, 2019 was US$300 million.

The indenture governing the 2023 International Notes contains customary events of default. Alpek's obligations under the 2023 International Notes are guaranteed by the following subsidiaries: (i) Grupo Petrotemex, S.A. de C.V., (ii) DAK Americas LLC, (iii) DAK Resinas Americas Mexico, S.A. de C.V., (iv) Tereftalatos Mexicanos, S.A. de C.V., (v) Akra Polyester, S.A. de C.V. and (vi) DAK Americas Mississippi, Inc.

Alpek has the right, at its option, to redeem any of the 2023 International Notes, in whole or in part, at any time prior to their maturity at a redemption price equal to the greater of (1) 100% of the then outstanding principal amount of the 2023 International Notes and (2) the sum of the present values of the remaining scheduled payments of principal and interest thereon (exclusive of interest accrued to the date of redemption) discounted to the redemption date on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the applicable treasury rate plus 40 basis points, in each case plus accrued interest thereon to the date of redemption and any additional amounts payable with respect to the 2023 International Notes.

Syndicated Bank Loan

2018 Syndicated Credit Facility

On March 28, 2018, Alpek entered into a senior unsecured credit agreement with MUFG Bank, Ltd. (formerly, The Bank of Tokyo-Mitsubishi UFJ, Ltd.), Citigroup Global Markets Inc., HSBC México S.A., Grupo Financiero HSBC and JPMorgan Chase Bank, N.A., which was later syndicated (the "Syndicated Credit Facility"), which provides for a loan in an amount of up to US$710 million. The Syndicated Credit Facility matures in March 2021 and has an availability period of 18 months from the closing date. The loan accrues interest at a variable rate of Libor plus a spread that depends on leverage levels, and can be prepaid at any time, in whole or in part, without penalty. As of June 30, 2019, Alpek had US$290 million outstanding under this facility.

The Syndicated Credit Facility has covenants that require Alpek to maintain certain financial ratios. The failure to comply with such covenants, if not cured within a certain specified time period, can result in the loan and then outstanding amounts becoming immediately due and payable. These maintenance covenants include: (i) a leverage ratio, which requires that the ratio at any date of (a) consolidated net debt to (b) consolidated EBITDA (as defined therein) for the four consecutive fiscal quarters most recently ended on or prior to such date, be no greater than 3.75 to 1.0 at any time through September 30, 2019 and no greater than 3.5 to 1.0 at any time subsequent to September 30, 2019; and (ii) an interest coverage ratio which requires that the ratio at any date of (a) consolidated EBITDA for the four consecutive fiscal quarters most recently ended on or prior to such date to (b) consolidated net interest charges for such period, be not be less than 3.0 to 1.0, as of the last day of each fiscal quarter. The Syndicated Credit Facility also contains customary events of default.

The Syndicated Credit Facility contains a mandatory prepayment provision that requires that the outstanding loans be prepaid upon the occurrence of certain events, including that 50% of the net proceeds of any cogeneration asset sale, up to a maximum aggregate amount of US$350 million, be used to prepay ratably all outstanding loans. A portion of the proceeds from the Cogeneration Asset Sale will need to be used to prepay a part of the Syndicated Credit Facility in accordance with such mandatory prepayment provisions.

Bilateral Bank Debt

Alpek Polyester - Export Development Canada ("EDC") Credit Agreement

On May 10, 2019, Alpek Polyester and certain of Alpek's subsidiaries entered into a credit agreement with Export Development Canada, as lender (the "Alpek Polyester -EDC Loan Agreement"), in an aggregate principal amount of US$250 million. This facility matures in May 2025. The loan accrues interest at a variable rate of Libor plus a spread that depends on leverage levels, and can be prepaid at any time, in whole or in part, without penalty. As of June 30, 2019, Alpek Polyester had US$250 million outstanding under this facility.

The Alpek Polyester - EDC Loan Agreement has covenants that require Alpek to maintain certain financial ratios. The failure to comply with such covenants, if not cured within a certain specified time period, can result in the loan and then outstanding amounts becoming immediately due and payable. These maintenance covenants include: (i) leverage ratio, which requires that the ratio at any date of (a) consolidated net debt to (b) consolidated EBITDA (as defined therein) for the four consecutive fiscal quarters most recently ended on or prior to such date, shall at no time be greater than 3.5 to 1.0; and (ii) interest coverage ratio which requires that the ratio at any date of (a) consolidated EBITDA for the four consecutive fiscal quarters most recently ended on or prior to such date to (b) consolidated net interest charges for such period, shall not be less than 3.0 to 1.0, as of the last day of each fiscal quarter. The Alpek Polyester - EDC Loan Agreement also contains customary events of default.

Polioles - Scotiabank Credit Agreement

On December 8, 2017, Polioles entered into a credit agreement (the "Scotiabank Credit Agreement") with The Bank of Nova Scotia, as lender, in an aggregate principal amount of US$50 million. This facility matures in December 2022, with four equal amortizations in June 2021, December 2021, June 2022 and December 2022. The loan accrues interest at a variable rate of Libor plus a spread that depends on leverage levels, and can be prepaid at any time, in whole or in part, without penalty. As of June 30, 2019, Polioles had US$44 million outstanding under this facility.

There are also covenants that require Polioles to maintain certain financial ratios. The failure to comply with such covenants, if not cured within a certain specified time period, can result in the loan and then outstanding amounts becoming immediately due and payable. These maintenance covenants include: (i) leverage ratio, which requires that the ratio at any date of (a) consolidated net debt to (b) consolidated EBITDA (as defined therein) for the four consecutive fiscal quarters most recently ended on or prior to such date, shall at no time be greater than 3.5 to 1.0; and (ii) interest coverage ratio which requires that the ratio at any date of (a) consolidated EBITDA for the four consecutive fiscal quarters most recently ended on or prior to such date to (b) consolidated net interest charges for such period, shall not be less than 3.0 to 1.0, as of the last day of each fiscal quarter. The Scotiabank Credit Agreement also contains customary events of default.

Committed Credit Facilities

The Company has entered into several committed credit facilities with certain financial institutions for a total amount, as of June 30, 2019, of approximately US$1,210 million, out of which US$846 million was available at such date. The total amount includes the 2018 Syndicated Credit Facility described above and other smaller facilities that range in amounts from US$10 million to US$150 million. These credit facilities are denominated in U.S. Dollars and mature between July 2020 and April 2022.

Capital Expenditures

In 2016, 2017 and 2018 and in the six months ended June 30, 2018 and 2019, we made capital expenditures of Ps. 6,453 million (US$345 million), Ps. 4,470 million (US$236 million), Ps. 15,684 million (US$826 million), Ps.

9,714 million (US$527 million) and Ps. 2,039 million (US$106 million), respectively. These capital expenditures mainly include expenditures related to maintenance projects, the construction of two propylene storage spheres, the expansion of our EPS plant at Altamira, the construction of the cogeneration power plant at Altamira, the acquisition of the Brazilian Assets and the Corpus Christi Project.

We estimate that our capital expenditures for 2019, excluding expenditures made in connection with any acquisitions, will be approximately US$310 million, primarily for investments in the Altamira cogeneration power plant project, payments related to the CC Polymers joint venture and for maintenance and the replacement of productive assets.

Tabular Disclosure of Contractual Obligations

The following is a summary of our contractual obligations as of June 30, 2019:

	Payments Due by Period			
	Total	**Less than 1 Year**	**1-5 Years**	**More than 5 Years**
	(in millions of Pesos)			
Trade and other accounts payable	*19,258*	19,258	-	-
Current and non-current debt[1]	*46,913*	12,485	29,475	4,953
Lease liability	*3,286*	927	1,767	592
Derivative financial instruments	*1,694*	1,450	244	-
Total	**71,151**	**34,120**	**31,486**	**5,545**

(1) Excludes debt issuance costs.

In the ordinary course of business, we also enter into long-term supply arrangements for raw materials and energy, which are not reflected in the above table. In addition, our obligations under derivative financial instruments are described further below.

Off Balance Sheet Arrangements

As of June 30, 2019, we did not have any off balance sheet arrangements.

Quantitative and Qualitative Disclosures about Market Risk

Derivative Financial Instruments

Because we operate in various countries and enter into credit agreements in U.S. Dollars and, to a lesser extent, other currencies, from time to time we have entered into interest rate and exchange rate derivatives for purposes of reducing the overall cost of such financing and the volatility associated with exchange and interest rates.

Additionally, due to the nature of the industries in which we operate and our consumption of energy and raw materials, from time to time we have entered into hedge contracts covering natural gas, paraxylene, nafta, gasoline, ethylene, ethane, MEG and other raw material prices.

All of our derivative financial transactions are subject to guidelines set forth by Alpek's Board of Directors in collaboration with Alpek's Planning, Finance and Audit Committees, and must be authorized by Alpek's Risk Management Committee.

We maintain a system of internal control over derivative financial instruments. The negotiation, authorization, contracting, operating, monitoring and recording of derivative financial instruments are subject to IAS 39 "Financial Instruments: Recognition and measurement by International Accounting Standards Board (IASB)" and to internal control procedures variously overseen by our treasury, legal, accounting and auditing departments.

In accordance with our policy, the derivatives that we enter into are for non-speculative purposes in the ordinary course of business. From an economic point of view, these derivatives are entered into for hedging purposes; however, for accounting purposes, some of our derivative financial instruments may not be designated as

hedges if they do not meet all the accounting requirements established by IFRS and, therefore, may be classified as trading instruments. Derivative financial instruments employed by us are contracted in the over-the-counter market with international financial institutions. The main characteristics of the transactions refer to the obligation to buy or sell a certain underlying asset given certain criteria such as cap rate, spread and strike price, among others.

The obligations under our derivative financial instruments are generally contracted in U.S. Dollars. The notional amounts and fair values presented in the tables below have been translated from U.S. Dollars to Mexican Pesos using a rate of 19.1685. The fair values presented below are mathematical estimates of the corresponding market values of such instruments. We estimate fair value by reference to independent third-party models, which may include models provided by the swap counterparties under these instruments that use assumptions based on past, present and future expectations of market conditions as of the relevant accounting closing date.

Currency Exchange Rate Risk

As of June 30, 2019, the position of our foreign currency exchange rate forwards was as follows, in millions of Mexican Pesos:

Type of derivative value or contract	Economic purpose	Accounting treatment	Notional amount	Underlying asset		Fair Value	Maturity			Collateral
				Unit	Reference		2019	2020	2021+	
Currency	Hedge	Hedge	-274	USD/MXN	19.17	6	6	-	—	—
Currency	Hedge	Hedge	-98	EUR/USD	1.14	2	2	0	—	—
						8	**8**	**0**	—	**—**

Interest Rate Risk

As of June 30, 2019, the position of our interest rate swaps was as follows, in millions of Mexican Pesos:

Type of derivative value or contract	Economic purpose	Accounting treatment	Notional amount	Underlying asset		Fair Value	Maturity			Collateral
				Unit	Reference		2019	2020	2021+	
LIBOR-based	Hedge	Hedge	5,559	% per year	1.68	**(108)**	**(18)**	**(63)**	**(26)**	—
						(108)	**(18)**	**(63)**	**(26)**	**—**

Natural Gas and Other Commodities Price Risk

We enter into different derivative agreements with several counterparties to protect ourselves against increases in the prices of natural gas and other raw materials. In the case of natural gas derivatives, hedging strategies for commodities were designed to mitigate the impact of potential price increases. The objective is to hedge prices against volatility by having positions that provide stable expectations of cash flows, thus avoiding price uncertainty.

In order to fix the sales prices of certain of our products, we have entered into swaps for certain commodities concurrently with the execution of sales contracts with certain customers, as the prices of such commodities have a direct or indirect impact on the sales prices of such products.

As of June 30, 2019, the position of our derivative financial instruments for natural gas and commodities was as follows, in millions of Mexican Pesos:

Type of derivative value or contract	Economic purpose	Accounting treatment	Notional amount	Underlying asset		Fair Value	Maturity			Collateral
				Unit	Reference		2019	2020	2021+	
Natural gas	Hedge	Hedge	1,062	Dollar / MMBTU	2.63	(421)	(149)	(268)	(3)	—
Ethylene	Hedge	Hedge	598	Cent. dollar / Pound	13.06	(117)	(108)	(9)	-	—
Ethane	Hedge	Hedge	50	Cent. dollar / Gallon	17.57	(13)	(12)	(1)	0	—
Paraxylene	Hedge	Hedge	6,182	Dollar / MT	843.57	(973)	(684)	(264)	(25)	—
MEG	Hedge	Hedge	300	Dollar / MT	697.00	(61)	(43)	(19)	-	—
						(1,586)	**(996)**	**(561)**	**(28)**	—

Hedge Effectiveness

The effectiveness of derivative financial instruments classified as hedge instruments is assessed on a periodic basis. As of June 30, 2019, we assessed the effectiveness of hedges and estimated that they are highly effective for hedge accounting purposes. The notional amounts related to derivative financial instruments reflect the reference volume contracted.

As of June 30, 2019, the net fair value position of the aforementioned derivative financial instruments amounted to Ps. 1,685 million, which is included in our balance sheet as follows:

	Amount
	(in millions of Pesos)
Assets:	
Current assets	9
Non-current assets	-
Liabilities:	
Current liabilities	(1,450)
Non-current liabilities	(244)
Net position	(1,685)

Credit Lines, Margins and Collateral Policies

In order to manage the obligation to post collateral in connection with margin calls under derivative financial instruments, we have agreed to a credit limit with each counterparty that has a derivative transaction. In cases where the agreed threshold under a particular transaction is less than the absolute mark-to-market value of such transaction, we have the obligation, from time to time, to post the corresponding collateral to the counterparty. We typically satisfy this obligation by drawing on our cash reserves, cash flow generation or available credit lines. Additionally, if we fail to post such collateral, the counterparty has the right, but not the obligation, to declare such obligation as prematurely expired and to demand the corresponding reasonable value in accordance with the agreed terms. As of June 30, 2019, we had no cash or other collateral posted for margin calls related to derivative financial instruments.

Risk Management Committee

Alpek has a Risk Management Committee, which supervises among other things hedging and derivative transactions proposed to be entered into with a risk exposure in excess of US$1 million. This committee reports directly to Alpek's Chairman and Chief Executive Officer ("CEO"). All new hedging and derivative transactions which we propose to enter into, as well as the renewal or cancellation of existing hedging and derivative arrangements, are required to be approved by Alpek's senior management, including Alpek's Chairman and CEO. Proposed transactions must satisfy certain criteria, including that they be entered into for non-speculative purposes in the ordinary course of business, that they be based on fundamental analysis and that a sensitivity analysis and other risk analyses have been performed before the transaction is entered into.

INDUSTRY

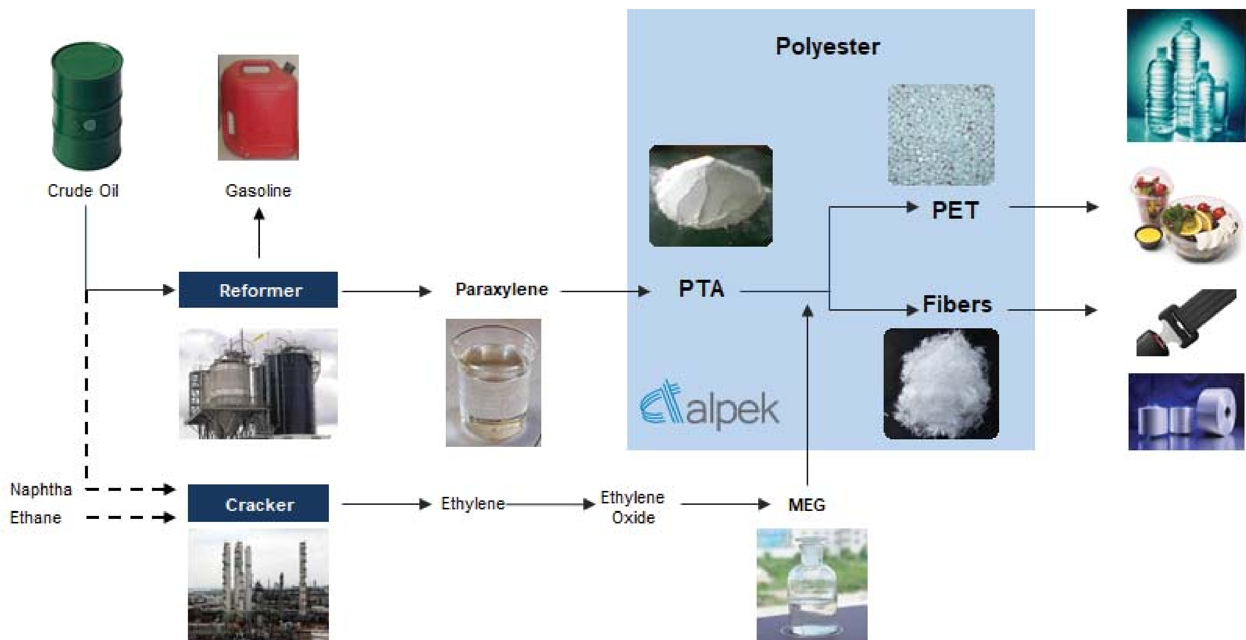
This section includes market share and industry and economic data and forecasts that we have obtained from industry sources, including independent consultants such as Wood Mackenzie, surveys and our internal estimates. There can be no assurance as to the accuracy or completeness of information based on our estimates or industry publications.

Overview

Polyester Chain Business Overview

Polyester is a petroleum-based synthetic material typically manufactured in three forms: resin (commonly known as PET), fiber and film. Polyester has a wide range of end-use applications, including plastic bottles and other food or beverage containers, apparel and carpets. Polyester is made by combining PTA and MEG. Paraxylene (commonly referred to as pX), a chemical produced in a crude oil refinery, is the main raw material used for manufacturing PTA. According to Wood Mackenzie's estimates, worldwide production of polyester in 2018 was approximately 78.8 million tons, with a CAGR of 5.6% from 2014 to 2018.

The following chart depicts the polyester production chain, starting from crude oil, which is converted into pX, which is then converted into PTA, which together with MEG, are raw materials used for final production of polyester products.



PTA

PTA is the main raw material used to manufacture PET (used in plastic bottles, containers and other packaging) and polyester fibers (used for carpets, garments, home furnishings and consumer and industrial applications), in addition to other products. Almost all PTA produced is used in the production of polyester resin, fiber and film. In 2018, PET, polyester fiber and film (video, audio and photography) represented approximately 30%, 60% and 6%, respectively, of the market for PTA worldwide, according to Wood Mackenzie's estimates.

PET

PET is a polymer derived typically from the reaction between PTA and MEG. PET offers transparency, strength, durability and high barrier properties, has no known health risks, is lightweight, cost-efficient and

recyclable and has a high degree of design flexibility and customization, all of which enable custom PET containers to be used for a variety of reusable and temperature-sensitive packaging applications. These characteristics have led to its widespread use in bottles and other containers for liquids, food and personal care products, including carbonated soft drinks, sparkling water, still water, fortified water, isotonic beverages, health drinks, juices, teas, dairy products, prepackaged food, health and beauty aids, pharmaceuticals and other household products. Sheet and film products made from PET are used for cups, lids, trays, bowls and blister packaging. PET has increasingly displaced glass, aluminum, tin and can containers, and has shown one of the highest growth rates of any plastic container product worldwide during the last decade. Based on our review of publicly available market data, we believe that, from 2009 to 2018, demand for PET grew at a 3.5% CAGR in the U.S. beverage containers market, compared to a CAGR of approximately -3.9% for glass and a CAGR of approximately -1.1% for metal during the same period. This growth is driven by the higher acceptance of PET packaging, which is resilient, lightweight, low-cost and recyclable. Further technology innovation, such as enhanced barrier protection, is expected to enable new applications.

Polyester Fiber and Filament

Polyester fiber includes staple fiber, which may be sold on its own or blended with either cotton or wool; and textured and flat textile filaments and technical yarns that have multiple apparel, home furnishing and non-woven consumer and industrial applications. According to Wood Mackenzie, polyester fiber accounted for an estimated 55% of the world's total fiber consumption in 2018, compared to 47% in 2009, representing a 6.0% CAGR, compared to a 0.6% CAGR for cotton over the same period. This increase has been driven by greater consumer acceptance of this product due to its durability, flexibility in applications, color stability, quality and production processability that has led to competitive pricing in many end products. This growth has been concentrated primarily in China, India and South Asia, with the market in the Americas declining in recent years as textile production has migrated to Asia.

Plastics & Chemicals Business Overview

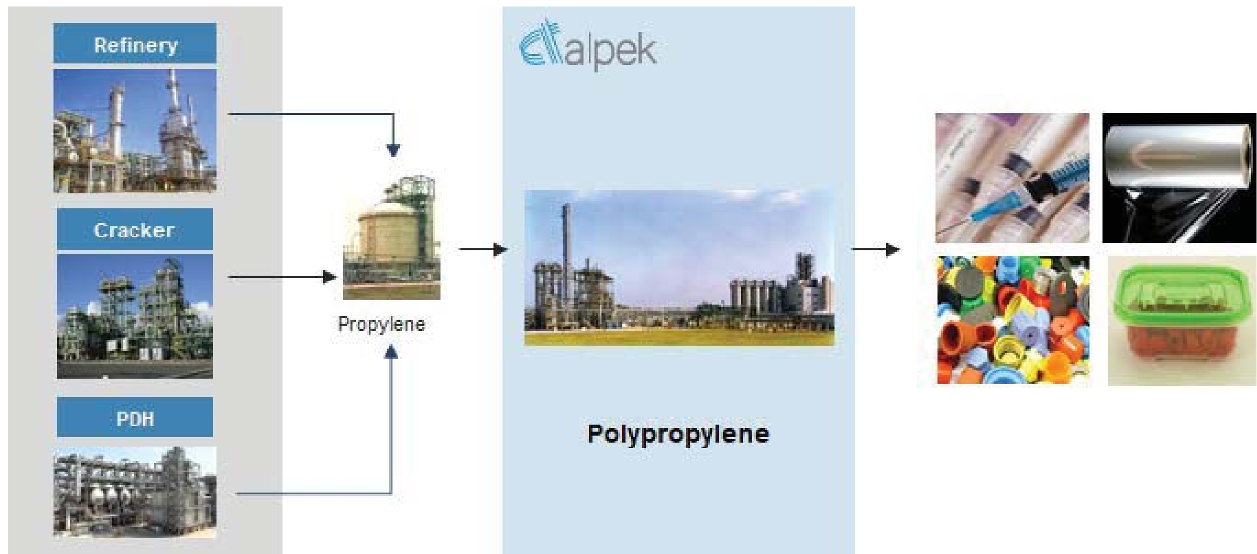
Polypropylene (PP)

PP is a thermoplastic polymer that results from the chemical reaction among propylene monomer and a set of catalysts and chemicals. The properties of PP include low specific gravity, high stiffness, relatively high temperature resistance and good resistance to chemicals and fatigue. PP is used in a wide variety of applications, including packaging, textiles (*e.g.*, ropes, thermal underwear and carpets), stationery, plastic parts and reusable containers of various types, automotive parts, and polymer banknotes**.**

The following table sets out the various PP market segments and common applications under each segment.

Segments	Application
Injection	Transportation products, appliances, consumer products, rigid packaging and medical applications.
Fiber	Carpet face yarns, carpet backing, diapers, liners, upholstery, medical gowns, geotextiles and rope/cording.
Film/BOPP	Labels for soft drink bottles, liners for cereal boxes, wraps for bread, snack foods, cheese and cigarettes.
Raffia	Bags and sacks for sugar, flour and industrial products.
Blow molding	Bottles and jars.
Compounding & automotive	Resins mixed with additives and other chemicals such as pigments: used in cockpits, appliances, plastic fan blades, washing machines.
Others	Distributors and resellers.

The following chart depicts the PP production chain, starting from refineries, crackers or propane dehydrogenation (PDH) where the propylene is separated and transformed into PP.



Expandable polystyrene (EPS)

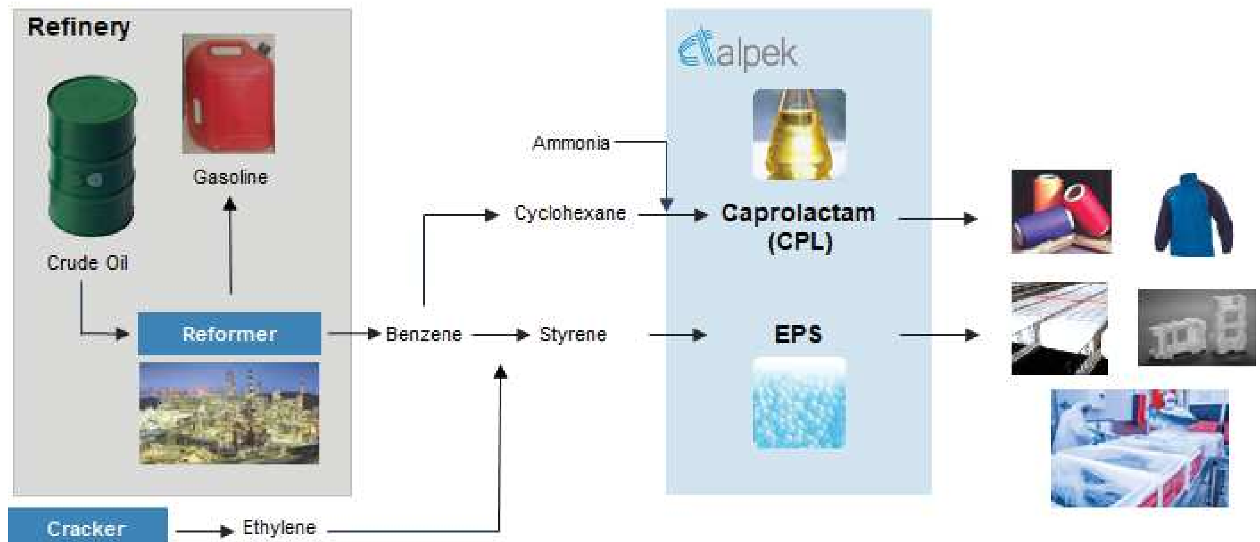
EPS is a lightweight, rigid cellular plastic made from the polymerization of the styrene monomer, which is commonly produced in petroleum refineries. To produce EPS, our customers heat the polystyrene beads (small spheres) with steam. This causes a pre-foaming agent found within the beads (pentane) to evaporate rapidly. When this happens, the beads expand to some 40 to 50 times their original volume. After expansion, the beads undergo a maturing period in order to reach an equilibrium temperature and pressure. The beads are then placed within a mold and reheated with steam. The pre-foamed beads expand further, completely filling the mold cavity and fuse together. The beads are molded to form boards, blocks or customized products. Because of this manufacturing process, EPS is comprised of a range between 90% to 98% of air.

EPS is a material characterized by its versatility, given its shock-absorbing and custom molding properties. These properties, combined with its processing ease and low cost, make it a popular packaging material for pieces sensitive to impact and for the preservation of perishable products. EPS has been included as part of the construction system in large-scale housing projects due to its ease of installation and light weight in roofing; which reduces construction costs and time and provides thermal and acoustic insulation.

Caprolactam (CPL)

CPL is manufactured from a chemical reaction between cyclohexane, ammonia and sulfur. CPL is the main raw material used in the production of nylon 6 (used in textile and industrial yarns, carpets and engineering resins). There are no substitutes for CPL in the production on nylon 6. Nylon 6 is a synthetic fiber and for its strength, resilience and smoothness, among other things, is used in a variety of end-use applications. In 2018, the nylon industry was estimated to be a US$16,500 million global industry, based on Alpek’s estimates and according to Wood Mackenzie. Wood Mackenzie also estimates that in 2018, 5.7 million tons of nylon 6 were produced in the world.

The following chart depicts the EPS and CPL production chain.



Fertilizers (Ammonium sulfate)

Ammonium sulfate is a by-product of the CPL production process and is a nitrogen-rich fertilizer that is well suited and marketed primarily for use in the farming regions located in central Mexico, near our production facilities.

Global Market for Polyester Chain Business

The PTA industry is comprised mainly by global players, which, in addition to Alpek, include Yisheng (headquartered in China), Heng Li (China), BP (United Kingdom), Reliance Industries Limited (India) and Indorama (Thailand). Based on data prepared by Wood Mackenzie, as of December 31, 2018, Alpek has approximately 48% of the Americas PTA installed capacity.

The PET industry comprises several major players as well as many smaller companies. Major PET producers in the Americas, in addition to Alpek, include Indorama (Thailand), Far Eastern New Century ("FENC") (Taiwan) and Nan Ya Plastics Corporation (Taiwan). According to Wood Mackenzie, as of December 31, 2018, Alpek has approximately 44% of the Americas PET installed capacity. Customers of this industry primarily include companies that convert PET into plastic bottles and other containers, known in the industry as "converters," and in turn sell them to major consumer goods companies.

Polyester staple fiber is also a largely regional industry and in North America is comprised mainly by three main players: Alpek, which is the leader in terms of market share and capacity utilization, Nan Ya and Indorama. As of December 31, 2018, Alpek has an estimated 31% of North America polyester staple fiber capacity, according to Wood Mackenzie. The demand for polyester staple fiber in North America has been declining since 1999 due to the shift to Asia of manufacturing capacity for apparel and other end-uses for polyester staple fiber, which has enabled Asian competitors to gain market share. Customers of this industry are manufacturers of carpets, certain knit apparel items and non-woven consumer and industrial products.

The polyester filament industry in North America has also experienced downward pressure on margins due to pressure from imports, mainly from China and the rest of Asia. However, the polyester filament industry in North America has benefited from lower energy costs (primarily lower prices for natural gas).

Competitive Environment

As PTA, PET and fibers are commodity products, competition is predominantly based on price and, to a lesser extent, on other factors, including product quality, continuity of supply and customer service.

In an environment characterized by a high level of price competition, the leading producers are likely to have the following competitive advantages:

- economies of scale;
- integration into raw materials;
- low cost manufacturing;
- efficient logistics; and
- ability to manage raw material procurement

Benefits of Integration in the Polyester Chain

The price of PET resin and polyester fiber is predominantly determined by market dynamics and, to a lesser extent, by the PET resin and polyester fiber producer. Therefore, in order to be profitable, producers must effectively manage their production costs. The integration of raw material production provides significant opportunity for cost reduction. The benefits from integration include:

- Logistics cost savings. The close proximity of the pX, MEG, PTA and PET resin and polyester fiber plants significantly reduces (or, in the case of co-located plants, eliminates) the cost of packaging, loading, shipping and unloading PTA from its production site to the PET resin and polyester fiber production site.
- Fixed costs savings. Integration saves fixed administrative costs associated with managing raw materials purchases and transportation.
- Consistent supply of raw materials. A key benefit of the co-location of the PTA and PET resin or polyester fiber facilities is the security of raw materials sourcing. This reduces the risk of shipping delays or volatility in market prices for the raw materials and facilitates higher capacity utilization.

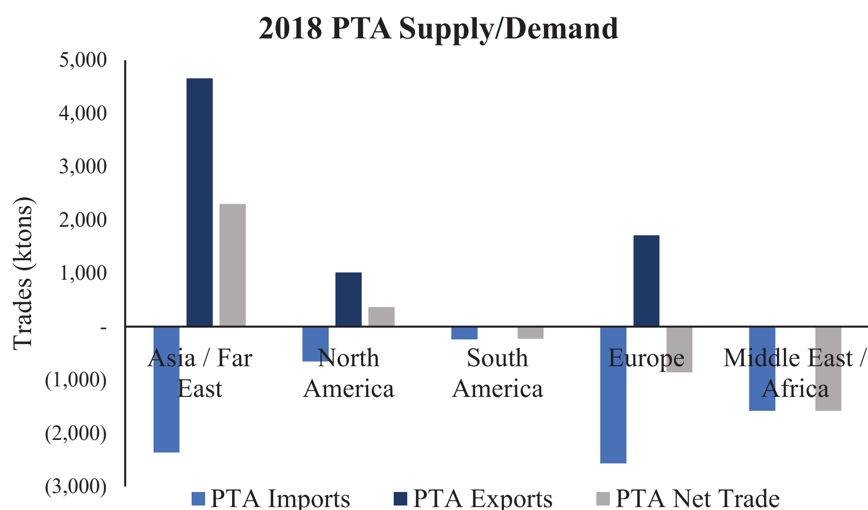
Accordingly, integration can result in enhanced margins through increased purchasing power and coordinated operational planning across integrated operations. According to Wood Mackenzie, we are one of the largest integrated players in the global polyester industry and the leading integrated polyester producer in North America.

PTA

Industry Development

The rapid growth in worldwide demand for PTA in recent years has been driven mainly by the demand for PET and polyester fiber. According to Wood Mackenzie, from 2014 to 2018, global PTA markets had been growing strongly at rates of approximately 4% to 8% per year.

According to Wood Mackenzie, worldwide trade volume of PTA is concentrated mainly in Asia, which is expected to continue to be a net exporter and is unlikely to become a net importer as in the past. As depicted in the chart below, for 2018, North America is a major net exporter of PTA, whereas South America, Europe, the Middle East and Africa are major net import regions.



Source: Wood Mackenzie

Based on the global consumption trend of PTA in recent years, the proportion of worldwide consumption volume in Asia has increased steadily, the proportion in Western Europe has dropped slightly and the proportion in North America has shown a steady trend.

In Asia, the growth in PTA consumption has been driven by strong polyester fiber demand, which now accounts for more than half of global polyester demand, according to Wood Mackenzie's estimates. In North America and Europe, polyester fiber production has been declining as the textile industry has migrated to Asia. Growth in these regions has been in the PET market, which Wood Mackenzie estimates now accounts for approximately 31% of global polyester demand.

Market Position

While the PTA industry in the Americas is concentrated among a few players, the worldwide market is somewhat more diversified, with 42 producers and more than 95 production facilities, approximately 76% of which are located in Asia. According to Wood Mackenzie's estimates, we are among the top global PTA producers based on production capacity as of December 31, 2018. In South America, Alpek, through its plant in Suape, Brazil, is the only PTA producer. In conjunction with other plants from the Alpek system, the Company supplies almost all of the local demand.

The following table shows the worldwide PTA installed capacity, as reported by Wood Mackenzie, as of December 31, 2018.

Worldwide PTA Installed Capacity	
Company	**Installed Capacity**
	(in thousands of tons per year)
Yisheng (China)	14,220
Heng Li (China)	7,500
BP (UK)	5,828
Reliance Industries (India)	5,150
Indorama (Thailand)	4,593
Fujian Fuhaichuang (China)	4,500
Tongkun (China)	4,000
Huabin (China)	3,342
Hailun Petrochemical (China)	3,000
Alpek (Mexico)	**2,975***
Others	30,623
World total	**85,730**

* Our actual installed capacity is 2,890 Ktons, which differs from the amount calculated by Wood Mackenzie.
Source: Wood Mackenzie

The following table shows the America's 2014, 2018 and estimated 2023 PTA installed capacity, as reported by Wood Mackenzie.

Americas PTA Installed Capacity			
Company	**Installed Capacity**		
	(in thousands of tons per year)		
	2014	*2018*	*2023E*
Alpek (Mexico)	**2,260**	**2,975***	**3,458**
Indorama (Thailand)	1,650	1,567	1,833
BP (UK)	1,400	1,400	1,400
Others	950	250	683
Americas total	**6,260**	**6,192**	**7,375**

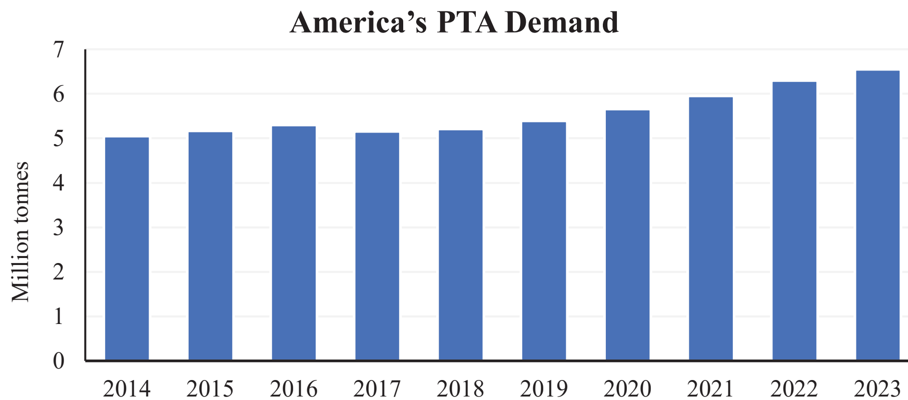
* Our actual installed capacity is 2,890 Ktons, which differs from the amount calculated by Wood Mackenzie.
Source: Wood Mackenzie

PTA is a commodity product and industry competitiveness is predominantly based on price. Therefore, having low-cost production facilities is a significant competitive advantage. According to Wood Mackenzie, North American PTA assets are generally in the first and second quartile globally based on site capacity, age, technology and integration levels.

Regional Supply and Demand Growth Dynamics

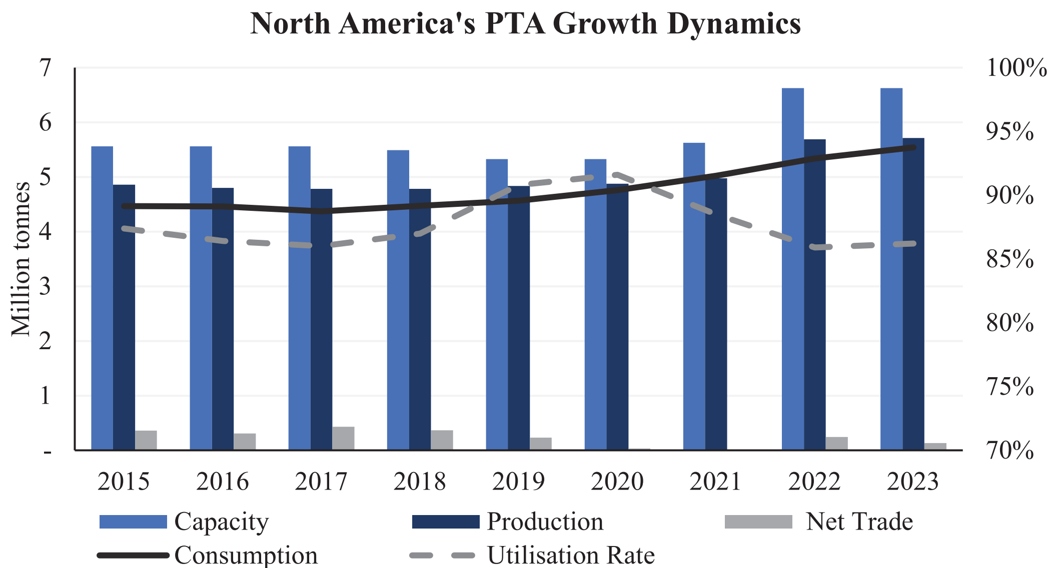
World: According to Wood Mackenzie, during 2018, worldwide production of PTA was approximately 68.6 million tons, with a CAGR of 5.9% from 2014 to 2018. Worldwide production of PTA is expected to increase at a CAGR of 3.6% from 2019 to 2023 while PTA demand is expected to grow at a CAGR of 3.8% over the same period, according to Wood Mackenzie.

Americas: According to Wood Mackenzie, from 2014 to 2018 PTA demand in the Americas grew at a CAGR of 0.8%. Demand through 2023 is expected to grow at a CAGR of 5.0% while production capacity is expected to increase at a CAGR of 4.1% for the same period.



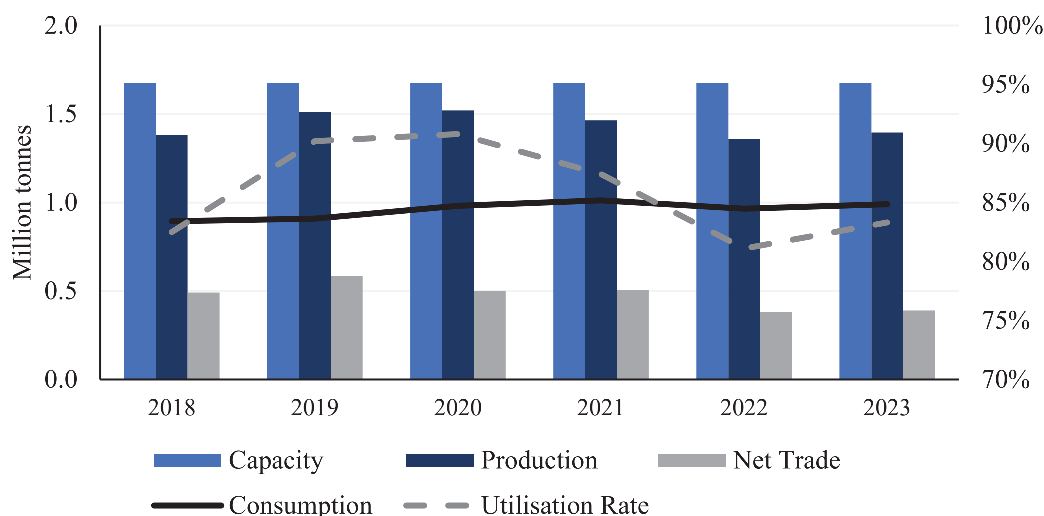
Source: Wood Mackenzie

North America: During 2018, North America represented about 7%, or 4.8 million tons, of global PTA production, with a CAGR of -0.2% from 2014 to 2018. Substantially all of North America's PTA needs are satisfied through regional PTA production, without reliance on imports. According to Wood Mackenzie, PTA demand from North America is expected to grow at a CAGR of 5.0% through 2023, while production capacity is expected to increase at a CAGR of 4.3% for the same period.



Source: Wood Mackenzie

Mexico: According to Wood Mackenzie, Mexico is the second largest market for PTA in North America and the eighth largest PTA market in the world, driven by the high per capita carbonated soft drink consumption, an increase in PET production for bottled water consumption as well as the ongoing substitution of plastic containers for aluminum and glass containers. According to Wood Mackenzie, PTA demand in Mexico is expected to grow at a CAGR of 2.2% through 2023.



Source: Wood Mackenzie

South America: PTA demand in South America increased at 2.3% CAGR from 2012 to 2018. According to Wood Mackenzie's estimates, Brazil is the largest market in the region with an estimated total consumption of approximately 600,000 tons in 2018, followed by Argentina with an estimated total consumption of 134,000 tons in 2018. From 2019 to 2023, Wood Mackenzie expects South American PTA demand to grow at a CAGR of 5.1%, while our production is expected to increase from 610,000 tons in 2019 to approximately 680,000 tons by 2023 as we continue to improve the Brazilian Assets operations.

Pricing

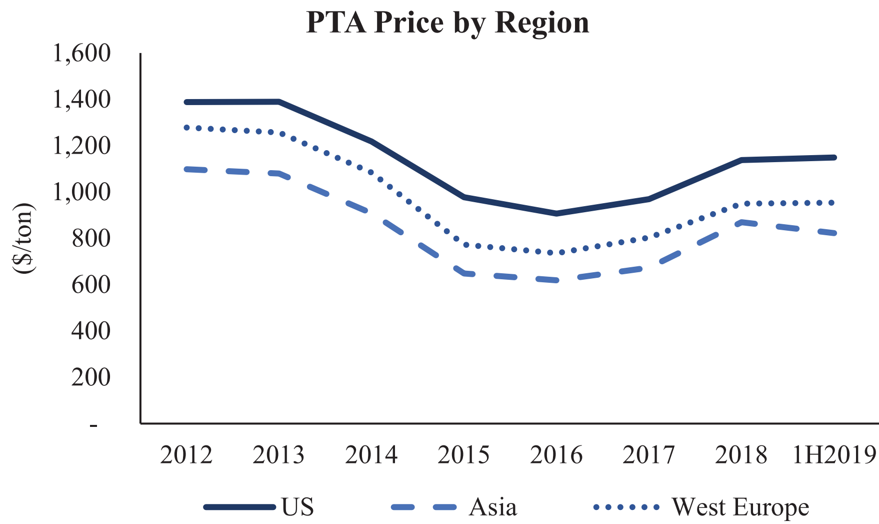
World: PTA prices have traditionally been correlated to pX prices.

North America: PTA prices are generally set on a monthly basis (the "U.S. Contract Delivered Price") using as a reference a "cost plus" pricing formula published by BP. The formula takes into account cost variances in the main factors involved in the PTA production process (pX, energy and labor costs, and the U.S. Producer Price Index for other fixed costs). The U.S. Contract Delivered Price is based on the published pX price, which as a petrochemical is sensitive to oil and gasoline prices. This pricing formula is typically used for sales in North America and provides predictable and published reference prices. The actual costs of production vary by producer. From time to time, the PTA pricing formula may be adjusted.

Asia: Prices are set monthly and reflect the forces of supply and demand, including freight costs to the customer's port of destination. This pricing mechanism applies to both PTA imports into the region and sales between countries within the region. In this region, the prices are negotiated mainly between producers in Japan, Taiwan and South Korea and customers from these three countries and from China. Asian producers face significant margin volatility on a month-to-month basis.

Europe: In the European market, domestic PTA pricing is influenced by polyester markets in Asia. Usually prices in Europe follow the Asian PTA price plus the freight costs from Asia to Europe. However, there are some customers that prefer setting a formula based on the European pX price plus a negotiated fee.

South America: In the South American market, a mechanism similar to the European pricing methodology is typically used.

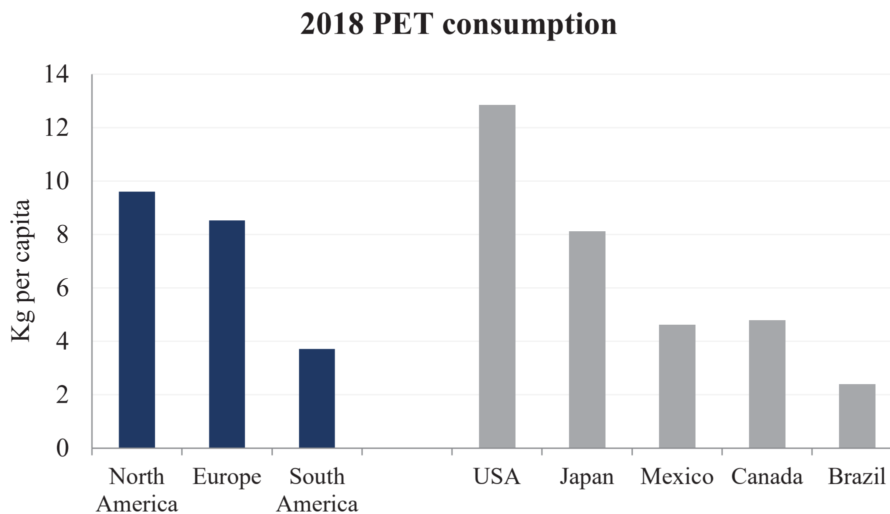


Source: Wood Mackenzie

PET

Industry Development

In the United States, the use of PET became widespread during the 1980s and PET demand has now reached a mature stage. In contrast, PET consumption in Mexico and the rest of the world became prevalent starting in the 1990's and increased rapidly but per capita consumption remains below U.S. levels. Per capita consumption in each of Mexico and Canada represents about 40% of that in the United States.



Source: Internal estimates

Until 1997, global demand had always exceeded supply, resulting in high profit margins for producers. However, that year a large number of PET plants began operations around the world, reducing margins in 1998 and 1999. As demand continued to grow, equilibrium was reached by 2000 and 2001, and margins improved during those years, reaching a peak in 2005 due to raw material shortages precipitated, in part, by the effects of hurricanes in the United States.

In recent years, some of our competitors have shut down certain of their less efficient production facilities worldwide, which has effectively removed approximately 2 million tons of capacity from the market between 2013

and 2016. According to Wood Mackenzie, the PET industry capacity operating rate was 78.5% in 2018 and is expected to be 79.2% in 2019.

PET, like many other plastics, is subject to recycling efforts. Some PET consumers such as large brands of carbonated drinks are increasingly fostering recycling and other green initiatives. The production of R-PET (recycled PET) relies on the supply of curbside bottles that are gathered by regional sanitation services. Logistics costs are very important in the process of deciding where to locate a recycling facility, since moving bottle bales can be very costly. It is therefore important to achieve a proper balance between proximity to the supply of bales and to the demand source of R-PET. The price of bottle bales varies according to supply and demand balances, and to a certain extent, after adding processing costs, it may render R-PET more expensive than virgin PET.

Notwithstanding recycling and light weighting activities, demand for PET has started to grow again since 2010. Both recycling and light weighting have allowed PET to foster a more positive perception among consumers as a "friendly plastic." PET continues to be a very versatile and cost competitive form of packaging and conversions to PET continue to take place in the marketplace.

In 2018, the PET industry in the Americas went through consolidation as a result of the bankruptcy of some subsidiaries of M&G. The site they had in Brazil was acquired by Indorama, a site in United States was acquired by Far Eastern and the Corpus Christi facility (still under construction) was acquired by CC Polymers. Additionally, the plant M&G has in Altamira, Mexico, entered bankruptcy procedures (*solicitud de concurso mercantil*). A pre-arranged restructuring plan has already been accepted by the courts and a final ruling is expected by the end of 2019. As a result of this consolidation, the top three PET producers in the Americas operate 86% of the installed PET capacity in the region, according to Wood Mackenzie.

Market Position

The following table shows the PET production capacity in the Americas for 2014, 2018 and estimated 2023 with data from Wood Mackenzie.

Americas PET Installed Capacity

Company	**Installed Capacity** *(in thousands of tons per year)* 2014	2018	2023
Alpek	**1,925**	**2,521***	**3,003**
Indorama	1,292	1,842	2,209
M&G	1,470	560	727
Nan Ya	445	455	455
FENC	-	360	560
Others	250	-	-
America total	**5,382**	**5,738**	**6,953**

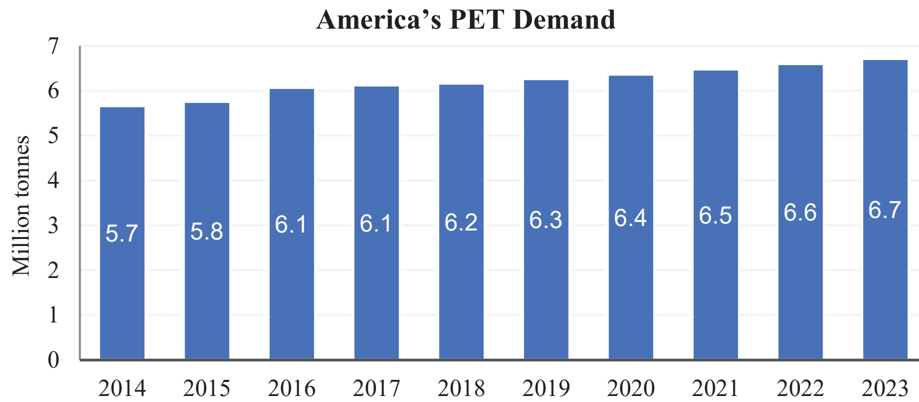
* Our actual installed capacity is 2,464 Ktons, which differs from the amount calculated by Wood Mackenzie.
Source: Wood Mackenzie

In Brazil, there are two main PET producers: Indorama and Alpek. Alpek's Suape facility has an installed capacity of 450 Ktons per year between two production lines. Supply is principally focused on local demand and minor exports to the rest of South America.

Regional Supply and Demand Growth Dynamics

World: According to Wood Mackenzie, during 2018, worldwide production of PET was approximately 23.9 million tons, with a CAGR of 5.4% from 2014 to 2018. Worldwide production of PET is expected to increase at a CAGR of 4.2% from 2019 to 2023, while demand is expected to grow at a rate of 5.2% over the same period.

Americas: Production of PET in the Americas was 4.6 million tons in 2018, with a CAGR of 1.5% since 2014. During the same period, demand grew at a CAGR of 2.1%. According to Wood Mackenzie, from 2019 to 2023 production will increase at a CAGR of 5.9% and demand at a CAGR of 1.8%.



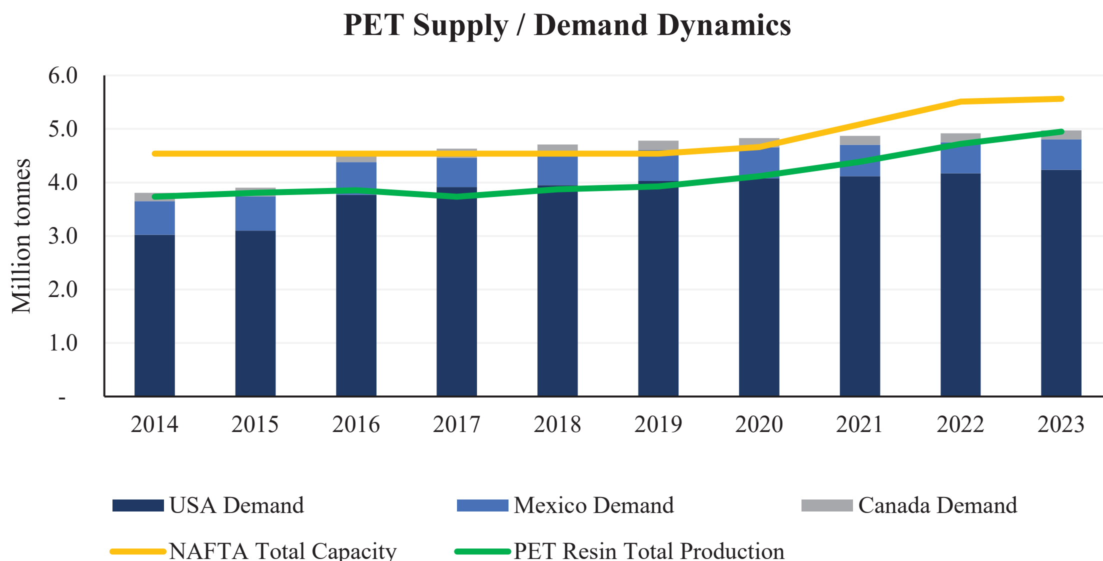
Source: Wood Mackenzie

North America: In North America, production of PET was nearly 3.9 million tons in 2018, with a CAGR of 0.9% from 2014 to 2018, according to Wood Mackenzie.

According to Wood Mackenzie's estimates, PET has become the main market for PTA in North America, representing approximately 72% of sales in 2018, compared to 58% in 2002. This percentage has increased in recent years due to the closure of certain fiber assets in the region and the higher consumption growth of PET compared to fibers.

PET growth in North America is moderating as a result of maturing applications in such key markets as water, carbonated soft drinks and personal care products and the drive toward lighter-weight containers and increased content of recycled material. According to Wood Mackenzie, forecast demand for PET in North America is expected to increase at a CAGR of 1.0% from 2019 to 2023.

Mexico: According to Wood Mackenzie, production of PET in Mexico grew at a 0.3% CAGR from 2009 to 2018. PET production in Mexico is expected to remain at the same levels during the next five years.

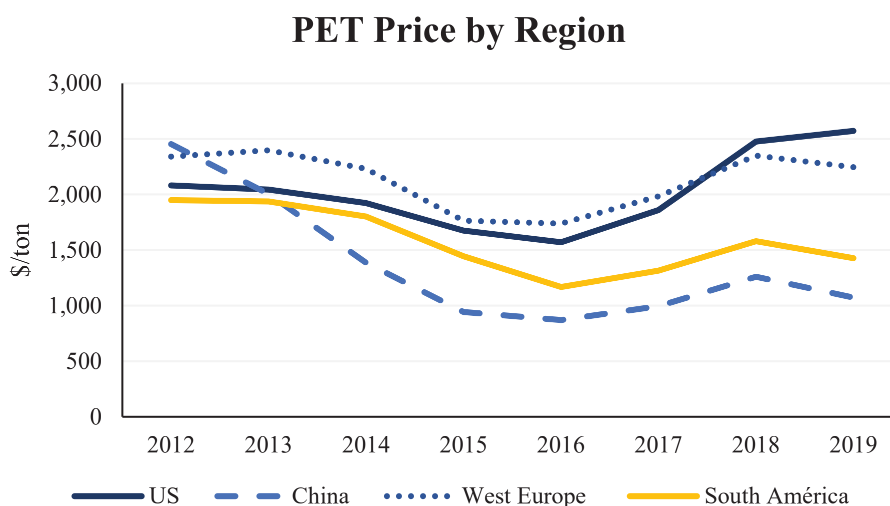


Source: Wood Mackenzie

South America: According to Wood Mackenzie, production for PET in South America increased at a 4.8% CAGR from 2014 to 2018. PET demand is anticipated to grow in South America at a CAGR of 4.2% from 2019 to 2023.

Pricing

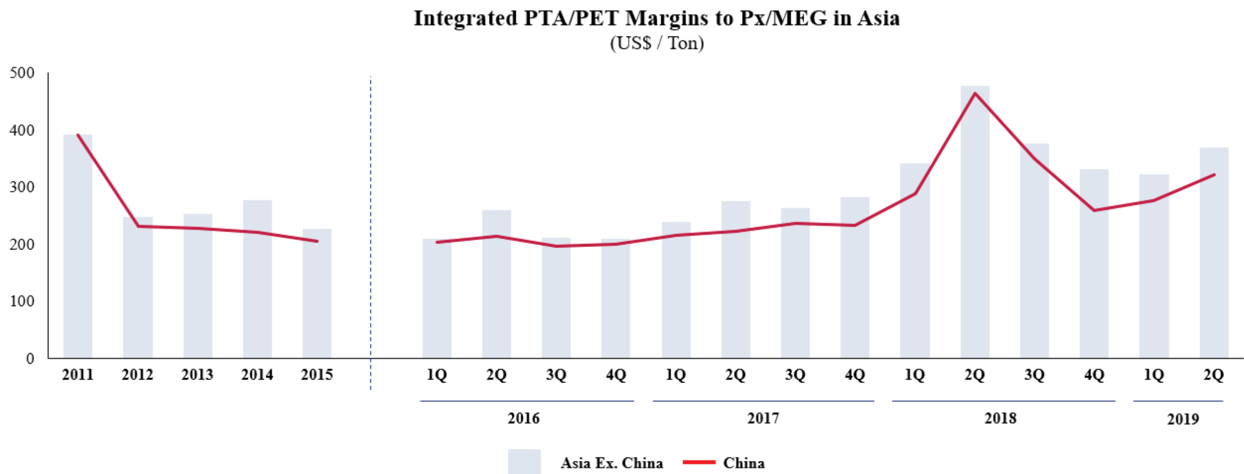
Historically, prices of PET in the Americas have generally been negotiated between PET producers and their customers on a monthly basis as a function of supply/demand balance and access to product from other regions. Prices can be subject to rapid change in periods when factors influencing demand are affected, when prices of raw materials fluctuate or when there are shortages of key inputs in the production process. Prices in South America are also influenced by Asian prices as there is a higher exposure to imports from this region.



Source: Wood Mackenzie

Integrated PTA/PET Margins in Asia

Global polyester margins tend to correlate with Asian market dynamics. Notwithstanding that the global reference for PET prices in Asia seems to have remained in the same levels between 2012 and 2016, industry margins over raw materials have shown a significant recovery since 2017, as shown in the table below. This improvement in the industry environment is related to a reduction of global overcapacity and resulting higher operating rates worldwide. In 2018, Asian margins reached levels near US$400 per metric ton, a level that they had not reached since 2011. Margins in 2019 have shown a normalization, but have remained at higher levels than the years before 2018.

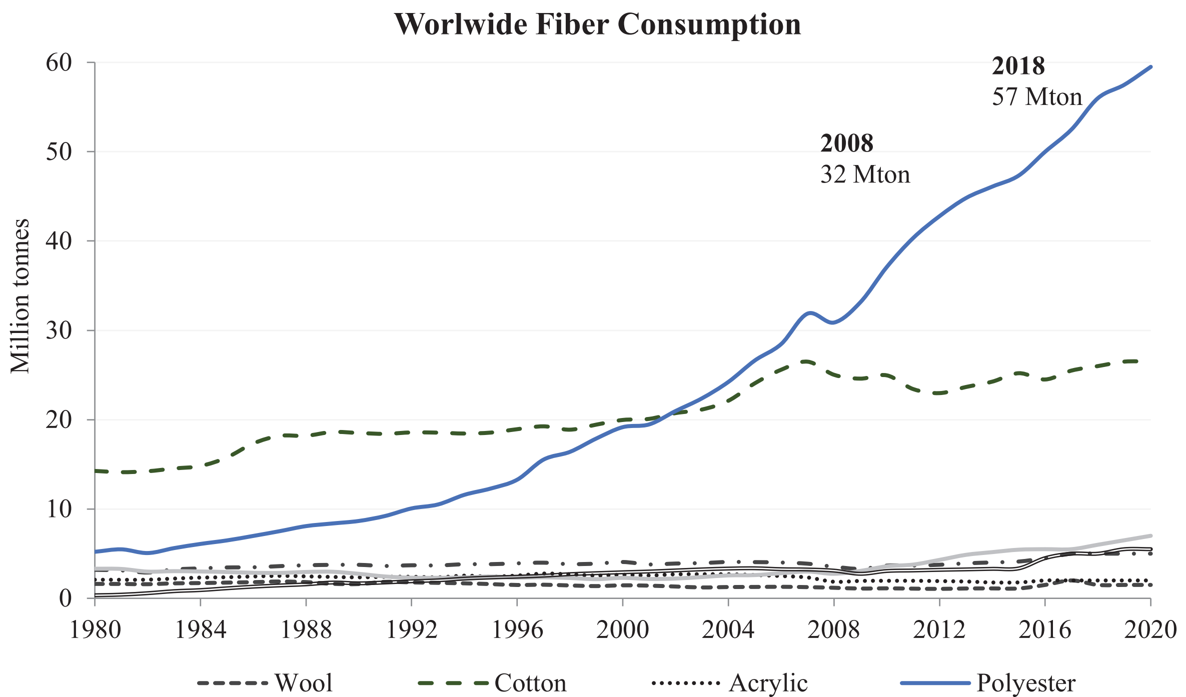


Source: Industry Benchmark Prices

Polyester Fibers

Industry development

Polyester fiber represents the largest and largest-growing market in the man-made fibers ("MMF") industry. This fiber has replaced cotton in many applications. As a result, cotton production lost 9.6% of its market share to polyester fiber from 2009 to 2018, according to Wood Mackenzie, while polyester fiber gained 7.8%. Polyester has also substituted other MMFs, such as olefin and acrylic fibers, due to reduced costs of production and comparable or enhanced performance. The following chart shows the worldwide fiber consumption change from 1980 to 2020, according to our internal estimates.



Source: Internal estimates

In North America, growth is expected to come from markets less susceptible to imports from Asia, which according to industry research is expected to continue serving apparel applications. Synthetic fibers for specialized applications with superior performance characteristics, such as tensile strength, dye affinity and resiliency are expected to be the region's growth drivers.

China's entry into the World Trade Organization decreased Mexican textile producers' market share of total U.S. textile imports. As a result, Mexican producers were forced to improve their production processes and increase productivity in order to remain competitive. There are market segments in which Mexican producers have advantages compared with China. Some of these advantages consist of a faster response time to customer supply requests and better margins derived from its geographical vicinity to the U.S., according to the U.S. Office of Textiles and Apparel (Otexa). Mexico's privileged situation as a competitive producer within North America, has allowed it to overcome competition, and retain a significant share of the U.S. textile imports.

Market Position

Despite the decline in the polyester staple fiber ("PSF") market in recent years, we have the second largest capacity share in North America, with 31%. Nan Ya has the largest capacity share with 44%. The following table shows North American PSF production capacity, as calculated by Wood Mackenzie.

North America PSF Installed Capacity (2018)	
Company	**Installed Capacity**
	(in thousands of tons per year)
Nan Ya	210
Alpek	**150**
Indorama	122
North America total	**482**

Source: Wood Mackenzie

Polyester filament is used for textile and industrial applications. In North America, the textile filament chain is usually divided into two categories, with certain companies producing partially-oriented yarn ("POY") and others producing finished textile fibers. The separation between POY (unfinished yarn) and finished yarn production processes implies additional packaging and logistics costs, which creates inefficiencies due to producers' lack of integration.

According to Wood Mackenzie and our internal estimates, the largest textile filament producers of POY in the North American market are: Nan Ya with 39% of total capacity, followed by Unifi with 28% and Alpek with 24% of total capacity. Total installed capacity is 253 Ktons. In the industrial polyester yarn North American market, the largest producer is Performance Fibers with 87% of the total installed capacity of 158 Ktons. Alpek has 9% of the installed capacity in the region, while the rest of the market holds the remaining 4% and includes a larger number of players because of the degree of specialization of certain products.

Regional Supply and Demand Growth Dynamics

World: According to Wood Mackenzie's estimates, during 2018, worldwide production of PSF was approximately 17.3 million tons, with a CAGR of 2.5% from 2014 to 2018. Worldwide production of PSF is expected to increase at a rate of 2.6% from 2019 to 2023. World polyester filament production capacity is forecast to grow at 3.6% CAGR from 2019 through 2023. China's production capacity is expected to grow 3.5% during the same 2019 to 2023 period. The worldwide demand for polyester filaments is forecast to grow at a 3.6% CAGR between 2019 and 2023.

North America: In North America, the demand for PSF declined from 1999 to 2009. By contrast, from 2014 to 2018, it experienced a growth rate of 3.5%. One of the principal drivers of this decline has been the shift to Asia of manufacturing capacity for apparel and other end-uses for PSF, which has enabled Asian competitors to gain market share. We estimate that in the near future there will be further attrition in this market. According to Wood Mackenzie, North America's filament production capacity is expected to grow at a 2.8% CAGR from 2019 to 2023 and demand is expected to grow at a 1.1% CAGR during the same period. In addition, Wood Mackenzie estimates that Alpek has a 18% capacity share in the region.

Mexico: Alpek is the only domestic textile filament producer in the country.

Pricing

Polyester fiber prices respond to import dynamics. Another factor that has now come into play in the world is the availability of recycled material. Prices can be subject to rapid change in periods when factors influencing demand are affected, when prices of raw materials fluctuate or when there are shortages of key inputs in the production process.

Due to market improvement and lower energy costs, North American polyester filament producers have been improving their business profitability since 2009.

Global Market for Plastics & Chemicals Business

Polypropylene (PP)

Industry Development

PP typically competes against other traditional non-polymer materials. Examples are aluminum, steel, wood, paper, glass, etc. Worldwide, PP growth is showing a significant increase, on pace with other thermoplastics, such as polyethylene. PP has also typically substituted polyethylene in some applications. Before 2009, propylene prices had been lower than ethylene prices, causing PP to absorb some of the polyethylene demand. However, the pricing trend changed in North America, due in part to the rising prices of propylene, compared to those of ethylene. In spite of this pricing trend, based on our review of publicly available market data, we believe PP demand is expected to grow at a CAGR of 4.5% from 2019 to 2023.

Market Position

We are the only PP producers in Mexico, being the leader of the market with a market share of approximately 30% in 2018, according to our internal estimates. The other 70% of the market is served mainly by imports from U.S. producers and traders.

Regional Supply and Demand Growth Dynamics

World: Based on our review of publicly available market data, we believe approximately 72,248 Ktons were produced during 2018. We believe production showed a CAGR of approximately 5.1% for the period from 2014 to 2018 and we expect it to grow at a CAGR of 4.5% from 2019 to 2023. We believe demand showed a CAGR of approximately 5.6% from 2014 to 2018, which we expect to increase to approximately 4.5% from 2019 to 2023.

North America: Based on our review of publicly available market data, we believe North America showed a production of approximately 7,567 Ktons in 2018, with a CAGR of approximately 0.4% from 2014 to 2018, however we expect it to show a strong growth of 5.2% CAGR from 2019 to 2023. Demand for PP was approximately 9,979 Ktons in 2018 and is expected to grow at a CAGR of 4.3% from 2019 to 2023.

Mexico: The Mexican PP market has been steadily growing, even during periods of economic uncertainty. The Mexican PP market has shown a compounded annual growth rate of approximately 3.6% from 2014 to 2018. In 2018, the size of the market was estimated at 1,400 Ktons and is expected to grow at a CAGR of 2.1% from 2019 to 2023.

Pricing

PP prices respond to market dynamics in the region, as well as to raw material pricing. Through a successful segmentation strategy with our customers, as well as superior service and continuous innovation, we believe we have been able to maintain a pricing edge above prices from imports.

Expandable Polystyrene (EPS)

Industry Development

The EPS business is divided into three main segments: construction, packaging and disposable containers, such as thermal cups. The cup grade product is, nevertheless, different, and is considered as an independent segment and we do not participate in this segment. Unless otherwise stated, the numbers in this offering memorandum referring to markets and industries do not consider cup grade supply or consumption.

Based on our review of publicly available market data, we believe the construction segment represents approximately 56% of the world EPS demand, followed by approximately 39% for the packaging segment. In North America, however, we believe cup grade represents up to 28% of total EPS demand, while we believe the construction segment accounts for approximately 48% of total consumption, with packaging accounting for the remaining 24%.

As it did with many other markets, the 2008-2009 financial crisis affected the demand for EPS. However, since 2011 demand has increased considerably, principally driven by the recovery in the construction industry. Based on publicly available data, Alpek estimates that in the United States and Canada, the market grew 4.4% and 4.0% during 2017 and 2018, respectively. A 3.3% growth rate is expected for 2019.

Market Position

In 2018, approximately 55% of our EPS was used in the packaging industry while the remainder went to the construction business. During 2017, Alpek finished the expansion of its EPS plant in Mexico, reaching an installed capacity of 240,000 tons. We now own and operate the largest EPS manufacturing facility in the Americas and are leaders in the Mexican market. As of October 2018, based on our review of publicly available data, we had 93% and 46% of the capacity share in Mexico and North America, respectively. In South America, Alpek's capacity share was approximately 52% with an installed capacity of 85,000 tons in 2018.

Regional Supply and Demand Growth Dynamics

World: Based on our review of publicly available market data, we believe worldwide EPS capacity was approximately 12 million tons during 2018. The largest capacity share is in China, which we believe has a little over half of the installed capacity.

North America: Based on our review of publicly available market data, we believe domestic demand for EPS in North America accounted for approximately 656,000 tons in 2018. We believe almost 30% of the North American EPS consumption comes from the cup segment, a market in which we have no participation.

South America: Based on our review of publicly available market data, we believe domestic demand for EPS in South America accounted for approximately 165,000 tons in 2018. We believe approximately 80% of the South American EPS consumption comes from the construction and packaging market segments in which Alpek participates.

Pricing

The EPS industry bases its prices on a "delta margin," defined as the price difference between the EPS price and the styrene monomer price free on board ("FOB") for the U.S. Gulf Coast as reported by third party industry analysts. The fluctuation in delta-margins is a function of the product demand. The styrene monomer price is a function of its availability, and the benzene and ethylene prices in the market.

Caprolactam *(CPL)*

Industry Development

Worldwide consumption and trade volume of CPL is concentrated mainly in Northeast Asia (China and Taiwan). In 2018, China represented 46% of global demand, followed by Western Europe with 19% and the United States with 11%. These regions represent 75% of worldwide consumption. From 2010 to 2018 global consumption

of CPL grew at a CAGR of 3.4%. In the same period, consumption of CPL in China showed a strong increase with a CAGR of 11.3%, while consumption in the United States experienced a declining trend with a CAGR of -1.9%. On the other hand, consumption of CPL in Western Europe grew in the same period with a CAGR of 3.2%. According to industry consultant estimates, consumption in China is expected to grow within the next three years at an approximate rate of 6.7% per year on average, while consumption in the United States and Western Europe is not expected to have a significant change. According to Wood Mackenzie, the average plant operating rate in the industry is expected to stay between levels of 75% and 80%.

Market Position

We are the sole CPL producer in Mexico and there are minimal CPL imports into the Mexican market. We currently sell CPL primarily in the Northeast Asian, Mexican and United States markets. 40% of our CPL revenue in 2018 was from exports to Asia.

Regional Supply and Demand Growth Dynamics

World: CPL is mainly used for the production of nylon 6 polymer. Therefore, market demand for CPL is a function of the demand for nylon 6 polymer, which is used by a diverse group of manufacturers serving a wide variety of end use markets. Global demand for CPL will continue to grow at an annual average of 2.5% to 3.5%, according to industry consultants and our internal analysis.

In 2018, CPL was a US$12,200 million global industry with global capacity of approximately 7.4 million tons and global production of approximately 5.8 million tons according industry consultants and our internal analysis.

China: Growth in CPL consumption has been driven by strong textile and industrial filament demand, which now accounts for more than 70% of Chinese CPL demand. In the rest of the world, textile filament production has been declining as the textile industry has migrated to Asia. Growth in these regions has been in the resins market, which accounts for 43% of global CPL demand, according to Wood Mackenzie.

The demand of CPL grew during 2010 to 2018 at a CAGR of 3.4%, according to industry consultants and our internal analysis.

According to Wood Mackenzie, the Northeast Asian market, comprised mainly of China and Taiwan, consumed the largest volume of CPL in the world, equal to approximately 55% of world consumption, or 3.2 million tons of CPL, in 2018. China is the largest consumer of CPL of the Northeast Asian market (78% of consumption from this region), accounting for approximately 2,650 Ktons or 46% of world consumption in 2018. According to Wood Mackenzie, Asia imported approximately 470 Ktons of CPL in 2018 to meet its demand. According to industry consultants and our internal analysis, Chinese CPL demand is expected to grow at a CAGR of 6.9% from 2017 to 2023.

Pricing

Because CPL generally consists of uniform properties and characteristics, it is a commodity and is traded and exported around the world in the CPL spot market. The spot price is published monthly in a variety of publications. The change in prices is influenced by fluctuations in raw materials prices and majorly by the supply-demand balance.

Fertilizers (Ammonium sulfate)

Industry Development

The fertilizer industry in Mexico is approximately 3.5 million tons per year. Ammonium sulfate competes with another nitrogen-based fertilizer in Mexico called urea, as well as compound fertilizers, which are tailor made. Ammonium sulfate has the value added from its sulfur content, which is suitable to improve the characteristics of the alkaline soil in Mexico.

Mexico's total demand of ammonium sulfate is approximately 1.3 million tons per year. Additionally, Mexico imports approximately 1.7 million tons per year of urea. Ammonium sulfate sales in Mexico are tied to the agricultural cycle and most of it is sold during spring and summer.

Market Position

There are four producers of ammonium sulfate in Mexico, each of which is located in a different geographical region of the country. Alpek's share of total capacity is approximately 24% of the market and the remaining 76% of capacity is divided among the three other participants and imports.

Regional Supply and Demand Growth Dynamics

World: The continued growth in worldwide consumption of agricultural products such as grains for human and animal feed, and most recently for fuel production (bio-fuels), requires an extensive use of fertilizers in order to improve yields.

Depending on the production process used to produce CPL, between two and four parts of ammonium sulfate may be produced for each part of CPL produced. In the case of Alpek, approximately 4.3 parts of ammonium sulfate are produced for each part of CPL produced.

Mexico: Because of the low nitrogen content in its agricultural soil, Mexico is a significant market for the use of ammonium sulfate as a fertilizer. Competitiveness is strongly based on the fertilizer's price; therefore, it is important to be close to a fertilizer demand source so freight costs do not reduce profitability. In Mexico, there is widespread use of fertilizers near our CPL plant.

Pricing

Ammonium sulfate prices vary seasonally with demand. Many of our products, also, are value-added fertilizers based on ammonium sulfate that have higher margins, and are sold to higher-value crops, such as avocado, strawberries and others.

Other Chemicals

Industry Development

Improved economic growth in Mexico, in particular in the oil, automotive and consumer product industries that use our products, is expected to lead to the growth of our other chemicals and specialty products. The improved competitive position of the region in the production cost of ethylene will also support the development of our group of products that use ethylene oxide as their main raw material.

Market Position

We have an important number of specialty chemicals products with diverse end-uses, among which the most important are: pharmaceuticals, cosmetics, detergents, applications in the oil industry and water treatment.

Our specialty chemicals include oil field chemicals ("OFCs") (products used in the market for crude oil production process), polyethylene glycols, non-ionic tensoactives, industrial polyols, among other performance chemicals. We take part in the demulsifiers market mainly as a supplier of dehydration and desalting of crude oil products (promoting the separation of water from crude oil) and have reached a 25% domestic market share in demulsifiers within the OFCs market.

Our industrial chemicals products are divided in ethylene and propylene glycols, glycol ethers and brake fluids. We believe we are trade leaders in most of those markets.

The markets we participate in our specialty and industrial chemicals are very diverse. The market is highly fragmented among many different products and producers. Alpek's products meet the needs of many industrial markets, both locally and abroad.

The following tables present a brief description of the applications in these markets:

	Product	Applications
Specialty Chemicals	*Oil field chemicals (OFCs)*	Production of crude oil, dehydration and desalting, corrosion inhibitors and scale inhibitors, among others
	Polyethylene glycol (PEG)	Pharmaceuticals, medicine tablets, skin creams, ointments, toothpastes and cosmetics
	Non-ionic tensoactives	Detergents, emulsifiers, demulsifiers, humectants and dispersants (water treatment)
	Industrial polyols	Antifoam agent (antibiotics, pharmaceuticals), plastic coatings, foaming agent (mining) and functional fluid
	Other performance chemicals	Water treatment, detergents, galvanoplasty, wax and cleaning for farms

Industrial Chemicals	*Ethylene glycols*	PET (bottles for water and soft drinks), polyester fibers Engine coolant and antifreeze Solvents, unsaturated polyester resins, polyurethane foams, oil industry (dehumidifying agent for air and natural gas), film developer, paints and flocculants
	Propylene glycols	Pharmaceuticals, cosmetics & personal care, food, solvent of flavors and fragrances, chemical intermediate, functional fluid, paints and coatings, printing inks (solvents), liquid cleaners, textile (soap and lubricants) and cutting oils
	Glycol ethers and brake fluids	Solvent for dyes in textile, adhesives, thinner, metal cleaning, agrochemicals, lacquers, paints and varnish, industrial cleaning and automotive

Regional Supply and Demand Growth Dynamics

Mexico: In the specialty chemicals products, we estimate that the non-ionic surfactants industry in Mexico is about 71,000 tons per year. Specialty chemicals products have shown a growth rate of 0.5% in 2018 and are expected to grow 4.2% in 2019.

Pricing

The prices of specialty and industrial chemicals are set based on international prices, more specifically those applicable in the United States. The change in prices is influenced by fluctuations in raw materials prices and by the supply-demand balance. Our products are manufactured from crude oil derivatives, and therefore its raw material prices are influenced by those of crude oil.

Below is a brief summary of some of our products, their uses and the final markets they target:

Industry				Alpek	
Industry Segment	**Main Products**	**Representative End Markets**	**Typical End Users**[1]	**% of 2018 Revenues**[2]	**Main Geographic End Markets**
Polyester Chain Products	PTA, PET, rPET	- Food and beverage packaging - Personal care	- Coca Cola - Pepsi - Kraft Foods	Approx. 74%	- Mexico - United States - Brazil - Argentina - Canada - Colombia - Spain - Italy
	Polyester fibers	- Carpets - Non-woven - Apparel	- Hanes - Shaw - Fruit of the Loom		
Plastics & Chemicals Products	Polypropylene	- Food and beverage packaging - Consumer goods - Automotive - Medical	- Coca Cola - Pepsi - Alcoa - Becton Dickinson - Tupperware - Kimberly Clark	Approx. 25%	- Mexico - United States - Brazil - Chile - Argentina - China - Taiwan - Colombia - Central America and Caribbean [3] - Europe[4]
	Expandable polystyrene	- Construction - Packaging for appliances	- Whirlpool - Samsung - LG - Bosch		
	Caprolactam	- Textile/apparel - Tire cords - Engineering plastics	- Nike - Quadrant - Rhodia - Tornel - Mohawk		
	Industrial and specialty chemicals	- Crude oil industry - Automotive - Polyester - Hygiene - Pharmaceutical	- Bardahl - Procter & Gamble - Johnson & Johnson - Pemex		
	Fertilizers (ammonium sulfate)	- Agriculture	Diversified agricultural customers in central Mexico, mainly growers of sorghum and corn		

(1) Mix of current customers and non-customers of Alpek.
(2) Additional 1% represented by other small businesses.
(3) Central America and Caribbean includes Barbados, Belize, Costa Rica, Dominican Republic, Guatemala, Honduras, Jamaica, Nicaragua, Panama, El Salvador, Trinidad and Tobago and British Virgin Islands.
(4) Europe includes Germany, Spain, France, United Kingdom, Italy, Netherlands, Poland, Turkey and Lithuania.

BUSINESS

Overview

We are involved in the production, marketing and sale of a diversified portfolio of petrochemical products. We are one of the largest petrochemical companies in Mexico and in Latin America (based on 2018 revenues). For the year ended December 31, 2018, we sold our products in over 30 countries, with 70% of revenues from sales made to countries outside of Mexico. We have leadership positions across our product portfolio. For example, we were the largest producer of polyester and its precursor chemicals in the Americas based on installed capacity as of December 31, 2018 according to Wood Mackenzie. We are the largest purified terephthalic acid ("PTA") and polyethylene terephthalate ("PET") producer in the Americas and the second largest PET producer worldwide according to Wood Mackenzie, our internal estimates and publicly available market data. Furthermore, we believe we are one of the largest recyclers of PET bottles in the United States. Alpek is also the largest expandable polystyrene ("EPS") producer and owns the largest EPS plant in the Americas in terms of installed capacity, based on our internal estimates and our review of publicly available market data. We also operate the only polypropylene ("PP") plant in Mexico which is both the newest as well as one of the largest PP production facilities in North America. We are also the sole Mexican producer of caprolactam ("CPL"). For the year ended December 31, 2018, and the six months ended June 30, 2019, we derived approximately 74% and 76% respectively, of our revenues from our polyester group of products, which includes the production of PTA, PET resin, polyester fibers and recycled PET ("rPET"). The remainder of our revenues was derived primarily from our plastics and chemicals group products which include PP, EPS, CPL and specialty and industrial chemicals.

We focus on products and end markets that we believe offer the highest growth potential and ability to expand margins and that are more likely to provide stable financial performance through economic cycles. For the year ended December 31, 2018, 89% of our products (on the basis of sales volume) were used in what we believe are recession-resistant end markets such as the food and beverage packaging and consumer goods end markets. For the year ended December 31, 2018, we generated approximately 49% of our total revenues in high-growth emerging markets including Mexico.

Our businesses benefit from access to competitively sourced raw materials, large-scale integrated production sites, experienced sourcing personnel, proprietary state-of-the-art manufacturing technologies, strategic alliances and sustainable energy initiatives, which, together with our operational efficiency and expertise, allow us to maintain low-cost operations. We believe our recent growth in the Americas polyester market, our focus on product innovation and sustainability and our ability to maintain long-standing relationships with our key suppliers and customers have further enhanced our relevant market positions.

We believe we are not a typical petrochemical company. The capital intensity of our infrastructure is low and we are able to achieve a ratio of 3x sales over fixed assets. The segments where we participate are highly consolidated and due to our cost-plus pricing we are able to maintain stable margins. We also believe that due to our leading technology, we have been able to achieve significant cost efficiencies that place us within the first quartile of the industry.

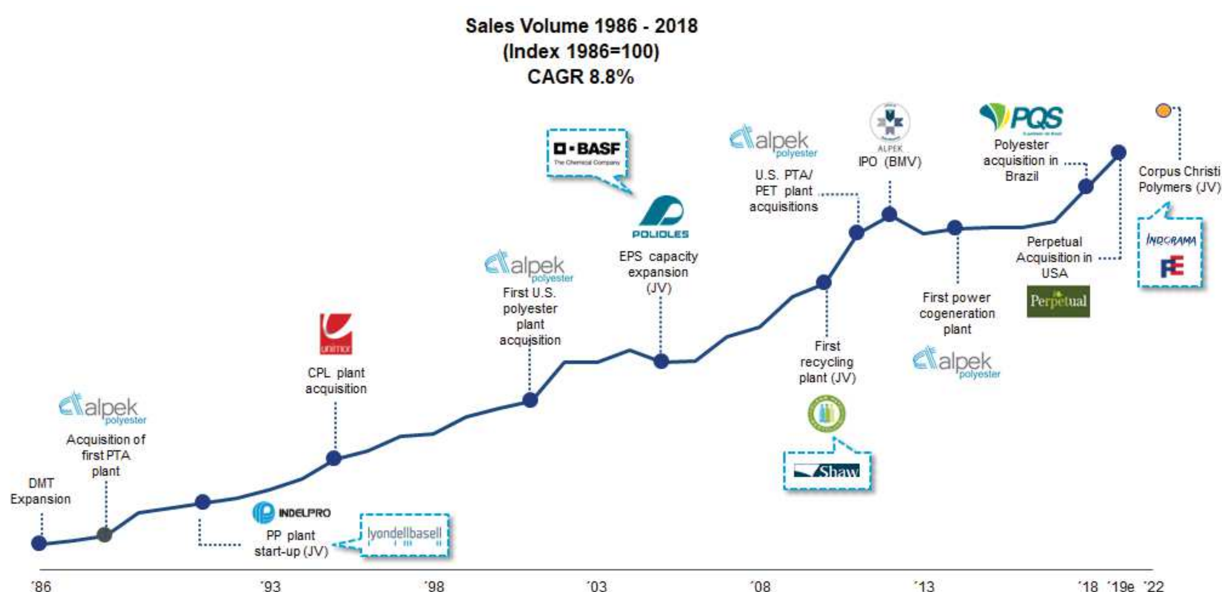
We operate through two major business segments: polyester chain products ("Polyester Chain Business") and plastics and chemicals products ("Plastics & Chemicals Business"). Our Polyester Chain Business segment, comprising the production of PTA, PET, recycled PET and polyester fibers, serves the food and beverage packaging, textile and industrial filament end markets. Our Plastics & Chemicals Business segment, comprising the production of PP, EPS, CPL, fertilizers and other specialty and industrial chemicals, serves a wide range of markets, including the food and beverage packaging, consumer goods, automotive, construction, agriculture, oil industry and pharmaceutical end markets.

History and Evolution

Alpek is a a publicly traded variable capital corporation that is a holding company and controlled by Alfa, a Mexican public company that is one of Mexico's largest conglomerates, based on revenues. Alfa is a holding company that manages a portfolio of diversified subsidiaries including Alpek (petrochemical division), Sigma

(multinational refrigerated food company), Nemak (lightweigthing solutions for the automotive industry), Axtel (information technology and communication services) and Newpek (oil and gas exploration and production).

Alpek has grown at an 8.8% annualized rate since 1986 through mergers and acquisitions, joint ventures and organic growth. The following timeline sets forth significant milestones leading to the development of our company and our current operations.



The following tables set forth the largest PTA and PET producers in the Americas based on installed capacity as of December 31, 2018:

Americas PTA Installed Capacity	
Company	**Installed Capacity**
	(in thousands of tons per year)
Alpek (Mexico)	**2,975***
Indorama (Thailand)	1,567
BP (UK)	1,400
Others	250
Americas total	**6,192**

* Our actual installed capacity is 2,890 Ktons, which differs from the amount calculated by Wood Mackenzie.
Source: Wood Mackenzie

Americas PET Installed Capacity	
Company	**Installed Capacity**
	(in thousands of tons per year)
Alpek	**2,521***
Indorama	1,842
M&G	560
Nan Ya	455
FENC	360
Americas total	**5,738**

* Our actual installed capacity is 2,464 Ktons, which differs from the amount calculated by Wood Mackenzie.
Source: Wood Mackenzie

Recent Acquisitions and Divestitures

Corpus Christi Acquisition

On March 21, 2018, Alpek announced that it had entered into a joint venture with Indorama Venture Holdings LP ("Indorama Holdings") and Far Eastern Investment (Holding) Limited ("Far Eastern"), to create Corpus Christi Polymers LLC ("CC Polymers"). CC Polymers acquired the integrated PTA/PET site under construction and related assets in their current state in Corpus Christi, Texas, as well as certain intellectual property (the "Corpus Christi Project"), from M&G USA Corp, M&G Resins USA LLC, M&G Polymers USA LLC and M&G Waters USA LLC (together "M&G USA"). On December 21, 2018, we announced that CC Polymers obtained the necessary regulatory clearance from the United States Federal Trade Commission ("FTC") to proceed with the purchase. Seven days later, the joint venture successfully completed the acquisition of the Corpus Christi Project for US$1.199 billion in cash and other capital contributions. For this purchase, Alpek contributed US$266 million in cash and US$133 million in other non-cash capital contributions associated with a portion of its secured claim with M&G with respect to supply rights in connection with amounts Alpek had paid to M&G under supply agreements prior to the M&G bankruptcy. In addition, Alpek obtained a US$67 million cash-credit for the remaining portion of its secured claim, subject to certain conditions. Upon completion of the project, each partner will have the right to receive one-third of the PTA and PET produced by the site, which is expected to have an annual capacity of 1.1 million tons of PET and 1.3 million tons of PTA. This will make this Corpus Christi plant the largest integrated PTA/PET plant in the Americas. Updated investment requirements and a specific timeline for completion are expected by the end of 2019. However, we currently expect the PET section of the plant to begin operations in 2021 and the PTA section to begin operations in late 2022.

Petroquímica de Pernambuco - Acquisition of Brazilian Assets

In April 2018, we completed the purchase of Companhia Petroquímica de Pernambuco – PetroquímicaSuape ("Suape") and Companhia Integrada Têxtil de Pernambuco – CITEPE ("Citepe" and, together with Suape, the "Brazilian Assets") from Petróleo Brasileiro S.A. ("Petrobras"). We acquired Petrobras' 100% stake in the Brazilian Assets on a debt-free basis for an amount of US$435 million. Both companies operate the only integrated PTA/PET site in South America and added an annual installed capacity of 640 Ktons of PTA, 450 Ktons of PET, and 90 Ktons of texturized polyester filament. Furthermore, through this purchase, Alpek acquired the only PTA producer in South America and one of only three PET plants in South America, thereby becoming the owner of two of the three PET plants in South America.

Cogeneration Asset Sale

On January 6, 2019, Alpek announced that it had signed an agreement for the sale of its Cosoleacaque and Altamira cogeneration power plants, located in Mexico (the "Cogeneration Asset Sale"). Under the terms of the agreement, Alpek will sell all of its shares of the companies that own both facilities: Cogeneración de Altamira, S.A. de C.V. ("CGA") and Cogeneración de Energía Limpia de Cosoleacaque, S.A. de C.V. ("CELCSA"), for an aggregate amount of US$801 million to ContourGlobal Terra 3 S.à.r.l ("CG Terra 3"), a subsidiary of ContourGlobal PLC ("ContourGlobal"). In accordance with the purchase agreement, the price will be subject to certain post closing adjustments and is due on the closing date.

Additionally, Alpek has agreed under the terms of the purchase agreement for the Cogeneration Asset Sale to enter into a call option agreement in favor of CG Terra 3, whereby Alpek undertakes the obligation to sell all of its shares of the capital stock of Tereftalatos Mexicanos Gas, S.A. de C.V. (whose assets, among others, include gas pipelines that transport natural gas from the point of interconnection of the integrated national transport system to the point of consumption in Altamira) to CG Terra 3. The call option agreement will have a term of five years from the date of closing of the Cogeneration Asset Sale.

The transaction is subject to customary closing terms and conditions and has already received corporate approvals and authorization from the *Comisión Federal de Competencia Económica of Mexico*. This will be the largest asset sale in Alpek's history. We believe the net proceeds from the sale will further strengthen Alpek's financial position and will maintain a secure and competitive power and steam supply to our Mexican facilities from

a world-class operator with a proven track-record. The Cogeneration Asset Sale is expected to close before the end of 2019 and could close before the consummation of this offering.

Acquisition of Perpetual Recycling Solutions

On January 9, 2019, Alpek announced that one of its subsidiaries had signed an agreement with Perpetual Recycling Solutions, LLC to acquire a PET recycling plant in Richmond, Indiana (“Perpetual”). The Perpetual PET recycling plant has an installed capacity to produce approximately 45,000 tons per year of high quality recycled PET flake. The acquisition was completed on January 31, 2019. This acquisition complements Alpek’s existing food-grade PET recycling operations in Argentina and its fiber-grade PET recycling joint venture facility in Fayetteville, North Carolina.

Our Strengths

Throughout our history, we have developed a series of competitive strengths upon which we have built a successful business model. We believe that our key competitive strengths are:

- Market Leading Position in the Americas;
- Attractive Consumer-oriented Product Portfolio;
- Proven Track Record and Solid Growth;
- State-of-the-art Technology Yielding Low-Cost Position;
- Strong Free Cash Flow and Financial Performance;
- Portfolio Well Placed for Circular Economy Trends; and
- Experienced Management Team Supported by Strong Shareholder.

Market Leading Position in the Americas

We are one of the largest petrochemical companies in Mexico and in Latin America (based on 2018 revenues) with leading positions across our product offering in the Americas. According to Wood Mackenzie, we are one of the largest integrated players in the global polyester industry and the leading integrated polyester producer in North America.

The following table highlights our leading market positions as of December 31, 2018 based on installed capacity in our targeted geographies and end markets:

Products	Market Position(1)	Share(1)
PTA	#1 in the Americas	48%(2)
PET	#1 in the Americas	44%(2)
	#2 worldwide	8%(2)
rPET	Leading recycler in the United States(3)	
Polyester Staple Fiber(4)	#2 in North America	31%(2)
EPS	#1 in the Americas	47%(5)
PP	#1 in Mexico	100%(3)
CPL	#1 in Mexico	100%(3)

(1) Based on installed capacity.
(2) Source: Wood Mackenzie.
(3) Source: Alpek’s internal estimates.
(4) Excludes filaments.
(5) Source: Alpek’s review of publicly available market data.

Our leading market positions are reinforced by significant competitive advantages:

- Our ability to continuously innovate allows us to develop and improve manufacturing technologies and production processes, enhance value-added attributes of our products and reduce our cost structure.

- We are suppliers to important consumer goods brands. We maintain long-term relationships with customers across our portfolio through high-quality customer service and superior technical responsiveness. Our commercial, marketing, research and development organizations allow us to meet specific customer performance requirements and provide our customers with attractive and competitive value initiatives.
- Our long-standing relationships with our strategic alliance partners allow us to access key manufacturing technologies, technical expertise and products.
- We have grown our footprint in the Americas across our product portfolio through strategic acquisitions, particularly in the Polyester Chain Business and in the EPS Business, which has allowed us to further enhance our ability to establish valuable and attractive product offerings and broaden our customer base in that market. See "Business."
- Based on our experience and industry knowledge, we believe that our best-in-class infrastructure would require large capital investments and significant lead time to replicate.

Attractive Consumer-oriented Product Portfolio

We focus on products and end markets that we believe offer the highest growth potential and ability to expand margins and that are more likely to provide stable financial performance through economic cycles. Our products are used in what we believe are recession-resistant end markets such as the food and beverage packaging and consumer goods end markets.

In our Polyester Chain Business, our customer base comprises mainly major producers of PET that purchase our PTA, as well as companies that convert PET into plastic bottles and other containers, known in the industry as "converters," and in turn sell them to major consumer goods companies. Many of the world's most popular consumer brands use our products in their containers, including Coca Cola, Pepsi, Heinz, P&G, Nestle and Kraft Foods, among others.

In the Plastics & Chemicals Business we serve a variety of customers through our different products. For example, our PP is used by manufacturers to produce food and consumer grade packaging, which is then sold to major consumer goods companies. Our EPS business supplies the construction industry with a range of applications for insulation and/or structure design and supplies electronic and home appliances producers that use our products for packaging. Our Caprolactam business serves industrial customers through a variety of products, including gears, tire treads, carpets and textiles.

Proven Track Record and Solid Growth

Throughout our history, we have executed a focused strategy of organic growth and value-creating acquisitions. We have a proven track record of integrating and succesfuly managing acquired assets. In addition, we have built a product portfolio and trade leadership that have strategically positioned us to benefit from high-growth emerging markets and the U.S. economic recovery. As a result, since 1986, we have grown our sales volume at a CAGR of 8.8%.

We have grown our production capacity through high-return, capital-efficient debottleneckings and expansions. For example, in 1998 we debottlenecked our first PP line, increasing its capacity from 100 Ktons to 240 Ktons and further increased the site's capacity to 640 Ktons in 2008 by adding a second production line. Furthermore, we have converted our PP facility into what we believe is one of the most competitive in North America.

Similarly, in 2017 we completed the latest expansion of our EPS site in Altamira, Mexico, turning it into the largest EPS producing facility in the Americas and one of the top ten largest EPS sites worldwide. The site, which started in 1995 with an installed capacity of approximately 35 Ktons, has reached a nominal capacity of 240 Ktons, allowing Alpek to further leverage on its cost-efficient process and large-scale optimization.

In 2001 we acquired certain idle PTA, PET and polyester staple fiber assets in the United States. In January and August 2011, we executed the acquisitions of the Columbia Assets and Wellman, respectively. Most recently, we further enhanced our leading position in the Polyester Chain Business through our joint venture acquisition of Selenis in Canada in 2017, the acquisition of Suape and Citepe in Brazil in 2018 and the acquisition of Perpetual in January 2019. In our Plastics & Chemicals Business, we have continued to expand our EPS and molded EPS capacity in South America through the acquisition of a total of five different plants from BASF in 2015 and 2016.

We believe we have transformed these assets into leading producers within their respective markets. We improved the profitability of these assets by reducing fixed costs, increasing asset utilization, consolidating our product offerings, focusing our product mix on products and markets with higher margins and focusing on the elimination of waste and non-value-added activities. We believe these measures, when coupled with sustainability initiatives aimed at reducing energy needs and increasing environmental awareness, have helped transform these assets and businesses into trade leaders. With respect to the acquisition of the Brazilian Assets, we believe the integration process is occurring faster than expected, we have already improved the operations and margins of these assets and are in the process of extracting synergies from them.

We intend to continue to use our strengths and competency to grow our business both organically and through acquisitions.

State-of-the-art Techonology Yielding Low-Cost Position

We believe we are one of the lowest-cost producers in North America based on our:

- ***State-of-the-art production technology.*** We use industry leading production technologies across our product portfolio that help reduce our production costs by being more efficient than older technologies.
- ***Large-scale production facilities.*** According to Wood Mackenzie and industry consultants, we operate some of the largest manufacturing plants in the Americas for our products, including our world-scale polyester production facilities in Altamira and Cosoleacaque in Mexico, our polyester facilities in Columbia, South Carolina, and Pearl River, Mississippi, in the U.S., our polyester facilities in Ipojuca, Brazil, our EPS facilities in Altamira, Mexico, and our PP facility in Altamira, Mexico.
- ***High utilization rates and energy efficiency***. We believe that we operate our plants at industry leading utilization rates, which helps minimize our per-unit production costs as well as promote higher energy efficiency. According to internal calculations, our PTA and PET capacity utilization rate for the last three years was 96% and 89%, respectively.
- ***Strategically located assets.*** Our assets are in close proximity to raw material supplies (principally on the U.S. Gulf Coast or close to seaports in Brazil, Argentina and Chile), product transportation infrastructure and end markets, which helps reduce logistics costs. In addition, our long-term relationships with suppliers, supported by our large-scale consumption and long-term contracts, give us strategic access to raw materials;
- ***Low overhead costs***. We maintain low overhead costs and a lean, flexible organizational structure throughout our facilities.

With respect to our Caprolacam business, we rank among the three lowest cost producers worldwide. Additionaly, in our polyprolelene business, Alpek has maintained a strong competitive position compared to its peers in the region. Industry benchmarks place Alpek's margin-over-conversion-cost ratio at a higher level than 75% of the North American producers. We intend to maintain and grow our cost advantage through continued investment in cost reduction and efficiency-enhancing projects.

We have developed and acquired cutting-edge production technologies that we believe have improved our cost position and enhanced the quality and performance of our products. We believe the IntegRex® technology provides us with state-of-the-art PTA and PET production technology. Our technology was licensed to increase the

PTA capacity of a plant in The Netherlands and will be used in our joint-ownership PTA/PET plant under construction in Corpus Christi. The principal benefits of this technology are:

- conversion costs, which we estimate to be lower than competing technologies and lower capital investments, through the reduction of steps and machinery necessary for the production of PTA and PET;
- low investment per ton of installed capacity;
- suitable for large-scale application; and
- lower environmental impact, due to a reduction in wastewater and solid by-product, and savings in energy consumption.

Our PP production process also uses state-of-the-art technologies: Spheripol, the most widely used PP technology in the world, and Spherizone, the latest technology being licensed by LyondellBasell. These technologies allow us to produce PP with a wider range of properties. Additionally, our specialty and chemicals businesses benefit from close technological collaboration with our strategic alliance partner BASF.

This robust technological base underpins our low-cost advantage, our operational excellence and our ability to develop new products.

Strong Free Cash Flow and Financial Performance

We have demonstrated strong financial performance throughout the business cycle. For the years ended December 31, 2016, 2017 and 2018 and the six months ended June 30, 2019, we had revenues of Ps. 90,192 million (US$4,834 million), Ps. 98,998 million (US$5,230 million), Ps. 134,523 million (US$6,993 million) and Ps. 62,992 million (US$3,286 million) and Adjusted EBITDA of Ps. 12,425 million (US$666 million), Ps. 7,483 million (US$395 million), Ps. 20,607 million (US$1,071 million) and Ps. 5,761 million (US$300 million), respectively. Our robust financial performance in the long term has been driven by the following key elements:

- for the year ended December 31, 2018, we estimate that approximately 89% of our products (on the basis of sales volume) were ultimately used to produce plastic products and containers for the beverage, food and consumer goods end markets, which tend to be less susceptible to economic downturns;
- for the year ended December 31, 2018, approximately 49% of our sales were in emerging markets, with high demand growth rates;
- access to competitively sourced raw materials;
- our ability to pass a substantial portion of raw material price increases to our customers; and
- our low-cost position.

We have also been able to turn potential hardships into opportunities. During 2017, M&G, one of our largest PTA customers at the time, faced significant financial difficulties. Several subsidiaries of M&G were in default on payments associated with the supply of PTA. This forced us to temporarily halt supply to both their Mexican and Brazilian operations. Additionally, one of their US subsidiaries, M&G Resins USA LLC, halted the construction on their integrated PTA-PET plant in Corpus Christi with which we had a 500 ktons supply rights based on our US$435 million investment. As a result, our Adjusted EBITDA was affected and temporarily brought our net leverage up from 1.7x as of December 31, 2016 to 3.4x as of December 31, 2017. However, based on Alpek's positioning within M&G's restructuring process, combined with strong operational performance from the rest of our businesses, we were able to post Adjusted EBITDA of US$1.1 billion in 2018 and reduce our net leverage to 1.7x as of December 31, 2018. We were also able to emerge from M&G's Corpus Christi bankruptcy with shared ownership of the Corpus Christi Project (along with Indorama and FENC) as well as US$200 million in credit towards the purchase and future capital expenditure contributions.

Portfolio Well Placed for Circular Economy Trends

Alpek is in a strong position to capitalize on new customer demand for recycled packaging content. Among plastics, PET, whose traits have made it the most used beverage packaging material, has the highest recycling rate in

the world. Furthermore, Mexico has one of the highest PET recycling rates worldwide. PET's high recyclability rate is driven by the ability for consumenrs to easily identify and separate PET packaging as well as financial incentives for its collection, which vary by region and country. When compared to aluminum or glass, PET has both the lowest cost as well as the lowest carbon footprint per bottle. Alpek is already actively participating in the recycling market through its three recycling operations in the United States and Argentina. We expect to continue to grow out footprint in this segment and leverage our existing relationships with customers to sell both new and recycled PET to satisfy consumer product needs.

Experienced Management Team Supported by Strong Principal Shareholder

We have a senior management team with an average of more than 30 years of industry experience and a seasoned and knowledgeable group of operating and technical managers in each of our businesses. Our team has been responsible for the expansion of Alpek through organic growth and acquisitions, and has a proven track record of integrating and optimizing acquired assets and implementing new projects and start-up operations. For example, since our acquisition of the Brazilian Assets in April 2018, we have improved our operating rate, and we have also achieved important synergies in areas such as procurement and operations. Additionally, our principal shareholder, Alfa, is a leading Latin American conglomerate with an established culture of operational excellence, conservative corporate governance, prudent management policies and reliability as a partner. These values form the core of our businesses on which our management team intends to build.

Our Strategies

Throughout its history, Alpek has executed a growth strategy based on a combination of organic growth, acquisitions and strategic alliances. Alpek's focus has been to identify attractive petrochemical chains, develop competitive advantages, achieve operational excellence and strengthen its low-cost position in order to achieve profitable growth, increase margins and generate a solid and sustainable cash flow. Our strategic priorities are divided into three main elements: Strengthen the Core Business, Sustained Growth and Product Sustainability.

Strengthen the Core Business

Improve Cost Competitiveness. We intend to continue to pursue operational excellence initiatives in order to ensure profitability throughout the industry cycles. We strive to maintain a low-cost structure through continued operating and safety excellence resulting in high-capacity utilization rates at our large-scale production facilities. We also intend to continue to implement additional cost and efficiency improvements, including the replacement of our older and less efficient operations with new large-scale plants using our latest proprietary low-cost technologies.

Enhance Position in the Americas. Alpek is a leading petrochemical player in the Americas and we intend to continue to offer high value solutions to our customers. We intend to maintain our standing as a trade leader, supported by close collaboration and long-standing relationships with our key customers. We plan to continue being our customers' supplier of choice by maintaining an emphasis on:

- unparalleled responsiveness to customer needs;
- superior technical support;
- continuous innovation in products and services by working closely with customers to better meet their needs; and
- sustainable products and solutions.

Secure competitive feedstock/power supply. We will continue developing long-term competitive sourcing for our key raw materials, leveraging our capacity, the convenient geographic location of our operations and our strong logistics infrastructure. Additionally, we will continue to seek further energy cost reduction opportunities and continue to seek opportunities to improve manufacturing efficiency through the use of diversified fuel sources and energy integration.

Attract, Develop and Retain the Best Human Capital. Our human capital has shaped us since our earliest stages. We do not believe we could have fostered and achieved the success we have had without the

support of a top-performing, goal-oriented and highly skilled human capital base. Alpek will continue to actively invest in attracting, developing and retaining the best human capital in all jurisdictions in which we operate. We expect to further benefit from the practices of the businesses we acquire.

Sustained Growth

Deliver returns on recent investments. In recent years, Alpek has invested over US$1 billion in various projects, including the acquisitions of Suape and Citepe, the Corpus Christi Project, and the Perpetual acquisition, among others. We intend to leverage our capabilities and operational expertise to ensure the expected returns, improve our profitability and further enhance our capabilities in the markets we serve.

Growth in Adjacent Markets. We will continue to invest in capital efficient high-return organic growth opportunities throughout our product portfolio, ranging from large-scale expansions to debottlenecking projects. Additionally, we will further seek to diversify our product portfolio, with an emphasis on adjacent markets and higher margin products and plan to continue to broaden our customer base.

Pursue vertical integration. Alpek is currently exploring opportunities to invest in assets that would provide vertical integration into its raw material feedstocks (Paraxylene, MEG and Propylene among others). We believe that doing so would help secure the company's raw material needs at attractive prices into the future, as well as help capture additional margin associated with the production of these raw materials.

Strategic and Opportunistic M&A. We intend to continue evaluating and pursuing value-accretive acquisitions in the markets where we participate or in new regions with high potential such as Europe, in order to enhance our position as a global petrochemical player while maintaining a prudent approach to financial management.

Invest in and Grow Our Technology Leadership Position. We will seek to leverage our industry leading technology portfolio and business knowledge, seeking licensing, strategic alliance and joint venture opportunities or pursuing new integrated projects worldwide through the use of IntegRex® technologies in our PTA/PET businesses. We intend to continue developing proprietary technologies to maintain our leadership in the PTA/PET industry. We also intend to continue investing in our research and development program to further develop and continually improve our proprietary technologies. We believe that investing in and growing our technology leadership position will help us sustain and enhance our profitability, improve the efficiency of our operations and enhance the return on our investment.

Product Sustainability

Enhance recycled content offering. Alpek is actively working on incorporating existing mechanical recycling solutions into its portfolio via acquisitions, while at the same time developing chemical recycling solutions, which would return PET to its base feedstocks. This will allow Alpek to continue to participate in the recycling of PET and offer our customers solutions to service both their rPET flake and single pellet requirements.

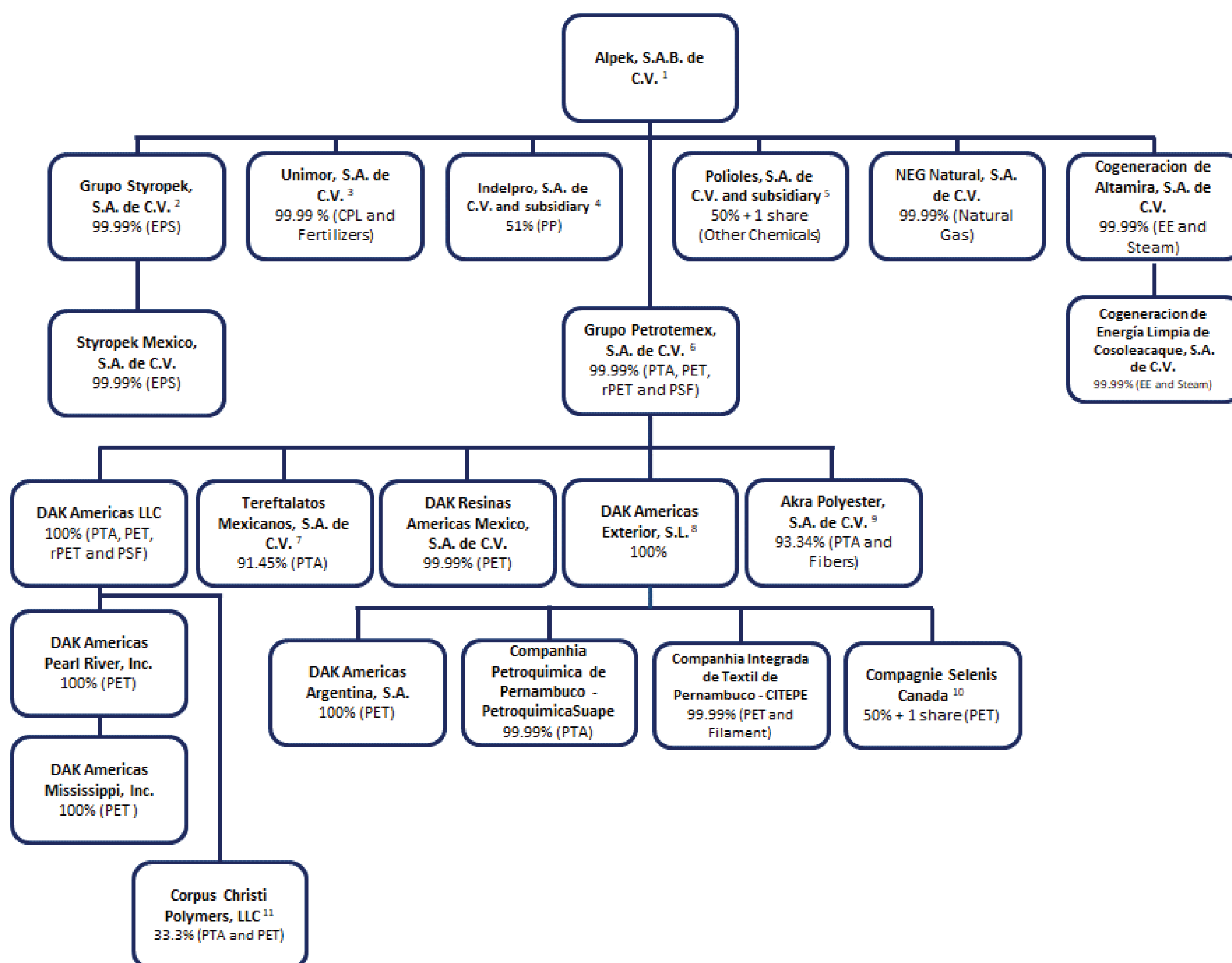
Expand PET recycling capacity. We actively participate in the recycling market with recycling operations in the United States and Argentina. We are one of the largest recyclers of PET bottles in the United States. With the recent acquisition of Perpetual, Alpek increased its rPET capacity to 115 Ktons of recycled material. Additionally, on July 24, 2019, the Company announced that it had joined The Recycling Partnership, a non-profit organization that leverages corporate partner funding to transform recycling in states, cities and communities across the United States. The organization estimates that by the end of 2019, it will have diverted 230 million pounds of new recyclables, saved 465 million gallons of water, avoided 250 thousand metric tons of greenhouse gases, and driven significant reductions in targeted contamination rates. Such initiatives demonstrate our commitment to the collection and recycling of plastics, and, as such, we will continue to invest in both organic or inorganic opportunities that will allow us to offer additional sustainable high-value products to our customers.

Support customer initiatives and drice circular economy growth. In recent years, Alpek's customers have developed a series of initiatives aimed at fostering a circular economy, incorporating a higher percentage of recycled materials and increasing the biodegradability rate of products. Given our long-standing relationships, as well as an alignment with these initiatives, Alpek will continue to expand its footprint and recyclying capabilities actively participating in supporting these activities.

Corporate Information

Alpek is a sociedad anónima bursátil de capital variable (a publicly traded variable capital corporation) that is a holding company based in San Pedro Garza García, Nuevo León, and controlled by Alfa, a Mexican public company that is one of Mexico's largest conglomerates, based on revenues. Alpek's common shares are listed on the Mexican Stock Exchange (*Bolsa Mexicana de Valores, S.A.B. de C.V.*). Our subsidiaries have operated for over 40 years. We have a successful history of managing strategic alliances, including our strategic alliances with BASF (since 1981), LyondellBasell (since 1992), Shaw Industries (since 2010) and with global chemical groups that provide us with access to what we believe are best-in-class manufacturing and applications technologies and technical expertise as well as advantageous sourcing of specialty products.

The following chart summarizes our corporate structure as of the date of this offering memorandum, including our principal subsidiaries, our percentage ownership in them and their principal products.



(1) Other non-material subsidiaries are Tereftalatos Mexicanos Gas, S.A. de C.V., Copeq Trading Co. and Grupo Alpek, S.A. de C.V.

(2) Other subsidiaries are Industrias Styropek, S.A. de C.V., Styropek, S.A., Styropek of Canada Corporation, Styropek USA, Inc., Styropek Exterior, SL, Aislapol, S.A., Styropek EPS DO Brasil, LTDA and Styropek Chile.
(3) Subsidiaries include Univex, S.A., among other non-material subsidiaries.
(4) LyondellBasell Industries Holdings B.V. owns 49.0% of the shares. Industrias Indelpro, S.A. de C.V. (personnel services company) is a subsidiary of this company.
(5) BASF de Mexico, S.A. de C.V. owns 50.0% minus one share. Industrias Polioles, S.A. de C.V. (personnel services company) is a subsidiary of this company.
(6) Among other non-material subsidiaries.
(7) BP Amoco Chemical Company owns approximately 8.55% of the shares.
(8) Other subsidiaries are DAK Americas Argentina and S.A, Ecopek, SA, among other non-material subsidiaries.
(9) BP Amoco Chemical Company owns approximately 6.65% of the shares. Industrias Fiqusa, S.A. de C.V. (personnel service company) is a subsidiary of this company.
(10) Control Pet, SA owns 49% minus one share of this company.
(11) APG Polytech USA Holdings, Inc. owns 33.3% and Indorama Ventures Corpus Christi Holdings, LLC owns 33.3%.

Facilities and Operations

Our corporate headquarters are located in Monterrey, Nuevo León, Mexico. Alpek currently owns and operates 27 manufacturing plants in the U.S., Mexico, Brazil, Chile, Canada and Argentina, which are set forth in the table below:

Product Produced	Facility (Location)	Installed Capacity (Ktons/year)	Age
***PTA** - 2,890 Ktons*	Altamira, TS, Mexico	1,000	20
	Columbia, SC, USA	640[(1)]	35
	Ipojuca, PE, Brazil	640[(2)]	1
	Cosoleacaque, Vz, Mexico	610	39
***PET** - 2,464 Ktons*	Columbia, SC, USA	725[(1)]	35
	Ipojuca, PE, Brazil	450[(2)]	1
	Bay St. Louis, MS, USA	430[(3)]	20
	Zarate, BA, Argentina	190[(4)]	21
	Cosoleacaque, Vz, Mexico	185	23
	Fayetteville, NC, USA	170[(5)]	21
	Charleston, SC, USA	170[(6)]	15
	Montreal, Quebec, Canada	144[(7)]	7
***rPET** - 115 Ktons*	Fayetteville, NC, USA	55[(8)]	21
	Richmond, IN, USA	45[(9)]	1
	Gral. Pacheco, BA, Argentina	15	7
***Staple** - 150 Ktons*	Charleston, SC, USA	150[(10)]	45
***Filaments** - 250 Ktons*	Monterrey, NL, Mexico	160	60
	Ipojuca, PE, Brazil	90[(2)]	1
***PP** - 640 Ktons*	Altamira, TS, Mexico	640	26
***EPS** - 325 Ktons*	Altamira, TS, Mexico	240	23
	Guarantingueta, SP, Brazil	46[(11)]	59
	Concon, Valpo, Chile	20[(12)]	23
	Gral. Lagos, SF, Argentina	19[(11)]	47
***Molded EPS** - 7 Ktons*	Santiago, RM, Chile	5[(11)]	41
	Puerto Montt, Lagos, Chile	2[(11)]	23
***CPL** - 85 Ktons*	Salamanca, GT, Mexico	85[(13)]	46
***Fertilizers** - 360 Ktons*	Salamanca, GT, Mexico	360[(13)]	46
***Nylon 6** - 10 Ktons*	Ocotlán, Jalisco, Mexico	10[(13)]	52
***Various** - 100 Ktons*	Lerma, MC, Mexico	100[(14)]	53

(1) This plant was acquired by Alpek Polyester from Eastman on January 31, 2011.
(2) This plant was acquired by Alpek Polyester from Petrobras on April 30, 2018.
(3) This plant was acquired by Alpek Polyester from Wellman in August 2011.
(4) This plant was acquired by Alpek Polyester from Eastman in December 2007.
(5) This plant was acquired by Alpek Polyester from DuPont in July 2001.
(6) This plant initiated operations in June 2003.
(7) This plant was acquired by Alpek Polyester from IMG Group in August 2016.
(8) This plant was acquired from DuPont in August 2004. It is a joint venture with Shaw Industries Group, Inc.
(9) This plant was acquired by Alpek Polyester from Perpetual Recycling Solutions in February 2019.
(10) This plant was acquired by Alpek Polyester from DuPont in August 2004.
(11) This plant was acquired by Styropek from BASF in March 2015.
(12) This plant was acquired by Styropek from BASF in April 2016.
(13) This plant was acquired by Alfa from Celanese in 1995.
(14) This plant's capacity varies depending on the production mix. Adjusted capacity after section of polyurethanes was sold to BASF on March 2015.

		Site	PTA	PET	rPET	Fibers	PP	EPS	CPL	Other
Mexico	A	Monterrey				160				
(3,390 Kta)	B	Altamira	1,000				640	240		
	C	Salamanca							85	360
	D	Ocotlán								10
	E	Cosoleacaque	610	185						
	F	Lerma								100
USA	G	Cedar Creek		170	55					
(2,385 Kta)	H	Cooper River		170		150				
	I	Columbia	640	725						
	J	Pearl River		430						
	K	Richmond			45					
Canada *(144 Kta)*	L	Montreal		144						
Argentina	M	Zárate		190						
(224 Kta)	N	Pacheco			15					
	O	General Lagos						19		
Brazil	P	Guaratingueta						46		
(1,226 Kta)	Q	Ipojuca	640	450		90				
Chile	R	Santiago								5
(27 Kta)	S	Puerto Montt								2
	T	Concon						20		
Total Capacity: 7,396 Kta			2,890	2,464	115	400	640	325	85	477

Grupo Petrotemex, S.A. de C.V.

Grupo Petrotemex, S.A. de C.V., is a limited liability company formed on December 11, 1998, and is registered with the Register of Property and Commerce of the State of Tamaulipas under number 65765*9. The registered address of Petrotemex is Carretera Tampico Mante KM 17.5, Puerto Industrial de Altamira, Altamira, Tamaulipas, 89603. As of December 31, 2018, Petrotemex had total assets of Ps. 6,527 million (accounting for 5% of our consolidated total assets), and total liabilities of Ps. 9,447 million (accounting for 12% of our consolidated total liabilities), and for the year ended December 31, 2018, Petrotemex had Adjusted EBITDA of Ps. 4,769 million (accounting for 23% of our consolidated Adjusted EBITDA). For further information on Petrotemex's business, please refer to the "Key Products" section below.

DAK Americas LLC

DAK Americas LLC is a limited liability company formed on March 26, 2001. The registered address of DAK Americas is 7621 Little Ave., Suite 500, Charlotte, NC 28226 (Delaware File Number 3377627). As of December 31, 2018, DAK Americas had total assets of Ps. 27,176 million (accounting for 21% of our consolidated total assets), and total liabilities of Ps. 9,727 million (accounting for 13% of our consolidated total liabilities), and for the year ended December 31, 2018, DAK Americas had Adjusted EBITDA of Ps. 2,718 million (accounting for 13% of our consolidated Adjusted EBITDA). In the United States, our operations are currently undertaken by Petrotemex's wholly-onwed subsidiary DAK Americas LLC. For further information on DAK Americas LLC's business, please refer to the "Key Products" section below.

Key Products

Polyester Chain Business

Our Polyester Chain Business primarily involves the production, marketing and sale of PTA, PET and polyester fibers. We are the largest PTA and PET producer in the Americas and the second largest PET producer worldwide according to Wood Mackenzie, our internal estimates and market data. We are also one of the largest producers of polyester fibers in North America, based on our production capacity in 2018. Furthermore, we believe

we are one of the largest recyclers of PET bottles in the United States. Our Polyester Chain Business represented Ps. 99,664 million (US$5,181 million), or 74%, of our total revenues in 2018.

PTA is primarily used to manufacture PET (used in plastic bottles, containers and other packaging) and polyester fibers (used for carpets, garments, home furnishings and consumer and industrial applications).

PET is a material that has gained widespread use in bottles and other containers for liquids, food and personal care products, including carbonated soft drinks, sparkling water, still water, fortified water, isotonic beverages, health drinks, juices, teas, dairy products, prepackaged food, health and beauty aids, pharmaceuticals and other household products. Sheet and film made from PET are used for cups, lids, trays, bowls and blister packaging. PET offers transparency, strength, durability and high barriers of protection, has no known health risks, is light weight, cost-efficient and recyclable and has a high degree of design flexibility and customization, all of which enable custom PET containers to be used for a variety of reusable and temperature-sensitive packaging applications. PET has increasingly displaced glass, aluminum and tin cans and other plastics such as PVC or polyethylene, and has shown one of the highest growth rates of any plastic container product worldwide during the last decade.

rPET. There is a growing trend to include recycled content in PET and polyester staple fiber products. As such, Alpek has taken firm steps to become a leader in the post-consumer PET bottle recycling market in order to offer our clients PET with recycled content. Since 2010, we operate, through a strategic alliance with Shaw Industries, an rPET facility located at our Cedar Creek site in Fayetteville, North Carolina. Currently, it has a 55,000 ton capacity (the equivalent of recycling over 3,600 million PET bottles per year). We also operate a 15,000 ton (the equivalent of recycling over 1,000 million PET bottles per year) food-grade recycling PET facility in Gral. Pacheco, Buenos Aires, Argentina. Early this year, Alpek acquired from Perpetual Recycling Solutions LLC, a 45,000 ton high quality/food grade facility located in Richmond, Indiana. This acquisition increased Alpek's rPET capacity by over 60%. Alpek also recently joined The Recycling Partnership, a non-profit organization focused on effort to improve residential recycling rates and the need for increased availability of recycled materials in the United States. We believe these acquisitions, the growth of our recycling capacity and our active participation in organizations like The Recycling Partnership will enable us to enhance the value and sustainability of our products and to deliver on the growing demand for recycled content.

Polyester staple fiber has multiple uses in carpets, garments, home furnishings (such as bedding, upholstery, drapery and towels) and non-woven consumer and industrial applications (such as wipes, medical and hygiene products, packaging, pharmaceutical products, automotive fabrics and linings). Polyester staple fiber is used in these products due to the durability, flexibility in applications, color stability, quality and production processability of final products. We have increasingly focused our operations to produce products that are specifically optimized for specific applications, such as carpets, certain knit apparel items (such as t-shirts, sweatshirts, socks and underwear) and non-woven consumer products (such as diapers, baby wipes, household wipes, filters and floor polishers).

Polyester filament has diverse applications such as textile fabrication, including automotive interiors and industrial yarns, manufacturing of seatbelts, canvases, conveyor belts, hoses and other products. According to Wood Mackenzie, the global demand for this product is growing rapidly due to its ability to substitute cotton and other fibers in many applications at lower cost, while providing similar properties.

Plastics & Chemicals Business

Our Plastics & Chemicals Business comprises the production, marketing and sale of PP, expandable polystyrene, glycols, glycol ethers, oil-field chemicals, specialty chemicals, caprolactam and fertilizers. Alpek is the largest expandable polystyrene producer and owns the biggest plant in the Americas in terms of installed capacity, based on our internal estimates and our review of publicly available market data. We also operate the only PP plant in Mexico which is one of the largest PP production facilities in North America. We are also the sole Mexican producer of CPL, the majority of which we export to China. Our Plastics & Chemicals Business accounted for Ps. 33,204 million (US$1,726 million), or 25%, of our total revenues in 2018.

Polypropylene (PP) is a thermoplastic polymer that results from the chemical reaction among propylene monomer and a set of catalysts and chemicals. The properties of PP include low specific gravity, high stiffness, relatively high temperature resistance and good resistance to chemicals and fatigue. Polypropylene is used in a wide

variety of applications including packaging, textiles (*e.g.*, ropes, thermal underwear and carpets), stationery, plastic parts and reusable containers of various types, automotive components, and polymer banknotes. Rapid improvements in processing properties, coupled with superior cost and environmental properties, contributed to a substitution trend that allowed the PP industry to develop.

We produce a variety of polypropylene products including homopolymers, random and impact copolymers. The Company sells its products to polypropylene processing plants. Indelpro has two presentations for its polypropylene products; the Valtec™ & Sphertec presentation and the Pro-fax™ & Axlene presentation:

- *Valtec™ & Sphertec* presentation are sold as white opaque spheres and typically have a natural advantage in commodity-type applications, such as raffia and caps and closures, due to the fact that they are not extruded in the production process. This yields a polymer with higher conversion efficiency rate resulting in higher productivity in the customers' manufacturing processes; and
- *Pro-fax™ & Axlene* are presented as small translucent pellets obtained from the extrusion of polypropylene flake and are normally better suited for high-value added applications, such as bottle caps, microwavable food containers, carpeting, diapers and upholstery.

Expandable polystyrene (EPS) is a lightweight, rigid cellular plastic made from the polymerization of the styrene monomer. EPS is a material characterized by its versatility, given its shock-absorbing, insulating and molding properties. These properties, together with its processing ease and low cost, make it a popular packaging material for pieces sensitive to impact and for the preservation of perishable products. EPS has been included as part of the construction system in large-scale housing projects due to its ease of installation and light weight in roofing, therefore reducing construction costs and time. It also provides thermal and acoustic insulation.

Caprolactam (CPL) is the main raw material used in the production of nylon 6. Currently, most of the world's installed capacity for the production of nylon 6 is located in China. In 2018, we shipped approximately 40% of our CPL production to China. Examples of the end uses of nylon 6 are apparel (*e.g.*, blouses, dresses, hosiery, intimate apparel, swimwear, sportswear and leg wear), industrial yarns (*e.g.*, tire cord, automotive headliners, conveyor belts and seatbelts), engineering resins (*e.g.*, machine parts) and carpets.

Fertilizers produced based on ammonium sulfate is a by-product of the CPL production process we use. Ammonium sulfate is a nitrogen-rich fertilizer that is well suited for use in the farming regions located in central Mexico, near our production facilities. The close proximity to these regions enables us to sell ammonium sulfate to over 450 fertilizer wholesalers and retailers. In addition, we have a dedicated team committed to the research and development of higher aggregate value fertilizers tailored to the specific needs of our customers.

Other chemicals include specialty chemicals and industrial chemicals. Our specialty chemicals are used to manufacture a wide variety of products in a diverse spectrum of markets, including pharmaceuticals, cosmetics, detergents and industrial cleaning. Industrial chemicals are used in: polyester, automotive, pharmaceutical, cosmetic and personal care industries; paints, lacquers and dyes; and in various other applications. Our main raw materials in the production of other chemicals are ethylene and propylene oxides.

The following chart presents a breakdown of the various products that make up this business segment:

	Product	Applications
Specialty Chemicals	*Oil field chemicals (OFCs)*	Production of crude oil, dehydration and desalting, corrosion inhibitors and scale inhibitors, among others
	Polyethylene glycol (PEG)	Pharmaceuticals, medicine tablets, skin creams, ointments, toothpastes and cosmetics
	Non-ionic tensoactives	Detergents, emulsifiers, demulsifiers, humectants and dispersants (water treatment)
	Industrial polyols	Antifoam agent (antibiotics, pharmaceuticals), plastic coatings, foaming agent (mining) and functional fluid

	Other performance chemicals	Water treatment, detergents, galvanoplasty, wax and cleaning for farms
Industrial Chemicals	*Ethylene glycols*	PET (bottles for water and soft drinks), polyester fibers Engine coolant and antifreeze Solvents, unsaturated polyester resins, polyurethane foams, oil industry (dehumidifying agent for air and natural gas), film developer, paints and flocculants
	Propylene glycols	Pharmaceuticals, cosmetics & personal care, food, solvent of flavors and fragrances, chemical intermediate, functional fluid, paints and coatings, printing inks (solvents), liquid cleaners, textile (soap and lubricants) and cutting oils
	Glycol ethers and brake fluids	Solvent for dyes in textile, adhesives, thinner, metal cleaning, agrochemicals, lacquers, paints and varnish, industrial cleaning and automotive

Principal Customers

In our Polyester Chain Business, our customer base comprises mainly major producers of PET that purchase our PTA, as well as companies that convert PET into plastic bottles and other containers, known in the industry as "converters," and in turn sell them to major consumer goods companies. Many of the world's most popular consumer brands use our products in their containers, including Coca Cola, Pepsi, Heinz, P&G, Nestle, Kraft Foods, among others.

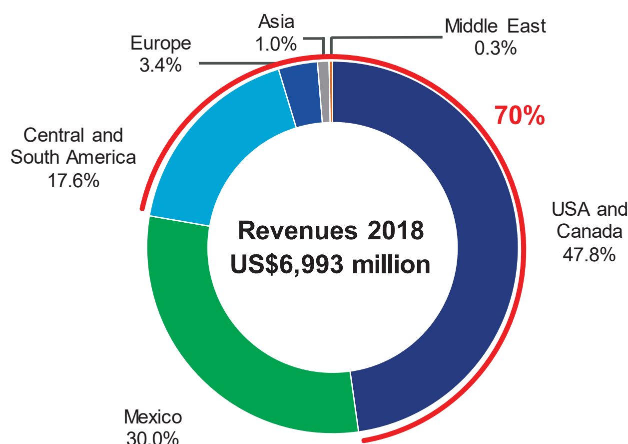
In the Plastics & Chemicals Business, most of our customers are converters that purchase PP and EPS in the form of beads for the following uses: (i) extrusion, molding, injection, blowing or thermoforming applications; (ii) production of construction elements, such as EPS blocks for housing; (iii) for manufacturing elements, such as automotive parts, piping and others; (iv) for packaging elements, such as bags, food containers and others; and (v) for disposables, such as diapers, disposable cups, plates and cutlery. CPL is exported mainly to customers in Greater China to produce nylon. Ammonium sulfate is sold to large numbers of agricultural customers near our production facilities for use as fertilizer. We sell specialty and industrial chemicals to hundreds of small and medium businesses in a wide range of industries.

Alpek's ten largest customers represented 37% of our total revenues for 2018 and our largest customer represented approximately 9%. In the Polyester Chain Business, our ten largest customers accounted for 50% of our total revenues for this business segment and 37% of our total revenues for the year ended December 31, 2018. None of the customers in this segment represented more that 9% of our total revenues. Our ten largest customers in the Plastics & Chemicals Business accounted for 19% of our total revenues for this business segment and less than 5% of our total revenues for the year ended December 31, 2018. Our largest customer in this business segment accounted for less than 1% of our total revenues for the year ended December 31, 2018.

In both business segments, we have both short-term and long-term customer contracts, which generally can be renewed for successive one-year periods. Typically, contracts can be terminated by either party upon delivery of prior written notice. In our contracts, we generally agree to supply the requirements of our customers and, in some cases, the customers agree to purchase exclusively from us such supply requirements, which are dictated by their estimates or by a cap set forth in the contract. Pursuant to these contracts, if we are unable to supply the buyer with its requirements, the buyer has the right to purchase its minimum requirements from a third party.

The following chart summarizes the geographic location of our customers for the year ended December 31, 2018 based on the percentage of our total revenues in the respective geographic region, for all our business segments. Approximately more than 78% of our total sales for the year ended December 31, 2018 were sold within North America.

<u>Breakdown of Revenues by Destination for the Year Ended December 31, 2018</u>



Raw Materials and Energy

Our operations utilize various raw materials, including, but not limited to, the following:

pX

Paraxylene (pX) is a benzene-based hydrocarbon used for the manufacture of PTA for polyester. pX is derived from petroleum through a refining process at oil and petrochemical refineries. It is also used in the production of gasoline.

MEG

Monoethylene glycol (MEG) is an important raw material for industrial applications. A primary use of MEG is in the manufacture of PET, fiber and film. In addition, MEG is important in the production of antifreeze, coolants, aircraft anti-icers and de-icers and solvents.

Styrene Monomer

The main raw material used in the production of EPS is styrene monomer, which is an unsaturated hydrocarbon used to make polystyrene plastics, polymers, rubber, protective coatings and resins. Styrene is also used as a solvent and as an intermediate chemical. Styrene monomer, under normal conditions, is a clear, colorless, flammable liquid.

Propylene

Propylene is a three-carbon, unsaturated hydrocarbon, a co-product of the cracking process, or a by-product obtained in refineries. It is used in the petrochemical industry for the production of polypropylene, propylene oxide, cumene, isopropanol and acrylic acid. When alkylated with butanes or pentanes, it is also used as a gasoline component.

Cyclohexane

Cyclohexane is a benzene derivative used in the production of caprolactam. It is produced via the hydrogenation of benzene.

Ethylene oxide

The chemical compound ethylene oxide is an important industrial chemical used as an intermediate in the production of ethylene glycol and other chemicals, and as a sterilant for foodstuffs and medical supplies. It is a colorless flammable gas at room temperature and a colorless liquid below 10.7 Celsius with a sweet ether-like odor.

Propylene oxide

Propylene oxide is a colorless, low-boiling and highly volatile liquid with a sweet, ether-like odor. Propylene oxide is a chemical intermediate used worldwide to produce commercial and industrial products including polyether polyols, propylene glycols and propylene glycol ethers.

Acetic Acid

Acetic acid is a colorless liquid organic compound. Acetic Acid is a chemical intermediate used worldwide to produce commercial and industrial products including wood glue and synthetic fibers and fabrics. It is also a key raw material in the production of PTA.

Ammonia

Ammonia is a colorless gas with a characteristic pungent smell. Ammonia serves a precursor to products like Caprolactam and fertilizers.

Energy

We use natural gas, fuel oil, and electricity to meet our energy needs.

Suppliers

Some of our main suppliers include Braskem, Chemium, Exxon Mobil, Enterprise, Flint Hills, Pemex and SABIC, with whom we maintain close relationships. We are one of the largest pX buyers in the world (in terms of volume) and have entered into supply contracts with our pX suppliers to ensure consistent pricing and reliable supply in the long term. Other raw materials we use, such as MEG, propylene, styrene monomer and acetic acid, are also supplied under long-term contracts entered into with suppliers having a global presence or with which we have an established relationship. The majority of our raw material volume, with the exception of MEG, is sourced within North America. A significant portion of our MEG is supplied by sources within Saudi Arabia. The prices of our primary raw materials and energy resources, which are typically purchased pursuant to long-term contracts, have fluctuated in the past and are expected to fluctuate in the future. See "Risk Factors—Risks Relating to our Business—Our operations are dependent on the availability and cost of our raw materials and energy sources."

Competition

In our Polyester Chain Business, we compete on the basis of price, quality, proximity to customers, proximity and strategic access to raw material suppliers and favorable logistics. In the PET industry, we compete on the basis of price, quality and consistency, customer service, product variety and innovation. Geographically, our main competitors in the PTA industry are BP and Indorama; likewise, our main competitors in the Americas PET industry are Indorama and M&G. In the polyester staple fiber industry, we compete on the basis of quality, customer service and contract terms, including price. Our main competitors in the polyester fibers industry are importers from Asia.

In our Plastics & Chemicals Business, our main strengths as competitors are low-cost production and strong customer relationships. Excluding our EPS business, most of our Plastics & Chemicals Business customers are located in Mexico, where we believe we have a very strong presence and reputation. Also, as the largest producers of EPS in the Americas and the only producers of PP in Mexico, our main competitors are importers, although we also have domestic competitors in the EPS industry. This gives us an important advantage in logistics and in customer relations that we believe constitutes a part of our core strengths. We compete on the basis of high-quality production in the specialty and industrial chemicals market and of product specificity in the specialty chemicals market. Other important factors for our competitiveness are price, quality, customer service and innovation, as we offer customizable products that are highly attractive to our customers. In the case of Polioles' specialty chemicals division, we believe we are able to provide excellent technical support to our customers due to the knowledge base of our technological partner, BASF.

For more information regarding our market position in each business segment, see "Industry."

Sales and Distribution

Mexico

PTA is distributed from our Cosoleacaque plant to customers in Central Mexico by rail or in trucks. Our PET plant in Mexico is located in the same complex and next to the PTA plant and receives the product by pipeline directly to its silos. For the export market, our PTA production is distributed to a seaport by rail or highway. We have container loading facilities or truck platforms. PTA for customers in Asia is shipped from the Mexican ports of either Salina Cruz or Manzanillo on the Pacific Ocean. For European customers, shipments are made from the port of Veracruz on the Gulf of Mexico.

PTA produced at our Altamira plant is distributed by rail to customers in Mexico as well as to M&G México, which is located in the same industrial complex as the Altamira plant. For customers in the United States, South America or Europe, shipments are made in containers from the port of Altamira, located eight kilometers away from the Altamira plant, on the Gulf of Mexico. Proximity to the port makes this location highly competitive for export shipments of PTA.

PET is distributed from our Cosoleacaque plant. We sell PET in bulk railcars, bulk trucks and in one-ton bags shipped in package trucks mainly throughout Mexico and to a lesser extent in export markets in Central and South America and the Caribbean. Exports are packaged in one-ton bags and shipped in containers.

Polypropylene produced in our facility in Altamira, Tamaulipas and is distributed by independent transportation companies. We contract and arrange most of our product shipments. 97% and 98% of our PP sales volume was sold in Mexico during the year ended December 31, 2018 and the six months ended June 30, 2019, respectively. The rest is typically sold in Central and South America without any or little need in advertisement. Polypropylene is mostly sold directly to producers of flexible film for packaging (where the main market is snacks), caps and closures for all kinds of bottles (soft drinks, food containers and health care), nonwovens for hygiene products (diapers, sanitary napkins, medical clothing), raffia bags for sugar, fertilizers and grains, among others. PP sales are delivered in bulk in hopper cars and bulk trucks, as well as in 25-kg bags (on pallets) and one-ton super bags, both delivered in trucks. The particular distribution depends on the location of our customer, the options available to reach a particular customer, the presentation the customer requires and the amount of product supplied.

EPS is produced in Altamira, Tamaulipas and is distributed in 800-kg super bags. For sales abroad, the Company distributes the product through 20 foot long open top shipping containers to export the product while for the national market vented trucks are used.

With regard to specialty chemicals, given that this is a very fragmented market and there are some customers that consume less than one ton of specialty chemicals per year, we are creating a strategy to develop third party independent distributors. Most of our specialty chemicals are sent to customers in 55-gallon drums and sometimes in tank trucks.

Alpek sells CPL to manufacturers of nylon 6 polymer through its own sales team consisting of sales personnel located in Monterrey, Mexico and a Chinese sales agent located in Hong Kong. Alpek delivers CPL to customers either in solid flakes or in molten (semi-liquid) state, which is achieved by maintaining the required heat level during the transportation process.

Alpek sells ammonium sulfate through its own sales personnel. Fertilizers, which consist of mostly solids, are delivered in two presentations: in bulk direct to the costumer by truck or bagged in 25-kg bags. Alpek has nine distribution and warehouse centers (nine of which it leases and two of which it owns) in the states of Jalisco, Michoacán and Guanajuato. This allows us to store the product in an appropriate manner and close to the place of consumption, which we believe enables us to provide high-quality customer service.

United States

The majority of our PTA production in the United States is consumed internally by our PET and polyester staple fiber facilities in the United States. PTA is delivered by a pipeline within our integrated Columbia site or in rail cars to our Cedar Creek, Cooper River and Pearl River sites. PET is mainly shipped in rail cars, using bulk

hopper cars to deliver to customer silos, as well as shipping in bulk trucks. Polyester staple fiber is packaged in bales and delivered by trucks and trailers to customers located mainly in North Carolina and South Carolina. Exports of polyester staple fiber to Mexico and Latin America are shipped in containers out of the Charleston, South Carolina seaport.

All of our sales of EPS to the United States are made through our subsidiary Styropek, USA, Inc. from their offices in Houston, Texas. We also have warehouses strategically located in Laredo, Chicago, Los Angeles and Charleston. EPS is a solid product and is shipped in 800-kg super bags. For exports outside the United States, smaller 40-kg bags are used.

Canada

The PET site in Canada uses PTA from Indorama's site that is located five km from the site. This raw material is received either in trucks or in containers. The PET that our facility produces is sent in bulk hopper cars or in auto hoppers to the customers silos.

EPS sales in Canada are done through Alpek's subsidiary Styropek of Canada Corp. from their offices in Houston, Texas. We also have warehouses strategically located in Montreal and in Winnipeg, which are supplied by our plant in Altamira, Tamaulipas in 800 kg super bags via land, sea or railway.

Argentina

We sell PET in bulk trucks and in one-ton bags shipped in trucks throughout Argentina. In addition, a significant level of exports takes place to surrounding countries such as Uruguay, Paraguay, Bolivia and Chile. Exports are packaged in one-ton bags and shipped in containers.

EPS in Argentina is produced in our site in General Lagos in the Santa Fe province and shipped in 800-kg super bags. Local distribution is done through land in semi-trailers or "siders" of 28,000 kgs of capacity with lengths between 13.5 to 14.5 meters. Exports are made through open top containers of either 20 or 40 feet.

Brazil

PTA in Brazil is partially consumed internally in our integrated PET facility. The rest is distributed in containers principally to a client that is less than 2 km from the site and other clients in the state of Pernambuco. Only a small portion of the PTA volume is distributed to other regions. Such exports are done through containers in Suape's maritime port located approximately 8 km from our site and will principally be send to our PET plant in Zarate, in the Buenos Aires province in Argentina.

PET is mostly distributed in super bags of 1,100 and 1,250 kgs and a small proportion in bulk containers. Local logistics is mostly undergone through land in trucks or with cabotage in the case of shipments between the port of Suape and other principal ports in Brazil. Exports to other South American countries is done in ships and containers.

Drawn Textured Yarn ("DTY") is distributed in reels which are in turn stored in carboard boxes. All of our Suape's site production caters the domestic market. As with PET, land logistics is done through trucks and cabotaged to the main ports in the southeast of Brazil, where the largest consumption of textile fibers is concentrated.

We produce and sell EPS in 1,100-kg super bags. Local clients will usually source our product directly from our warehouses in their own 13 to 44 ton vented trucks. In the case of exports, we use vented trucks and, in the case that maritime shipment is required, the product is moved in 40 feet open top containers with a 22 ton capacity.

Chile

We sell EPS in Chile through our plant in Concon in 700-kg super bags and distribute it in 26.6 tons of capacity vented trucks. In the case of exports, vented trucks are also used and if maritime shipment is required, the product is moved in open trucks of 20 to 40 feet.

Molded EPS or Foam of EPS is sold in bulk or in packages according to the quantity of the material and transported in tuck of 20, 40, 60 and 80 m^3.

Intellectual Property

PTA

Since January 31, 2011, we own the intellectual property rights to the IntegRex® technology developed by Eastman. See "Columbia Assets Acquisition."

We have had ownership rights with respect to BP's (formerly Amoco) PTA technology since 1982. Technologies derived from the original BP technology are used in our PTA industrial process in Mexico. We have more than 30 years of experience employing and improving these technologies. As a result of our proprietary technology, we have increased capacity at Cosoleacaque from approximately 135,000 to 600,000 tons per year and at the Altamira plant from approximately 500,000 to 1,000,000 tons per year. In addition, we have undertaken an energy-efficiency project at Cosoleacaque, which has resulted in a significant reduction in production costs.

We have a royalty-free perpetual license to use DuPont's original technology for the production of polymer-grade PTA at our plant in Wilmington, North Carolina.

PET

In connection with our acquisition of the DAK Americas operations from DuPont, we obtained a royalty-free perpetual technology license for the production of PET. Currently, such technology is utilized at our PET plants located in North Carolina and South Carolina. This technology is the result of ICI's technological development, sold to DuPont in 1997, and makes these plants highly competitive compared to other plants operating in today's market. We also have multiple *Laser+*® registered trademarks that we use to market a diverse variety of PET specialty products. We were also granted a non-exclusive, perpetual, royalty-free license for PET from DuPont and a non-exclusive, royalty-free license for PET from Eastman.

The *Melt-Tek*® PET process employed at our Cape Fear, North Carolina site, which was developed in 2007, represents a state-of-the-art innovation in resin manufacturing, providing PET users and converters such benefits as improved product processability, lower temperature properties, shorter cycle times and increased resin uniformity and consistency.

In early 2009, we acquired DuPont's *Crystar*® specialty polymers technology, which has enabled us to expand our product offerings to include higher-margin differentiated products to serve more specialized markets.

In early 2011, we announced the completion of the acquisition of the United States PTA and PET facilities of Eastman. As a result, we acquired one modern, integrated petrochemical site consisting of three plants located in Columbia, South Carolina, with a total combined annual capacity of 1.26 million tons, which produce PTA and PET. In connection with the acquisition, we acquired a series of patents and related intellectual property rights to the IntegRex® PTA and PET production technologies, which we believe are leading production technologies that are less capital intensive than other technologies and provide the lowest production cost per ton of PTA and PET of any technology that is currently available. We also incorporated a complementary, diversified portfolio of PET products, which we believe will allow us to reach a wider customer base and offer a more diversified product portfolio. For example, we have entered the film/sheet and pharmaceutical/medical markets through brands like ParaStar™ and PET 9921 respectively.

In August 2011, we completed the acquisition of the PET business of Wellman. The Wellman business consists of a 430,000 ton capacity PET plant located in Bay St. Louis, Mississippi, employing 165 people, as well as technology for PET manufacturing. This plant is strategically located on the coast of the Gulf of Mexico, close to the main sources of raw materials for the production of PET. Additionally, as a result of the acquisition, we acquired a new group of products and brands that we believe have strong market recognition because of their high quality and performance.

In April 2018, we completed the purchase of Suape and Citepe from Petrobras. We acquired Petrobras' 100% stake in the Brazilian Assets on a debt-free basis for an amount of US$435 million. Both companies operate the only integrated PTA/PET site in South America and added an annual installed capacity of 640 Ktons of PTA, 450 Ktons of PET, and 90 Ktons of texturized polyester filament.

Polyester Staple Fiber

We have a royalty-free perpetual technology license to use DuPont's original technology for the production of polyester staple fiber. Currently, such technology is utilized at our plants located in North Carolina and South Carolina. In addition, we have a royalty-free perpetual license limited to North America to market polyester staple fiber under the *Dacron*® trademark, granted to us by DuPont. We also have the following registered trademarks, each licensed from a third party, that we use to market a diverse variety of fiber specialty products:

- *Dacron*® polyester staple fiber, a trusted and valued fiber for various markets of the textile industry;
- *Delcron*™ Hydrotec fiber, which uses molecular engineering to impart permanent moisture management properties;
- *SteriPur*® AM is a polyester staple fiber with antimicrobial properties featuring *AlphaSan*® by Milliken that inhibits growth of bacteria, odor, discoloration and fabric deterioration;
- *HydroPur*® fiber is a combination moisture management and antimicrobial fiber;
- *SteriPur*® FC is a polyester staple fiber certified for food contact;
- *Airloft*® is high void hollow fiber for high loft fiberfill applications; and
- *Secure Performance*® describes a type of polyester, synthetic and/or textile fibers.

Plastics and Chemicals

Our PP business is supported by two important technologies, including LyondellBasell's Spheripol process, the most widely used process worldwide for PP production and the latest technology developed by LyondellBasell, the Spherizone process. The Spherizone process is a state-of-the-art technology that is structurally identical to the Spheripol process, but offers a broader range of products.

In our EPS business, we use BASF's one-step technology at the largest site in the Americas in terms of installed capacity. Conventional technologies for EPS used at other sites involve a two-step process, which we believe results in a higher conversion cost. BASF is also our technology partner in certain specialty chemicals production. Even though Alpek does not have patents in these businesses, some products are registered as trademarks. Certain of these trademarks are owned by Alpek while others are owned by BASF and sold to Alpek through licenses.

The technology for the CPL production process is owned by Dutch States Mines ("DSM") and licensed by Stamicarbon B.V., with an original plant capacity of 40 Ktons per year. The first capacity expansion was concluded in 1991 to reach a new capacity of 75 Ktons per year without any external support. In 1997, a debottlenecking started up to reach CPL current production capacity of 85 Ktons per year, as a result of improvements in existing plant equipment. We do not pay any royalties or license fees for our CPL production technology.

Research and Development

Research and new product development are an integral part of our business. Our research programs focus on the development of new and improved products for various markets and applications, as well as the development of proprietary technologies, process improvements and energy consumption efficiency. Research and development work is performed on a product-specific basis, as each product has distinct processes and market needs that require focused efforts, and is conducted from three perspectives: internal, trade leadership and innovation.

- *Internal*. The internal perspective focuses on technology improvements to improve costs, quality or production capacity or to meet regulatory requirements. For example, the Integrex® process allows PET production with a single step production process that reduces the capital expenditures required for an integrated PTA/PET plant.

- *Trade Leadership*. Trade leadership focuses on the development of products and services that will increase customer satisfaction with the goal of becoming their preferred supplier. Trade leadership includes the development of differentiated products that may have a better sales margin. As an example, in Polioles we have developed new additives that can be used in oilfield chemicals to improve the extraction of crude oil.

- *Innovation*. Innovation identifies potential new products and market areas that will provide growth and/or differentiated products. An example is the development of Biovento® Organic, a biofertilizer based on algae growth in bioreactors that can replace 100% of synthetic fertilizers. In recent years, we have strongly committed ourselves to innovation with the development of Greentech products.

Based on our customer's need to supply sustainable products, we are providing our support on three different fronts: 1) making our products in such way so that they can be highly recyclable, 2) sourcing our raw materials from renewable resources and 3) increasing the biodegradability rate of products.

As of June 30, 2019, our research staff consisted of 70 full-time personnel, who conduct research at our five R&D centers. Around 40% of our staff have a PhD or Master's degree.

Environmental and Other Government Regulation

Our businesses are subject to a broad range of regulations generally applicable to manufacturing businesses. These regulations include environmental, health and safety, food and drug, transportation, anti-corruption, customs, export controls and trade sanctions, employment and labor, government contracts, and intellectual property, among others.

Environmental

Mexico

Our Mexican operations are subject to Mexican federal, state and municipal laws and regulations relating to the protection of the environment. The primary federal environmental law is the Mexican General Law on Ecological Balance and Environmental Protection (*Ley General del Equilibrio Ecológico y la Protección al Ambiente*) and regulations thereunder pursuant to which rules have been promulgated concerning water, air and noise pollution and hazardous substances. Other laws that apply or may apply to our operations are the General Law for Prevention and Integral Management of Residues (*Ley General para la Prevención y Gestión Integral de los Residuos*) and regulations thereunder, which regulates the generation, handling, transportation, storage and final disposal of hazardous waste, as well as imports and exports of hazardous materials and hazardous wastes, and the National Water Law (*Ley de Aguas Nacionales*) and regulations thereunder, which govern the prevention and control of water pollution.

The Mexican federal authority in charge of overseeing compliance with the federal environmental laws is the Ministry of Environment and Natural Resources (*Secretaría del Medio Ambiente y Recursos Naturales*) or SEMARNAT. An agency of SEMARNAT, the *Procuraduría Federal de Protección al Ambiente* or PROFEPA, has the authority to enforce the Mexican environmental laws. As part of its enforcement powers, PROFEPA can bring civil, administrative and criminal proceedings against companies and individuals that violate environmental laws and has the power to impose fines and close facilities that are not in compliance with federal environmental laws. As part of its enforcement powers, PROFEPA can issue sanctions that include, among others, monetary fines, revocation of authorizations, concessions, licenses, permits or registries, administrative arrests, seizure of contaminating equipment and, in certain cases, temporary or permanent closure of facilities. Furthermore, in special situations or certain areas where federal jurisdiction does not exist, the state and municipal authorities can regulate and enforce certain environmental regulations, as long as they are consistent with federal law.

We believe we are in compliance, in all material respects, with environmental laws in Mexico applicable to our operations and have fulfilled all applicable environmental requirements. Additionally, five of our plants have obtained PROFEPA's certification of Clean Industry (*Certificado de Industria Limpia*), which is a certification of our compliance with certain environmental laws, with respect to most of our production facilities. We were also awarded carbon dioxide emission credits by the United Nations for emission reduction at our Cosoleacaque PTA plant, which have been sold in the carbon market. There are external audits conducted on our Mexican facilities every two to four years, and we follow, to the extent possible, any recommendations that arise from such audits.

Although there can be no assurance, we do not believe that continued compliance with Mexican environmental laws and regulations applicable to our operations will require substantial expenditures or have a material adverse effect on our financial position or results of operations. We may, however, incur amounts greater than currently estimated due to changes in law, or in the interpretation or enforcement of laws, and other factors beyond our control.

United States

Our U.S. operations are subject to U.S. federal, state and local laws and regulations relating to the protection of the environment. The U.S. federal authority in charge of overseeing compliance with the federal environmental laws is the U.S. Environmental Protection Agency ("EPA"). The regulations cover all types of environmental control including air, water, waste and chemical management. As part of its enforcement powers, the EPA can bring civil, administrative and criminal proceedings against companies and individuals that violate environmental laws and has the power to close facilities not in compliance with such laws. The EPA delegates these enforcement powers to the state and municipal authorities in most cases. States can also pass their own laws as long as they are at least as stringent as those of the federal government. DAK Americas operates in the states of North Carolina, South Carolina and Mississippi in the United States, and works closely with the regulatory agencies in both states.

We believe we are in compliance, in all material respects, with U.S. federal and state environmental laws and regulations applicable to our operations. Our U.S. facilities are subject to external audits generally once every three years by a third party environmental consultant in order to validate our internal environmental programs and procedures. We also conduct mixed audits with both internal and external personnel participating. See "Risk Factors—Risks Relating to our Business—Compliance with environmental and other governmental laws and regulations could result in added expenditures or liabilities."

Although we cannot make any assurances, we do not believe that continued compliance with U.S. environmental laws and regulations applicable to our operations will have a material adverse effect on our financial position or results of operations. We may, however, incur amounts greater than currently estimated due to changes in existing laws and regulations and other factors beyond our control.

Brazil

Our Brazilian operations are subject to Brazilian federal, state and local laws and regulations relating to the protection of the environment. We adopt sustainable behavior roles within business priorities. Committed with the "Programa de Atuação Responsável" / (Responsible Care®) of ABIQUIM – Brazilian Association of Chemical Industries. The "Programa de Atuação Responsável" is a voluntary commitment from world chemical industry to promote continuous improvement and reach a high level of excellence in environment, health and safety management. This initiative reaches objectives through the application of legal and regulatory requirements, but also through the embracement of collaborative work between industry, government and other related parties. This commitment with the national programs' activities of Responsible Care® includes systematic procedures to the implementation and inspection of their elements.

Styropek Brazil maintain ethics principles in the chemical products management. Suape Petrochemical site is certified with ISO 14001:2015 and through its Integrated Management System policy is committed to promoting environment preservation, acting in a responsible way, adopting environmental conservation strategies and contributing to a culture of environment values. Sustainability is a key component of all processes and technology investment promotes more efficient production with better energy use and reuse of materials such as water and other supplies. For solid waste management, the Brazilian operations are committed to material reuse, recycling and

inverse logistics, in addition to campaign development about conscious consumption and other environmental related subjects.

We believe we are in compliance, in all material respects, with Brazilian federal environmental laws and regulations applicable to our operations.

Argentina

Our Argentine operations are subject to Argentine federal, state and local laws and regulations relating to the protection of the environment. We conduct environmental audits every three years at our DAK Argentina site and believe we are in compliance, in all material respects, with all such laws and regulations. We do not expect to make any significant capital expenditures over the next three years to comply with these and other Argentine environmental laws and regulations as they become effective or are modified. We may, however, incur amounts greater than currently estimated due to changes in law and other factors beyond our control. Although there can be no assurance, we do not believe that continued compliance with Argentine environmental laws and regulations applicable to our operations will have a material adverse effect on our financial position or results of operations.

Canada

Our Canadian operations are subject to federal, provincial and local laws and regulations relating to the protection of the environment. The Canadian federal authority in charge of overseeing compliance with the federal environmental laws is the Environment and Climate Change Canada ("ECCC"). The regulations cover all types of environmental control, including air, water, waste and chemical management. The ECCC works with provinces to develop policy and programs, conduct investigation and share information. Provinces can also approve their own regulations. DAK Americas operates at a Quebec province that collaborates with the *Ministere du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques* ("MMDDELCC", Ministry of Sustainable Development, Environment, and Fight Against Climate Change).

We believe we are in compliance, in all material respects, with Canadian federal environmental laws and regulations applicable to our operations.

Chile

Our Chilean operations are subject to laws, norms and environment regulations, mainly related to gas emissions, liquid and solid waste.

Control over such regulations is conducted by the Chilean Ministry of Health through its Regional Ministry (SEREMI). SEREMI conducts regular inspections in facilities. Styropek Chile and Aislapol have all current permits and certificates, which are renewed each time deadlines are met.

We believe we are in compliance, in all material respects, with Chilean federal environmental laws and regulations applicable to our operations.

The perceived effects of climate change may result in additional legal and regulatory requirements in Mexico, the United States, Brazil, Argentina, Canada and Chile to reduce or mitigate the effects of our industrial facilities' emissions. See "Risk Factors—Risks Relating to our Business—Compliance with environmental and other governmental laws and regulations could result in added expenditures or liabilities."

Safety and Quality Control

Mexico

Our Mexican operations are subject to Mexican federal and state laws and regulations relating to the protection of our employees and contractors. We believe we are in compliance with all such laws and regulations. We are committed to promoting the health and safety of our workers and others involved in or affected by our operations. We have developed and implemented an integrated health and safety management system. As part of this system, each of our Mexican facilities is equipped with a permit administration system, an accident prevention program, a comprehensive emergency response program with emergency equipment and trained safety crews, and a

risk analysis and management program. Regular external audits are conducted of the effectiveness of our internal health and safety practices, and we follow any recommendations that arise from such audits. We have been in compliance in all material respects with such audits in the past. In addition, we are committed to protecting the environment and the health and safety of the communities where we operate. Accordingly, we collaborate with local governments, advocacy organizations and industry and public interest groups to promote a culture of continuous improvement in environment, safety and health.

All of our Mexican facilities have quality systems in place and are ISO certified.

United States

Our U.S. operations are subject to U.S. federal and state laws and regulations relating to the protection of our employees and contractors. The U.S. federal authority in charge of overseeing compliance with the federal occupational safety laws is the U.S. Occupational Health and Safety Administration ("OHSA"). The regulations cover all types of occupational exposure such as chemical, heat, fall protection, scaffolding and moving and lifting equipment. As part of its enforcement powers, OHSA can bring civil, administrative and criminal proceedings against companies and individuals that violate occupational and health laws and has the power to close facilities not in compliance with such laws. OHSA also delegates these enforcement powers to the state and municipal authorities in most cases. States can also pass their own laws as long as they are at least as stringent as those of the federal government. We operate in the states of North Carolina and South Carolina and work closely with the occupational safety departments in each state.

We believe we are in compliance, in all material respects, with the federal and state occupational safety laws applicable to our operations. We routinely conduct internal occupational safety audits to validate our safety programs and procedures.

Most of our U.S. facilities have quality systems in place and are ISO 9001 certified.

Brazil

Styropek Brazil and Alpek Polyester's subsidiaries in Brazil have quality systems in place and are ISO 9001 certified. Our Brazilian operations are subject to federal, state and local laws and regulations. One of the Brazilian authorities in charge of the oversight is the Ministry of Justice and Public Security and the Ministry of Economy. We believe we are in compliance with all Brazilian laws and regulations related to safety and quality control in all material respects.

Argentina

Our Argentinean operations are subject to national, provincial and municipal laws and regulations related to the protection of our employees, contractors, as well as the environment. In all of our facilities, regular internal and external audits are conducted to verify the health and safety standards compliance.

Our Argentinean facilities have outstanding qualifications in Argentinean Chemical Chamber audits in the international program Environment Responsible Care. Additionally, we participate in community work to make people aware of our product recycling and taking care of the environment, mainly in elementary colleges in the region.

Most of our Argentinean facilities have quality systems in place and are ISO 9001 certified.

Canada

Our Canadian operations are subject to federal and provincial law and regulations related to the protection of our employees and contractors. We operate in Quebec's province and collaborate with the occupational safety department. The provincial authority in charge of overseeing compliance with federal occupational safety laws is the *Commission des normes, de l'équité, de la santé et de la sécurité du travail* ("CNESST", Committee on Standards, Equity, Health and Safety). The regulations cover all type of occupational exposure, such as chemical, heat, fall protection, scaffolding and moving and lifting equipment.

We believe we are in compliance, in all material respects with Canadian federal occupational health and safety laws applicable to our operations.

All of our Canadian facilities have quality systems in place and are ISO 9001 certified.

Chile

Aislapol operates under responsible care management system standards, validated biannually by the Chilean Association of Chemical Industries (ASIQUIM). In addition, different laws, norms and decrees provide the basis for employees and facilities care, from the safety, health and hygiene perspective. This is monitored regularly by SEREMI.

All of our Chilean facilities have quality systems in place and are ISO 9001 certified.

The following chart shows our certifications and awards at Alpek's facilities:

Product Produced	Facility (Location)	Certification/ Award
PTA	Altamira, TS, Mexico	ISO 9001, ISO 14001, Industria Limpia
	Columbia, SC, USA	ISO 9001
	Ipojuca, PE, Brazil	ISO 9001, ISO 14001:2015
	Cosoleacaque, Vz, Mexico	ISO 9001, ISO 14001
PET	Columbia, SC, USA	ISO 9001
	Ipojuca, PE, Brazil	ISO 9001:2015, ISO 14001
	Bay St. Louis, MS, USA	ISO 9001
	Zarate, BA, Argentina	ISO 9001
	Cosoleacaque, Vz, Mexico	ISO 9001
	Fayetteville, NC, USA	ISO 9001
	Charleston, SC, USA	ISO 9001
	Montreal, Quebec, Canada	ISO 9001
rPET	Fayetteville, NC, USA	-
	Richmond, IN, USA	ISO 9001
	Gral. Pacheco, BA, Argentina	-
Staple	Charleston, SC, USA	ISO 9001
Filaments	Monterrey, NL, Mexico	ISO 9001, ISO 14001, Industria Limpia, Oeko-Tex
	Ipojuca, PE, Brazil	ISO 9001:2015, ISO 14001
PP	Altamira, TS, Mexico	ISO 9001, ISO 14001, Industria Limpia
EPS	Altamira, TS, Mexico	ISO 9001, Industria Limpia
	Guarantingueta, SP, Brazil	ISO 9001:2008
	Concon, Valpo, Chile	ISO 9001:2008
	Gral. Lagos, SF, Argentina	ISO 9001:2008
Molded EPS	Santiago, RM, Chile	ISO 9001:2008
	Puerto Montt, Lagos, Chile	ISO 9001:2008
CPL	Salamanca, GT, Mexico	ISO 9001
Fertilizers	Salamanca, GT, Mexico	ISO 9001
Nylon 6	Ocotlán, Jalisco, Mexico	ISO 9001
Various	Lerma, MC, Mexico	ISO 9001, Industria Limpia

Insurance

We are insured with coverage against three key categories of risk: (i) assets and business interruption; (ii) transportation; and (iii) general liability. Our insurance policies are negotiated on our behalf at the parent

company level through Alfa and apply to our operations in Mexico, the United States, Brazil, Argentina, Canada and Chile.

Our all-risk policy insures assets and protects us against business interruptions caused by hurricanes, earthquakes, other natural disasters, equipment malfunctions and other catastrophic events. Our cargo/marine policies provide coverage for all import and export merchandise, such as raw materials, inventories and products, whether shipped by air, land and/or sea. We also maintain general liability policies that provide coverage for damage to third parties and insure properties, products and individuals, including our directors and officers. In addition, each subsidiary maintains other insurance policies as necessary to comply with local regulations or specific needs, such as commercial auto, workers compensation, environmental liability and employee practices.

We believe that our insurance coverage is reasonable in amount and consistent with industry standards applicable to petrochemical companies operating in the regions in which we operate and do not anticipate having any difficulties in renewing any of our insurance policies.

Legal Proceedings

In the ordinary course of our business, we have been involved in various disputes and litigation. While the results of any such disputes cannot be predicted with certainty, we do not believe that there are any pending or threatened actions, suits or proceedings against or affecting us which, if determined adversely to us, would in our view, individually or in the aggregate, materially harm our business, financial condition or results of operations.

Employees

Our operations in Mexico are subject to the LFT and the general labor regulations issued by the Mexican Ministry of Labor and Social Prevention (*Secretaría del Trabajo y Previsión Social*) on issues such as employees' hours and working conditions, health risks, fringe benefits and the dismissal of employees.

Pursuant to Article 117 of the Mexican Federal Labor Law, employees have the right to participate in the profits of their employers, defined as a percentage of their employer's taxable income. Such percentage is determined by the Mexican National Commission for the Participation of the Employees in the Profits of Companies (*Comisión Nacional para la Participación de los Trabajadores en las Utilidades de las Empresas*). Since February 3, 2009, such percentage has been set at 10%. Employers are liable for these profit-sharing obligations regardless of agreed compensation and benefits. Additionally, this percentage can be reviewed and modified by such commission pursuant to the terms and in accordance with the procedures set forth in the Mexican Federal Labor Law.

As of June 30, 2019, we employed 5,925 employees, of whom 60.1% were represented by labor unions and 39.9% were non-union managerial employees (*empleados de confianza*). Some of our employees in Mexico and Argentina belong to labor unions. Under Mexican law, collective bargaining agreements with these trade unions are renegotiated on an annual basis with respect to wages and every two years with respect to wages and all other benefits. Our most recent negotiation was completed without any disputes. In general, we consider our relationship with our workforce and various trade unions to be good.

The following table shows our employees by geographic location as of June 30, 2019 and December 31, 2017 and 2018:

	Number of Employees		
	December 31		**June 30,**
	2017	**2018**	**2019**
Mexico	3,419	3,300	3,280
United States	1,115	1,171	1,328
Brazil	59	600	620
Argentina	385	391	370
Chile	247	268	254
Canada	65	67	73
Total employees	**5,290**	**5,797**	**5,925**

	Number of Employees		
	December 31		June 30,
Percentage of employees represented by labor unions..	48.6%	50.9%	60.1%

MANAGEMENT

Our Board of Directors is responsible for the management of our business. The Board of Directors is comprised of a number of permanent and alternate members, as determined from time to time at the shareholders' meeting. Directors serve in their positions for a term of one year and may be re-elected.

Our current Board of Directors was appointed at the general ordinary and extraordinary shareholders' meeting held on February 27, 2019. The address for each of our directors and executive officers is Ave. Gómez Morín No. 1111 Sur, Col. Carrizalejo, San Pedro Garza García, Nuevo León, 66254 México.

Except as disclosed in this offering memorandum, the members of our Board of Directors and our executive officers have no conflicts of interest with us.

Board of Directors

The following table sets forth our current directors and their alternates, as appointed by our shareholders:

Name	Member since	Age
Armando Garza Sada - Chairman	2011	62
Álvaro Fernández Garza	2011	51
Francisco José Calderón Rojas*	2012	53
Rodrigo Fernández Martínez	2012	43
Francisco Garza Egloff*	2019	65
Andrés E. Garza Herrera*	2012	52
Merici Garza Sada	2012	61
Pierre Francis Haas García*	2012	67
José Antonio Rivero Larrea*	2018	67
Jaime Zabludovsky Kuper*	2019	63
Enrique Zambrano Benítez*	2012	64

*Independent Directors.

Armando Garza Sada has been a Board Member of Alpek since 2011. He is Chairman of the Boards of Alfa and Nemak and a member of the Boards of Axtel, BBVA Bancomer, CEMEX, FEMSA, Grupo Lamosa, Liverpool, Proeza and ITESM. Mr. Garza Sada is the brother of Merici Garza Sada and the cousin of Álvaro Fernández Garza.

Álvaro Fernández Garza has been a Board Member of Alpek since 2011. He is currently President of Alfa. He is Chairman of the Board of *Universidad de Monterrey (UDEM)* and a member of the Boards of Grupo Citibanamex, Cydsa, Grupo Aeroportuario del Pacífico, Vitro and *Museo de Arte Contemporáneo de Monterrey (MARCO)*. Mr. Fernández Garza is the cousin of Armando Garza Sada and Merici Garza Sada, and the uncle of Rodrigo Fernández Martínez.

Francisco José Calderón Rojas has been a Board Member of Alpek since 2012. He is the Chief Financial Officer of Grupo Franca Industrias, S.A. de C.V. and a member of the Boards of Franca Industrias, Franca Servicios, Franca Desarrollos, and *Universidad de Monterrey (UDEM)*, and an Alternate Member of the Boards of FEMSA, and Coca Cola FEMSA.

Rodrigo Fernández Martínez has been a Board Member of Alpek since 2012. He is currently President of Sigma. Formerly, he was the Chief Operating Officer and CEO of Sigma Americas. He is a member of the Boards of *Consejo Mexicano de la Industria de Productos de Consumo, A.C. (ConMéxico)* and *Cámara de la Industria de Transformación de Nuevo León (CAINTRA)*. Mr. Fernández Martínez is the nephew of Álvaro Fernández Garza.

Francisco Rogelio Garza Egloff has been a Board Member of Alpek since 2019. He is currently President of Proval Consultores. Former CEO of Arca Continental. He is a member of the Boards of Arca Continental, Grupo

Industrial Saltillo, Axtel, Banregio, Ovniver, Ragasa, Proeza and the *Universidad Autónoma de Nuevo de Nuevo León (UANL).*

Andrés E. Garza Herrera has been a Board Member of Alpek since 2012. He is Chief Executive Officer of Qualtia Alimentos, S.A. de C.V. (Qualtia), the food division of Xignux. He is a member of the Boards of Xignux, Regional Board of Banorte, *Universidad de Monterrey (UDEM)* and *Ciudad de los Niños*.

Merici Garza Sada has been a Board Member of Alpek since 2012. Ms. Garza Sada is the sister of Armando Garza Sada and the cousin of Álvaro Fernández Garza.

Pierre Francis Haas García has been a Board Member of Alpek since 2012. He is the Advisory Services Director of Hartree Partners L.P.

José Antonio Rivero Larrea has been a Board Member of Alpek since 2018. He is the current Chairman of the Board of Compañía Minera Autlán, S.A.B. de C.V. He is a member of the Executive Board of the *Cámara Minera de México (Camimex)* and *Cámara Nacional de la Industria del Hierro y del Acero (Canacero)*. He is a member of the Boards of *Museo del Acero en Monterrey*, *Fundación de Empresarios por la Educación Básica* and Regional Board Chairman of *Nacional Financiera (Nafinsa)*.

Enrique Zambrano Benítez has been a Board Member of Alpek since 2012. He is the President of Grupo Proeza, S.A. de C.V. He is a member of the boards of Grupo Proeza, CFE, and *Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM).*

Jaime Zabludovsky Kuper has been a Board Member of Alpek since 2019. He is Executive President for the *Consejo Mexicano de la Industria de Productos de Consumo, A.C. (ConMéxico)*. He is the Vice President of IQOM Inteligencia Comercial. He is a member of the Technical Committee of FibraHotel and member of the Boards of Baja Ferries, *Consejo Mexicano de Asuntos Internacionales* (*COMEXI)* and *Servicio Panamericano de Seguridad*.

Our Audit and Corporate Practices Committee

The president of our Audit and Corporate Practices Committee was appointed at the general ordinary shareholders' meeting held on February 29, 2019. The members of the committee are: Andrés E. Garza Herrera, Francisco José Calderón Rojas and Enrique Zambrano Benítez (Chairman), all of whom are independent directors pursuant to Article 26 of the LMV.

Executive Officers

The following table lists the names, ages, positions and years of service of our main executive officers:

Name	Age	Position	Years with Alfa[(1)]	Years with Alpek
José de Jesús Valdez Simancas	66	Chief Executive Officer	43	40
José Carlos Pons de la Garza	44	Chief Financial Officer	23	1
Felipe Garza Medina	62	Co-President of Alpek Polyester	42	17
Jorge P. Young Cerecedo	50	Co-President of Alpek Polyester	29	29
Alejandro Llovera Zambrano	57	President, Polypropylene	34	19
Gustavo Talancón Gómez	53	President, Polyester Filaments, CPL and Ammonium sulfate	30	30
Jose Luis Zepeda Peña	64	President, EPS, and Specialty Chemicals	33	33

(1) Considers all the years worked in any Alfa subsidiary.

Certain information with respect to our executive officers that have not been disclosed in "Our Board of Directors," above is set out below:

José de Jesús Valdez Simancas has been CEO of Alpek since 1988. He joined the Company in 1976 and has held several senior management positions, including CEO of Petrocel, Indelpro and Polioles. He has also served as Chairman of the Board of Directors of Mexico's National Chemical Industry Association (Asociación Nacional de la Industria Química – ANIQ), President of the Energy Commission for Mexico's Confederation of Industrial Chambers (Confederación de Cámaras Industriales de los Estados Unidos Mexicanos – CONCAMIN), and President of Nuevo Leon's Industry Chamber (Cámara de la Industria de Transformación de Nuevo León – CAINTRA). Mr. Valdez holds a Bachelor's degree in Mechanical Engineering and an MBA from Tecnológico de Monterrey (ITESM) as well as a Master's degree in Industrial Engineering from Stanford University.

José Carlos Pons De la Garza was appointed CFO of Alpek in October 2018. Prior to this, Mr. Pons was VP of Business Development at Nemak, S.A.B. de C.V. ("Nemak"). During his 22 year tenure with Nemak, he held other executive positions such as Director of the South American Business Unit and Strategic Planning Manager. Mr. Pons holds a bachelor's degree in Mechanical Engineering and an MBA from Tecnológico de Monterrey (ITESM). He also completed the Executive Management Program at Instituto Panamericano de Alta Dirección de Empresas (IPADE).

Felipe Garza Medina has been Co-President of Alpek Polyester since 2016. Previously he was President of the PTA business unit, a position he had since 2008. Mr. Garza joined Alfa in 1977 and has held numerous positions in the company, including CEO of Indelpro and CEO of Galvacero, a subsidiary of Hylsamex (formerly owned by Alfa). He holds a Bachelor's degree in Chemical Engineering from Stanford University and an MBA from Cornell University.

Jorge P. Young Cerecedo has been the Co-President of Alpek Polyester since 2016. Previously, he was President of the PET and Staple Fibers business unit since 2012. Mr. Young joined Alpek in 1990 and has held several positions including Executive VP, PET resins and VP of Planning and Administration at DAK Americas LLC. He holds a Bachelor's in Chemical Engineering from Tecnológico de Monterrey (ITESM), and an MBA from the Wharton Business School at the University of Pennsylvania.

Alejandro Llovera Zambrano has been President of the Polypropylene Business Unit since 2008. He joined Alfa in 1985, holding several executive positions such as Human Resources Director of Nemak, Director of the polyester filament business; Finance and Administration Director of the Alpek's Polyester Filament business; and Director of Human Capital of Alfa. He also served as Chairman of the Board of Directors of Mexico's National Chemical Industry Association (Asociación Nacional de la Industria Química – ANIQ). He holds a Bachelor's degree in Mechanical and Electrical Engineering, as well as an MBA from Tecnológico de Monterrey (ITESM). He also completed the Executive Management Program at Instituto Panamericano de Alta Dirección de Empresas (IPADE).

Gustavo Talancón Gómez is the President of the Caprolactam and Fertilizer Business unit since 2013 and Polyester Filament Business Unit as well since 2018. Prior to this, he served as CEO of Terza, an Alfa subsidiary involved in the production and sales of flooring and carpets. Between 1989 and 2009, Mr. Talancón held various management positions at Alpek's Polypropylene and Polyester Filament business units. He holds a Bachelor's degree in Industrial Engineering from Tecnológico de Monterrey (ITESM) and completed the Executive Management Program at Instituto Panamericano de Alta Dirección de Empresas (IPADE).

Jose Luis Zepeda Peña is the President of the EPS, Specialty Chemicals Business Unit, a position he has held since 1999. He joined Alpek in 1986 and since then has occupied several executive positions that include: Planning Vice President, Finance & Administrative Vice President and Commercial Vice President at Grupo Petrotemex. He also served as Chairman of the Board of Directors of Mexico's National Chemical Industry Association (Asociación Nacional de la Industria Química – ANIQ). Mr. Zepeda holds a Bachelor's degree in Chemical Engineering from the Universidad Nacional Autónoma de México and an MBA from Tecnológico de Monterrey (ITESM).

Compensation of Directors and Executive Officers

Salaries and benefits received by our senior officers that were paid or accrued by us in 2018 and 2017 were Ps. 281 million and Ps. 309 million, respectively, consisting of base salary, benefits and variable compensation programs.

Stock Option and Share Compensation Plans

We currently have a stock plan in place for our Directors and Executive Officers under which awards are granted and payable over a five-year period. The cash amounts payable during such period are based on quantitative and qualitative metrics such as financial results, the value of the stock of Alpek and Alfa, tenure of the executive in the Company, among others. The Board of Directors of Alfa has appointed a technical committee to manage the plan, and it reviews the estimated cash settlement of this compensation at the end of each year.

Internal Controls

We have internal control policies and procedures designed to promote (i) the efficiency and effectiveness of our operations, (ii) the reliability of our financial information and (iii) the compliance with all applicable legislation, regulations, statutory rules and guidelines. Our Board of Directors is responsible for establishing and maintaining our internal controls with support from Alfa. This allows us to assure that our internal controls continuously function and are independent from our general management activities and internal audit.

PRINCIPAL SHAREHOLDERS

We are a subsidiary of Alfa, which beneficially owns 82.1% of our outstanding common shares. The table below sets forth certain information regarding the ownership of our capital structure as of the date of this offering memorandum.

Shareholder	Number of Shares	%
Alfa, S.A.B. de C.V.	1,738,865,065	82.1
Alfa Subsidiarias Servicios, S.A. de C.V.	350	0.0
Public float	379,298,220	17.9
Total	2,118,163,635	**100.0**

Alpek's common shares have been listed on the Mexican Stock Exchange since April 2012. To the best of our knowledge, none of our officers or directors own more than 1% of our common shares. From time to time, Alpek may buy shares from the market in accordance with its share repurchase program filled with the BMV. As of June 30, 2019, and as a result of such program, 508,000 shares were held in Alpek's treasury.

RELATED PARTY TRANSACTIONS

Related Party Transactions

From time to time, we may enter into transactions with parties that have relationships with Alfa, officers, directors or entities in which we have an ownership interest. It is our policy to conduct all of these transactions on an arms-length basis and, in accordance with the LMV, to have these transactions approved by the Audit Committee, subject to certain exceptions, such as related party transactions that (i) by reason of their economic value, can be considered non-material for the Company and its affiliates, (ii) are carried out in the ordinary course of business and on an arms-length basis, and (iii) are carried out with employees on terms that are substantially the same as the terms of transactions carried out with non-related third parties or as a result of general employee-related contractual obligations.

Amounts representing related party transactions for 2016, 2017 and 2018 and for the six months ended June 30, 2018 and 2019 are as follows:

	For the Year Ended December 31,				For the Six Months Ended June 30,		
	2016	2017	2018	2018	2018	2019	2019
	(Ps.)	(Ps.)	(Ps.)	(US$)	(Ps.)	(Ps.)	(US$)
				(in millions)			
Income:							
Sales of goods	1,343	1,438	1,486	77	708	760	40
Services	530	404	483	25	220	233	12
Financial interest	44	27	27	1	13	13	1
Other	1	10	3	0	2	2	0
Expense:							
Purchase of finished goods and raw materials	918	853	992	52	442	504	26
Services	361	387	418	22	204	209	11
Financial interest	1	2	2	0	1	1	0
Other expenses	75	41	56	3	22	49	3
Dividend:							
Dividends declared	1,959	2,677	-	-	-	2,778	145
Dividends of subsidiaries to non-controlling interests	2,049	618	981	51	521	697	36

Services Provided by Affiliates

In the ordinary course of our business, we obtain administrative and corporate services from Alfa and several subsidiaries, including, among others, Alliax, S.A. de C.V. ("Alliax"), Alfa Corporativo, S.A. de C.V.("Alfa Corporativo") and Axtel, S.A.B. de C.V. ("Axtel").We have paid Alfa for the following administrative and support services, among others: government and institutional lobbying; human resources planning; financial and treasury planning; legal and tax advice; strategic planning; communication; and investor relations. Such payments were made on market terms.

Through Alliax, we outsource certain administrative services, including accounts payable, travel expense processing, payroll and accounting services. We also lease office space for our headquarters from Alfa Corporativo. Axtel provides us with telecommunications services (voice, data and video). Additionally, some of our affiliates provide certain services, to us and our subsidiaries such as air transportation, security services, leases and other corporate and administrative services. As required under IFRS, these transactions are valued on an arms-length basis.

Affiliates Outstanding Balances

As of June 30, 2019, and December 31, 2016, 2017 and 2018, we had amounts due to related parties of Ps. 356 million, Ps. 341 million, Ps. 329 million and Ps. 396 million, respectively.

DESCRIPTION OF THE NOTES

We issued US$500,000,000 aggregate principal amount of 4.250% Senior Notes due 2029 under an indenture dated September 18, 2019 (the "indenture") entered into by and among the Company (as defined below), the Subsidiary Guarantors (as defined below) and The Bank of New York Mellon, as trustee (which term includes any successor as trustee under the indenture), paying agent, registrar and transfer agent. Copies of the indenture, including the form of notes, are available for inspection during normal business hours at the offices of the trustee. The trustee will also act as transfer agent and registrar if we issue certificates for the notes in definitive registered form.

This Description of the Notes is a summary of the material provisions of the notes and the indenture. You should refer to the indenture for a complete description of the terms and conditions of the notes and the indenture, including our obligations and your rights.

You will find the definitions of capitalized terms used in this section under "—Certain Definitions." For purposes of this section of this offering memorandum, when we refer to:

- *"we," "us," "our," "the Company" or "Alpek," we mean Alpek, S.A.B. de C.V. (parent company only) and not its Subsidiaries;*
- *the "Subsidiary Guarantors," we mean the existing and any future Subsidiaries of the Company that may issue guarantees of the notes, which initially are those Subsidiaries identified under "—General"; and*
- *the "notes," we mean the notes offered pursuant to this offering memorandum and, unless the context otherwise requires, any additional notes, as described below in "—General."*

General

The notes:

- will be our senior unsecured obligations (junior to certain statutory obligations given preference under applicable law, including labor, social security and tax claims);
- will initially be limited to an aggregate principal amount of US$500,000,000;
- will mature at 100% of their principal amount then outstanding on September 18, 2029;
- will be issued in denominations of US$200,000 and integral multiples of US$1,000 in excess thereof;
- will not be convertible into any other security or have the benefit of a sinking fund;
- will be represented by one or more registered notes in global form and may be exchanged for notes in definitive form only in limited circumstances; and
- will be unconditionally and irrevocably guaranteed, on a joint and several basis, by the following direct and indirect Subsidiaries, subject to the guarantee release provisions described below: (i) Grupo Petrotemex, S.A. de C.V., (ii) DAK Americas LLC, (iii) DAK Resinas Americas Mexico, S.A. de C.V., (iv) Tereftalatos Mexicanos, S.A. de C.V., (v) Akra Polyester, S.A. de C.V., (vi) DAK Americas Mississippi, Inc. and (vii) Styropek México, S.A. de C.V.

We will initially issue US$500,000,000 million aggregate principal amount of notes, but may, subject to the limitations set forth under "—Covenants," issue an unlimited principal amount of the notes under the indenture. We may, without your consent, issue additional notes (together, the "additional notes") in one or more transactions,

which have substantially identical terms (other than issue price, issue date and date from which the interest will accrue) as the notes issued on the issue date. Such additional notes may be issued in one or more series and with the same or different CUSIP numbers; *provided*, *however*, that unless such additional notes are issued under a separate CUSIP number, such additional notes are issued either (i) pursuant to a "qualified reopening" for U.S. federal income tax purposes, (ii) with no more than a de minimis amount of original issue discount or (iii) otherwise as part of the same "issue" for U.S. federal income tax purposes. Any additional notes will be consolidated and form a single class with the notes issued on the issue date, so that, among other things, holders of any additional notes will have the right to vote together with holders of notes issued on the issue date as one class.

Interest on the notes:

- will accrue at the rate of 4.250% per annum;

- will accrue from the date of issuance or from the most recent interest payment date;

- will be payable in cash, semi-annually in arrears on March 18 and September 18 of each year, commencing on March 18, 2020;

- will be payable to the Persons in whose name the notes are registered at the close of business on the March 3 and September 3 immediately preceding each interest payment date; and

- will be computed on the basis of a 360-day year comprised of twelve 30-day months.

Principal of, and interest, including any Additional Amounts on, the notes will be payable, and the transfer of notes will be registrable, at the office of the trustee, and at the offices of the paying agents and transfer agents, respectively.

Ranking of the Notes and the Guarantees

The notes will constitute our direct senior unsecured obligations. The notes will rank at least *pari passu* in priority of payment with each other and with all our other existing and future senior unsecured indebtedness.

The guarantees will constitute each Subsidiary Guarantor's direct senior unsecured obligations. The guarantees will rank at least *pari passu* in priority of payment with such Subsidiary Guarantor's other existing and future senior unsecured indebtedness.

In the event of a bankruptcy, *concurso mercantil, quiebra*, liquidation or other similar proceeding by or against us or any of the Subsidiary Guarantors, obligations under the notes and the guarantees would be:

- equal in right of payment to all other of our and the Subsidiary Guarantors' existing and future senior unsecured indebtedness;

- junior to certain statutory obligations given preference under applicable law, including labor, social security and tax claims;

- effectively subordinated to all of our and the Subsidiary Guarantors' existing and future indebtedness secured by our and the Subsidiary Guarantors' assets, to the extent of the value of the assets securing such indebtedness; and

- structurally subordinated to claims of creditors (including trade creditors and preferred stockholders, if any) of each of our Subsidiaries (other than the Subsidiary Guarantors).

As of June 30, 2019, we and our Subsidiaries had total consolidated indebtedness of Ps. 45,360 million (US$2,366 million), Ps. 40,259 million (US$2,100 million) of which was unsecured indebtedness of the Issuer and the Subsidiary Guarantors, Ps. 2,993 million (US$156 million) of which was indebtedness of our Subsidiaries (other

than the Subsidiary Guarantors) to which the notes will be structurally subordinated, and Ps. 2,108 million (US$110 million) of which was secured indebtedness of the Subsidiary Guarantors. As of June 30, 2019, on an unconsolidated basis, the Issuer had Ps. 23,880 million (US$1,246 million) of outstanding indebtedness.

Guarantees

Each Subsidiary Guarantor will unconditionally guarantee the full and prompt payment of all of our obligations under the indenture and the notes. The obligations of each Subsidiary Guarantor in respect of its guarantee will be limited to the maximum amount as will result in its obligations not constituting a fraudulent conveyance, fraudulent transfer or similar illegal transfer, to the extent specified under applicable law. See "Risk Factors—Risks Relating to the Notes—The subsidiary guarantees may not be enforceable under applicable laws."

The Company (on a stand-alone basis) and the Subsidiary Guarantors accounted for 64% of our consolidated assets and 52% of our consolidated Adjusted EBITDA as of and for the six months ended June 30, 2019.

Each Subsidiary Guarantor will be released and relieved of its obligations under its respective guarantee in the event that:

(a) there is a sale or other disposition of such Subsidiary Guarantor (whether by merger, consolidation, the sale of all or a majority of its Capital Stock or the sale of all or substantially all of its assets), following which such Subsidiary Guarantor is no longer a direct or indirect Subsidiary of the Company; or

(b) there is a defeasance of the notes or upon satisfaction and discharge of the indenture; or

(c) at the Company's option, if the notes have Investment Grade Ratings from at least two Rating Agencies, and such two Rating Agencies issue a Ratings Affirmation;

provided that such transaction is carried out pursuant to, and in accordance with, the applicable provisions of the indenture. Following such release, such guarantee shall no longer be in effect.

Not all of the Company's Subsidiaries will guarantee the notes. In the event of a bankruptcy, *concurso mercantil, quiebra*, liquidation or similar proceeding by or against a non-guarantor Subsidiary, such non-guarantor Subsidiary will pay the holders of their debt and their trade creditors before they will be able to distribute any of their assets to the Company and the Subsidiary Guarantors. See "Risk Factors—Risk Factors Relating to the Notes—Payments on the notes and the subsidiary guarantees will be effectively junior to any of our secured indebtedness and payments on the subsidiary guarantees will be structurally junior to the debt obligations of the non-guarantor subsidiaries of each respective Subsidiary Guarantor."

Payments

We will make all payments on the notes exclusively in such coin or currency of the United States as at the time of payment will be legal tender for the payment of public and private debts.

We will make payments of principal and interest on the notes to the trustee (as identified on the inside back cover page of this offering memorandum), which will pass such funds to the paying agents or to the holders. Initially, the trustee will act as registrar, transfer agent and paying agent for the notes.

We will make payments of principal upon surrender of the relevant notes at the specified office of the trustee or any of the paying agents. We will pay interest on the notes to the Persons in whose name the notes are registered at the close of business on the fifteenth day immediately preceding the due date for payment. Payments of principal and interest in respect of each global note will be paid by wire transfer of immediately available funds to DTC. Payments of principal and interest in respect of any certificated notes will be made by U.S. dollar check drawn on a bank in the City of New York and mailed to the holder of such note at its registered address. Upon application by the holder of at least US$1.0 million in aggregate principal amount of notes to the specified office of the trustee or any

paying agent not less than 15 days before the due date for any payment in respect of a note, such payment may be made by transfer to a U.S. dollar account maintained by the payee with a bank in The City of New York.

All payments will be subject in all cases to any applicable tax or other laws and regulations, but without prejudice to the provisions of "—Additional Amounts." No commissions or expenses will be charged to the holders in respect of such payments.

Subject to any applicable abandoned property law, the trustee and the paying agents will pay to us upon our request any monies held by them for the payment of principal or interest that remains unclaimed for two years, and, thereafter, holders entitled to such monies must look to us and the Subsidiary Guarantors for payment as our and their general creditors. After the return of such monies by the trustee or the paying agents to us, neither the trustee nor the paying agents shall be liable to the holders in respect of such monies.

Form, Denomination and Title

The notes will be in registered form without coupons attached in amounts of US$200,000 and integral multiples of US$1,000 in excess thereof.

Notes sold in offshore transactions in reliance on Regulation S will be represented by one or more permanent global notes in fully registered form without coupons deposited with a custodian for and registered in the name of a nominee of DTC. Notes sold in reliance on Rule 144A will be represented by one or more permanent global notes in fully registered form without coupons deposited with a custodian for and registered in the name of a nominee of DTC. Beneficial interests in the global notes will be shown on, and transfers thereof will be effected only through, records maintained by DTC and its direct and indirect participants, including Euroclear and Clearstream. Except in certain limited circumstances, definitive registered notes will not be issued in exchange for beneficial interests in the global notes.

Title to the notes will pass by registration in the register. The registered holder of any note will (except 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 any interest in it, writing on, or theft or loss of, the definitive note issued in respect of it) and no Person will be liable for so treating the holder.

Redemption

No sinking fund is provided for the notes.

We will give not less than 30 days' nor more than 60 days' notice of any optional redemption to holders of the notes, which notice will be irrevocable and will be given to the registered holder of notes and published in Ireland as described in "—Notices" below.

On and after the redemption date, interest on the notes or any portion of the notes called for redemption will cease to accrue (unless we default in the payment of the redemption price and accrued interest). By 11:00 a.m. (New York time) on the business day prior to the redemption date, we will deposit with the trustee funds sufficient to pay the redemption price and accrued interest, through the redemption date, on the notes subject to redemption. If the redemption date falls after a record date but on or prior to the corresponding interest payment date, we will pay accrued interest to the holder of record of notes on the corresponding record date, which may or may not be the Person who will receive payment of the redemption price (which will exclude such accrued interest). If less than all of the notes are to be redeemed, the notes to be redeemed will be selected by the trustee by lot or by such method in accordance with DTC procedures.

Optional Make-Whole Redemption

The notes will be redeemable, in whole or in part, at our option at any time and from time to time, prior to June 18, 2029 (three months prior to the scheduled maturity of the notes) (the "Par Call Date"), at a redemption price, as calculated by us, equal to the greater of (i) 100% of the then-outstanding principal amount of the notes to be

redeemed and (ii) the sum of the present values of the remaining scheduled payments of principal and interest thereon as if redeemed on the Par Call Date (exclusive of interest accrued to the date of redemption), discounted to the redemption date on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate plus 40 basis points, plus in each case accrued and unpaid interest thereon to, but excluding, the date of redemption and any Additional Amounts payable with respect thereto.

"Comparable Treasury Issue" means the United States Treasury security or securities selected by an Independent Investment Banker as having an actual or interpolated maturity comparable to the remaining term of the notes to be redeemed that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of a comparable maturity to the Par Call Date.

"Comparable Treasury Price" means, with respect to any redemption date for the notes, (i) the arithmetic average of the Reference Treasury Dealer Quotations for such redemption date, after excluding the highest and lowest of such Reference Treasury Dealer Quotations, as determined by the Company, or (ii) if the Company obtains fewer than four such Reference Treasury Dealer Quotations, the arithmetic average of all such quotations.

"Independent Investment Banker" means one of the Reference Treasury Dealers appointed by the Company.

"Reference Treasury Dealer" means each of Citigroup Global Markets Inc., HSBC Securities (USA) Inc. and J.P. Morgan Securities LLC, or their respective affiliates or successors which are primary U.S. Government securities dealers, and no less than two other leading primary U.S. Government securities dealers in The City of New York reasonably designated by the Company; provided, however, that if any of the foregoing or their affiliates shall cease to be a primary U.S. Government securities dealer in The City of New York (a "Primary Treasury Dealer"), the Company shall substitute therefor another Primary Treasury Dealer.

"Reference Treasury Dealer Quotations" means, with respect to each Reference Treasury Dealer and any redemption date, the average, as determined by the Company, 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 the Company by such Reference Treasury Dealer at 3:30 p.m. New York time on the third business day preceding such redemption date.

"Treasury Rate" means, with respect to any redemption date, the rate per annum, as determined by an Independent Investment Banker, to be equal to the semi-annual equivalent yield to maturity or interpolated (on a day count basis) 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.

Optional Redemption without a Make-Whole Premium

The notes will be redeemable, in whole or in part, at the Issuer's option at any time and from time to time, commencing on June 18, 2029 (three months prior to the scheduled maturity of the notes), at a redemption price equal to 100% of the principal amount of the notes to be redeemed, plus accrued and unpaid interest thereon to the date of redemption and any Additional Amounts payable with respect thereto.

Optional Redemption upon Tax Event

We may at any time redeem the notes, at our option, in whole, but not in part, at a redemption price equal to 100% of the then-outstanding principal amount of the notes, plus accrued and unpaid interest thereon to, but excluding, the date of redemption and any Additional Amounts payable with respect thereto if we certify to the trustee (in the manner prescribed below) that:

(a) we, or a Subsidiary Guarantor, if a Subsidiary Guarantor is required to make payments, have or will become obligated to pay Additional Amounts in connection with payments of interest, or amounts deemed interest, on the notes in respect of withholding taxes imposed at a rate in excess of a 4.9% rate (the "Excess Additional Amounts") as a result of any generally applicable change in or amendment to the laws or regulations of a Relevant Jurisdiction having power to tax, or any generally applicable change in the application or official

interpretation of such laws or regulations, which change or amendment becomes effective or, in the case of a change in official position, is announced on or after the later of the date of issuance of the notes and the date that a Relevant Jurisdiction becomes a Relevant Jurisdiction; and

(b) such obligation cannot be avoided by taking reasonable measures available to us;

provided, *however*, that the notice of redemption, which will specify the date of redemption and redemption price, will not be given earlier than 60 days before the earliest date on which we or, as the case may be, a Subsidiary Guarantor, would be obligated to pay such Excess Additional Amounts if a payment in respect of the notes were then due.

No later than 15 days (unless a shorter period is acceptable to the trustee) before giving any notice of redemption as described in the preceding clauses, we will deliver an officer's certificate to the trustee stating that we are entitled to effect such redemption in accordance with the terms of the indenture and setting forth in reasonable detail a statement of facts relating thereto. The officer's certificate will be accompanied by a written opinion of recognized independent counsel experienced in tax and other related matters in the Relevant Jurisdiction to the effect that:

- we or, as the case may be, the relevant Subsidiary Guarantor if a Subsidiary Guarantor is required to make payment, have or will become obligated to pay the Excess Additional Amounts as a result of such change or amendment; and

- all governmental approvals necessary for us to effect the redemption have been obtained and are in full force and effect or specifying any such necessary approvals that as of the date of such opinion have not been obtained.

Change of Control Triggering Event

Upon the occurrence of a Change of Control Triggering Event, the holders of the notes will have the right to require us to purchase all or a portion of such holders' notes (in integral multiples of US$1,000) pursuant to a Change of Control Offer (as defined below) at a purchase price equal to 101% of the then-outstanding principal amount thereof, plus accrued and unpaid interest thereon to, but excluding, the date of purchase and any Additional Amounts payable with respect thereto (the "Change of Control Payment" and the date of such purchase, the "Change of Control Payment Date"), in accordance with the procedures set forth below. If the date of purchase is on a date that is after a record date and on or prior to the corresponding interest payment date, we will pay such interest to the holder of record on the corresponding record date, which may or may not be the same Person to whom we will pay the purchase price.

Within 30 days following the consummation of any transaction constituting a Change of Control Triggering Event, we will send, in accordance with "—Notices" below, a notice to each holder of notes with a copy to the trustee (the "Change of Control Offer") and publish the notice in a newspaper having a general circulation in Mexico, the United States of America and, as long as the notes are listed on the Official List of Euronext Dublin and trading on the Global Exchange Market of Euronext Dublin and the rules of such exchange so require, in Ireland. Our failure to give notice in the manner described herein will not affect the rights of the holders to require us to purchase the notes. The notice of the Change of Control Offer will state, among other things:

(a) that a Change of Control Triggering Event has occurred and that such holder has the right to require us to purchase all or a portion of such holder's notes at a purchase price equal to 101% of the principal amount thereof, plus accrued and unpaid interest thereon to, but excluding, the date of purchase (subject to the right of holders of record on the relevant record date to receive interest on the relevant interest payment date) and any Additional Amounts payable with respect thereto;

(b) the circumstances and relevant facts regarding such Change of Control Triggering Event;

(c) the Change of Control Payment Date, which will be no earlier than 30 days nor later than 60 days from the date such notice is mailed, other than as may be required by law;

(d) the jurisdiction of incorporation of the successor controlling entity; and

(e) the instructions, as determined by us, consistent with the covenant described hereunder, that a holder of notes must follow in order to have its notes purchased.

By 11:00 a.m. (New York time) on the business day prior to the Change of Control Payment Date, we will deposit with the trustee or a paying agent funds in an amount equal to the Change of Control Payment in respect of all notes or portion thereof so tendered.

On the Change of Control Payment Date, we will, to the extent lawful:

(a) accept for payment all notes or portions thereof properly tendered pursuant to the Change of Control Offer; and

(b) deliver or cause to be delivered for cancellation to the trustee the notes so accepted together with an officer's certificate stating the aggregate principal amount of notes or portions thereof we are purchasing.

If only a portion of a note is purchased pursuant to a Change of Control Offer, a new note in a principal amount equal to the portion not purchased will be issued in the name of the holder of such note upon cancellation of the original note, or appropriate adjustments to the amount and beneficial interests in a global note will be made, as appropriate. The minimum amount of such new note will be US$200,000.

We will comply, to the extent applicable, with the requirements of Section 14(e) of the Exchange Act and any other applicable securities laws or regulations in connection with the repurchase of the notes in connection with a Change of Control Offer. To the extent that the provisions of any securities laws or regulations conflict with the provisions of the covenant described hereunder, we will comply with the applicable securities laws and regulations and will not be deemed to have breached our obligations under the covenant described hereunder by virtue of our compliance with such securities laws or regulations.

We will not be required to make a Change of Control Offer following a Change of Control Triggering Event if a third party makes a Change of Control Offer in the manner, at the times and otherwise in compliance with the requirements set forth in the indenture applicable to a Change of Control Offer and purchases all notes validly tendered and not withdrawn under such Change of Control Offer.

Open Market Purchases

We may at any time purchase notes in the open market or otherwise at any price.

Transfer of Notes

A holder may transfer or exchange notes in definitive form, in whole or in part, in an authorized denomination upon the surrender of the note to be transferred, together with the form of transfer endorsed on it duly completed and executed, at the specified office of the registrar or the specified office of any transfer agent. Each new note to be issued upon exchange of notes or transfer of notes will, within three business days of the receipt of a request for exchange or form of transfer, be mailed or otherwise provided to, at the risk of, the holder entitled to the note to such address as may be specified in such request or form of transfer.

The notes will be subject to certain restrictions on transfer as more fully set out in the indenture. See "Transfer Restrictions." Transfer of beneficial interests in the global notes will be effected only through records maintained by DTC and its participants, including Euroclear and Clearstream.

Transfers will be effected, on our behalf, without charge by the registrar or the transfer agents, but upon payment, or the giving of such indemnity or security as the registrar or the relevant transfer agent may require, in respect of any tax or other governmental charges which may be imposed in relation to it. We are not required to transfer or exchange any note selected for redemption.

No holder may require the transfer of a note to be registered during the period of 15 days ending on the due date for any payment of principal or interest on that note.

Additional Amounts

All payments by us or the Subsidiary Guarantors in respect of the notes will be made free and clear of, and without withholding or deduction for or on account of, any present or future taxes, duties, assessments, fees or other governmental charges of whatever nature, including and any fines, penalties or interest related thereto ("Taxes"), imposed or levied by or on behalf of a Relevant Jurisdiction, unless such withholding or deduction is required by law. In that event, we or the relevant Subsidiary Guarantor will pay to each holder of a note such additional amounts ("Additional Amounts") as may be necessary in order that every net payment made to the holder on each note after deduction or withholding for or on account of any Tax imposed upon or as a result of such payment by such Relevant Jurisdiction will not be less than the amount then due and payable on such note; it being understood that the payment of such Additional Amounts will be deemed and construed by us as additional interest for tax purposes in the applicable Relevant Jurisdiction. The foregoing obligation to pay Additional Amounts to any holder of notes, however, will not apply to or in respect of:

(a) any Tax which would not have been imposed but for the existence of any present or former connection between such holder or beneficial owner of the note (or between a fiduciary, settlor, beneficiary or member of such holder, if such holder is an estate, a trust or a partnership), on the one hand, and the applicable Relevant Jurisdiction, on the other hand (including, without limitation, such holder or beneficial owner (or such fiduciary, settlor, beneficiary or member) being or having been a citizen or resident thereof or having been engaged in a trade or business or present therein or having, or having had, a permanent establishment for tax purposes therein), other than the mere receipt of such payment or the ownership or holding of such note;

(b) any Tax which would not have been so imposed but for the presentation of a note for payment on a date more than 20 days after the date on which such payment became due and payable or the date on which payment thereof is duly provided for, whichever occurs later, except to the extent that the holder would have been entitled to such Additional Amounts on presenting such note for payment on any date during such 20-day period (and no Additional Amounts shall be paid for or on account of any additional withholdings or deductions that arise as a result of such presentment after such 20-day period);

(c) Taxes which would not have been imposed but for the failure of such holder or other Person having a beneficial interest in the notes to comply with any certification, identification or other reporting requirements concerning the nationality, residence, identity or connection with the applicable Relevant Jurisdiction of the holder or beneficial owner of the notes if (i) such compliance is required or imposed by law as a precondition to exemption or reduction from all or a part of such tax, duty, assessment or other governmental charge and (ii) at least 30 days prior to the date on which we will apply this clause (c), we shall have notified all holders of notes that some or all holders and beneficial owners of notes will be required to comply with any such requirement;

(d) any estate, inheritance, gift, sales, transfer, excise or personal property or similar Tax imposed with respect to the notes;

(e) any Tax which is payable other than by deduction or withholding from payments on the note;

(f) any Tax imposed with respect to a payment on any note to a holder that is a fiduciary or partnership or other than the sole beneficial owner of such payment to the extent a beneficiary or settlor with respect to such fiduciary or a member of such partnership or beneficial owner would not have been entitled to receive payment of the Additional Amounts had the beneficiary, settlor, member or beneficial owner been the holder of the note;

(g) any Tax imposed under Section 1471 through 1474 of the U.S. Internal Revenue Code of 1986, as amended (the "Internal Revenue Code") as of the issue date (or any amended or successor version that is substantively comparable) and any current or future regulations or official interpretations thereof, any agreement entered into pursuant to Section 1471(b)(1) of the Internal Revenue Code, any intergovernmental agreement between a non-U.S. jurisdiction and the United States with respect to the foregoing or any law, regulation or practice adopted pursuant to any such intergovernmental agreement; or

(h) any combination of the above.

The limitations on our obligations and of any Subsidiary Guarantor to pay Additional Amounts set forth in clause (c) above shall not apply if (i) the provision of information, documentation or other evidence described in such clause (c) would be materially more onerous, in form, in procedure or in the substance of information disclosed, to comply with for a holder or beneficial owner of a note, than comparable information or other reporting requirements imposed under U.S. tax law (including the United States-Mexico income tax treaty), regulations (including temporary or proposed regulations) and administrative practice, or (ii) Article 166, Section II, paragraph a) of the Mexican Income Tax Law (*Ley del Impuesto Sobre la Renta*) (or a substitute or equivalent provision, whether included in any law, rule or regulation) is in effect, unless (A) the provision of the information, documentation or other evidence described in such clause (c) above is expressly required by the applicable Mexican laws and regulations in order to apply Article 166, Section II, paragraph a) of the Mexican Income Tax Law (or substitute or equivalent provision), (B) we or any Subsidiary Guarantor cannot obtain the information, documentation or other evidence necessary to comply with the applicable Mexican laws and regulations on our own through reasonable diligence and (C) we or any Subsidiary Guarantor otherwise would meet the requirements for application of the applicable Mexican laws and regulations.

In addition, such clause (c) above does not require, and shall not be construed to require, that any holder, including any non-Mexican pension fund, retirement fund, tax-exempt organization or financial institution, register with the Tax Management Service (*Servicio de Administración Tributaria*) or the Mexican Ministry of Finance and Public Credit (*Secretaría de Hacienda y Crédito Público*) to establish eligibility for an exemption from, or a reduction of, Mexican withholding taxes.

We will also pay when due any present or future stamp, court or documentary taxes or any other excise or property taxes, charges or similar levies, and any penalties, additions to tax or interest due with respect thereto, which arise in Mexico (or any other jurisdiction in which we or a Subsidiary Guarantor is organized or resident for tax purposes) from the initial execution, delivery or registration of the notes or the indenture or any document or instrument required under the notes or the indenture, including any such taxes, charges or similar levies imposed by any jurisdiction resulting from, or required to be paid in connection with, the enforcement of the notes following the occurrence of any Default or Event of Default.

We will provide the trustee with the official acknowledgment of the relevant taxing authority (or, if such acknowledgment is not available, a certified copy thereof) evidencing any payment of taxes in respect of which we or a Subsidiary Guarantor have paid any Additional Amounts. Copies of such documentation will be made available to the holders of the notes or the paying agents, as applicable, upon request therefor.

In the event that Additional Amounts actually paid with respect to the notes pursuant to the preceding paragraphs are based on rates of deduction or withholding of withholding taxes in excess of the appropriate rate applicable to the holder or beneficial owner of such notes, and as a result thereof such holder or beneficial owner is entitled to make a claim for a refund or credit of such excess from the authority imposing such withholding tax, then such holder shall, by accepting such notes, be deemed to have assigned and transferred all right, title and interest to any such claim for a refund or credit of such excess to us. However, by making such assignment, the holder makes no representation or warranty that we will be entitled to receive such claim for a refund or credit and incurs no other obligation with respect thereto, including taking any action for such refund to be repaid.

For the avoidance of doubt, in the event of any merger or other transaction described and permitted under "—Covenants—Limitation on Consolidation, Merger and Transfer of Assets," then all references to a Relevant Jurisdiction under this section and under "—Redemption—Optional Redemption upon Tax Event" shall include references to the applicable jurisdiction of the Successor Company (as defined below).

All references in this offering memorandum to principal (and premium, if any) payable on the maturity date of the notes, or upon any optional redemption, or to interest payable on the notes will include any Additional Amounts payable by us or a Subsidiary Guarantor in respect of such principal (and premium, if any) and such interest.

Covenants

The indenture will contain the following covenants in addition to customary covenants regarding maintenance of office or agency, maintenance of corporate existence and payments of taxes and claims:

Limitation on Liens

We will not, and will not permit any Subsidiary to, create or suffer to exist any Lien upon any of our or such Subsidiary's Specified Property now owned or hereafter acquired by us or such Subsidiary securing any Debt, unless contemporaneously therewith effective provision is made to secure the notes equally and ratably with such Debt for so long as such Debt is so secured. The preceding sentence will not require us or any Subsidiary to equally and ratably secure the notes if the Lien consists of the following:

(a) any Lien existing on the date of the indenture, and any extension, renewal or replacement thereof or of any Lien in clause (b), (c), (d) or (n) below; *provided*, *however*, that the total amount of Debt so secured is not increased;

(b) any Lien on any property or assets securing Debt incurred solely for purposes of financing the acquisition, construction or improvement of such property or assets after the date of the indenture; *provided* that (i) the aggregate principal amount of Debt secured by the Lien will not exceed (but may be less than) the cost (i.e., purchase price) of the property or assets so acquired, constructed or improved and (ii) the Lien is incurred before, or within 180 days after the completion of, such acquisition, construction or improvement and does not encumber any other property or assets (other than any of the property or assets acquired in connection with any such acquisition, construction or improvement) owned by us or any Subsidiary; and *provided*, *further*, that to the extent that the property or asset acquired is Capital Stock, the Lien also may encumber other property or assets of the Person so acquired;

(c) any Lien securing Debt for the purpose of financing all or part of the cost of the acquisition, construction or development of a project; *provided* that the lenders of such Debt expressly agree to limit their collateral in respect of such Debt to assets (including Capital Stock of the project entity) and/or revenues of such project; and *provided*, *further*, that the Lien is incurred before, or within 180 days after the completion of, that acquisition, construction or development and does not apply to any other property or assets owned by us or any Subsidiary;

(d) any Lien existing on any property or assets of any Person before that Person's acquisition by, merger into or consolidation with us or any Subsidiary after the date of the indenture; *provided* that (i) the Lien is not created in contemplation of or in connection with such acquisition, merger or consolidation, (ii) the Debt secured by the Liens may not exceed the Debt secured on the date of such acquisition, merger or consolidation, (iii) the Lien will not apply to any other property or assets (other than any of the property or assets in connection with any such acquisition, merger or consolidation) owned by us or any of our Subsidiaries and (iv) the Lien will secure only the Debt that it secures on the date of such acquisition, merger or consolidation;

(e) any Lien imposed by law that was incurred in the ordinary course of business, including, without limitation, carriers', suppliers', materialmen's, repairmen's, warehousemen's and mechanics' liens and other similar encumbrances arising in the ordinary course of business, in each case for sums not yet due or being contested in good faith by appropriate proceedings;

(f) any pledge or deposit made in connection with workers' compensation, unemployment insurance or other similar social security legislation, any deposit to secure appeal notes in proceedings being contested in good faith to which we or any Subsidiary is a party, good faith deposits in connection with bids, tenders,

contracts (other than for the payment of Debt) or leases to which we or any Subsidiary is a party or deposits for the payment of rent, in each case made in the ordinary course of business;

(g) any Lien in the nature of title retention arrangements (including extended retention of title arrangements) with sellers in connection with purchases incurred by us or any Subsidiary Guarantor in the ordinary course of business;

(h) any Lien in favor of issuers of surety notes or letters of credit issued pursuant to the request of and for the account of the Company or any Subsidiary in the ordinary course of business;

(i) any Lien securing taxes, assessments or other governmental charges, the payment of which is not yet due or that are being contested in good faith by appropriate proceedings and for which reserves or other appropriate provisions, if any, have been established as required by IFRS;

(j) minor defects, easements, rights-of-way, restrictions and other similar encumbrances incurred in the ordinary course of business and encumbrances consisting of zoning restrictions, licenses, restrictions on the use of property or assets or minor imperfections in title that do not materially impair the value or use of the property or assets affected thereby, and any leases and subleases of real property that do not interfere with the ordinary conduct of the business of the Company or any Subsidiary, and which are made on customary and usual terms applicable to similar properties;

(k) any liens or rights of set-off of any Person with respect to any deposit account of the Company or any Subsidiary arising in the ordinary course of business and not constituting a financing transaction;

(l) any Liens granted, directly or indirectly, to secure borrowings from (i) *Banco Nacional de Obras y Servicios Públicos*, *Sociedad Nacional de Crédito, Institución de Banca de Desarrollo* (BANOBRAS), *Nacional Financiera, Sociedad Nacional de Crédito, Institución de Banca de Desarrollo* (NAFIN), or any other Mexican governmental development bank or government credit institution or (ii) any international or multilateral development bank, government-sponsored agency, export-import bank or official, export-import credit insurer;

(m) any Lien which secures any Hedging Obligations;

(n) any Lien which secures Debt owing by any Subsidiary to us or any other Subsidiary;

(o) any Lien which secures Debt of any Joint Venture Company; and

(p) in addition to the foregoing Liens set forth in clauses (a) through (o) above, Liens securing Debt of the Company or any Subsidiary (including, without limitation, guarantees of the Company or any Subsidiary) which do not in aggregate principal amount (without duplication), together with the aggregate amount of the Attributable Value of sale and leaseback transactions entered into (without duplication) pursuant to the third paragraph under "Limitation on Sale and Leaseback Transactions," at any time of determination, exceed 15% of the Company's Consolidated Tangible Assets.

Limitation on Sale and Leaseback Transactions

We will not, nor will we permit any of our Subsidiaries to, enter into any sale and leaseback transaction with respect to any Specified Property of ours or of any of our Subsidiaries, unless, concurrently with such sale and leaseback transaction, the notes are secured equally and ratably with (or prior to) such sale and leaseback transaction, unless after giving effect thereto:

(a) we or such Subsidiary would be entitled pursuant to the provisions of the indenture described under "—Limitation on Liens" (other than paragraph (p)) to issue or assume Debt (in an amount equal to the Attributable Value with respect to such sale and leaseback transactions) secured by a Lien on such Specified Property without equally and ratably securing the notes; or

(b) we or such Subsidiary apply or cause to be applied, in the case of a sale or transfer for cash, an amount equal to the net cash proceeds thereof and, in the case of a sale or transfer otherwise than for cash, an amount equal to the fair market value of the Specified Property so leased (as determined in good faith by our Board of Directors), (a) to the retirement, within 12 months after the effective date of such sale and leaseback transaction, of (i) our or any Subsidiary Guarantor's Debt ranking at least on a parity with the notes and the subsidiary guarantees or (ii) Debt of any Subsidiary (other than a Subsidiary Guarantor), in each case owing to a Person other than us or any of our affiliates, or (b) to the acquisition, purchase, construction, development, extension or improvement of any of our or our Subsidiaries' fixed or capital assets or other real and tangible property, plant or equipment to be used by or for the benefit of us or any of our Subsidiaries, in each case, in the ordinary course of business.

These restrictions will not apply to (i) transactions providing for a lease term, including any renewal, of not more than three years and (ii) transactions between us and any of our Subsidiaries or between any of our Subsidiaries.

Notwithstanding the foregoing, the Company or any Subsidiary may enter into a sale and leaseback transaction which would otherwise be prohibited under the provisions of the indenture described in this "Limitation on Sale and Leaseback Transactions" section provided that the Attributable Value of such sale and leaseback transaction (without duplication) of the Company and its Subsidiaries measured at the closing date of such sale and leaseback transaction together with the Attributable Value of sale and leaseback transactions previously incurred (without duplication) pursuant to this paragraph by the Company and its Subsidiaries and the aggregate amount (without duplication) of Debt (including, without limitation, guarantees of the Company or any Subsidiary) incurred under "—Limitation on Liens" outstanding at such time, will not exceed 15% of the Company's Consolidated Tangible Assets.

Limitation on Consolidation, Merger and Transfer of Assets

Neither we nor any Subsidiary Guarantor will consolidate with or merge with or into, or convey, transfer or lease all or substantially all of our or its assets to, any Person, unless:

(a) the resulting, surviving or transferee Person (if not the Company or the relevant Subsidiary Guarantor) (the "Successor Company") will be a Person organized and existing under the laws of Mexico, the United States of America, any State thereof or the District of Columbia, any other country that is a member country of the European Union or of the Organization for Economic Cooperation and Development and such Person expressly assumes, by supplemental indenture to the indenture, executed and delivered to the trustee, all of our or such Subsidiary Guarantor's obligations under the notes and the indenture;

(b) immediately prior to such transaction and immediately after giving effect to such transaction, no Default or Event of Default will have occurred and be continuing; and

(c) we will have delivered to the trustee an officers' certificate and an opinion of legal counsel (which may be in-house counsel to the Company or to a direct or indirect parent of the Company), each stating that such consolidation, merger or transfer and such supplemental indenture, if any, comply with the indenture.

The restrictions in paragraph (b) above will not apply to transactions between us and any of the Subsidiary Guarantors or between any of the Subsidiary Guarantors; *provided*, *however*, that if the guarantees are released in accordance with the applicable provisions of the indenture, the restrictions in paragraph (b) above will not apply to transactions between us and any of our Subsidiaries or between any of our Subsidiaries.

The trustee will accept such certificates and opinions as sufficient evidence of the satisfaction of the conditions precedent set forth in this covenant, in which event it will be conclusive and binding on the holders.

Reporting Requirements

We will provide the trustee and, upon request, the holders of the notes, with the following reports:

(a) an English language version in electronic format of our annual audited consolidated financial statements prepared in accordance with IFRS promptly upon such financial statements becoming available but not later than 135 days after the close of each fiscal year;

(b) an English language version in electronic format of our unaudited consolidated quarterly financial statements prepared in accordance with IAS 34, promptly upon such financial statements becoming available but not later than 60 days after the close of each fiscal quarter (other than the last fiscal quarter of each fiscal year);

(c) without duplication, upon request, English language versions or summaries in electronic format of such other reports or notices as may be filed or submitted by (and within 10 days after filing or submission by) us with (i) the CNBV and (ii) the Global Exchange Market of the Euronext Dublin, or any other stock exchange on which the notes may be listed, in each case, to the extent that any such report or notice is generally available to our security holders or the public in Mexico or elsewhere, *provided*, *however*, that we shall not be required to furnish such information to the extent such information is available on our website or to the extent that the information contained therein is not materially different than the information provided pursuant to clause (a) and (b) above; and

(d) so long as we are not subject to Section 13 or Section 15(d) of the Exchange Act and exempt from reporting pursuant to Rule 12g3-2(b) of the Exchange Act, upon request, to any holder and any prospective purchaser of the notes, the information required pursuant to Rule 144A(d)(4) under the Securities Act.

We will maintain a public website or, at our option, a non-public website or other electronic distribution system to which the beneficial owners of the notes, prospective investors and security analysts will be given access and on which the reports and information referred to in clauses (a), (b), (c) and (d) above are posted, *provided*, *however*, that we may, in our sole discretion, exclude direct competitors, customers and suppliers from access to such website or electronic distribution system.

Simultaneously with the delivery of each set of financial statements referred to in clause (a) above, we will provide the trustee with an officers' certificate stating whether a Default or Event of Default exists on the date of such certificate and, if a Default or Event of Default exists, setting forth the details thereof and the action which we are taking or propose to take with respect thereto. Upon any of our directors or executive officers becoming aware of the existence of a Default or Event of Default or any event by reason of which payments of either principal or interest on the notes are prohibited, we will provide the trustee with an officers' certificate setting forth the details thereof and the action we are taking or propose to take with respect thereto.

Delivery of the above reports to the trustee is for informational purposes only and the trustee's receipt of such reports will not constitute constructive notice of any information contained therein or determinable from information contained therein, including our compliance with any covenant in the indenture (as to which the trustee is entitled to rely exclusively on officers' certificates).

Events of Default

An "Event of Default" under the notes will occur if:

(a) we fail to pay interest (including any related Additional Amounts) on the notes within 30 days from the due date;

(b) we default in the payment of principal (including any related Additional Amounts) on the notes on the due date;

(c) we fail to comply with any of the covenants described under "—Covenants—Limitation on Liens", "—Limitation on Consolidation, Merger and Transfer of Assets", and such failure continues for 30 days after the notice specified below;

(d) we fail to comply with any of our covenants or agreements in the notes or the indenture (other than those referred to in clauses (a), (b) and (c) above), and such failure continues for 60 days after the notice specified below;

(e) we or any Significant Subsidiary defaults under any mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any Debt for money borrowed by us or any such Significant Subsidiary (or the payment of which is guaranteed by us or any such Significant Subsidiary) whether such Debt or guarantee now exists, or is created after the date of the indenture (*provided* that for purposes of this clause (e), Debt will not be deemed to include any Non-Recourse Debt or Joint Venture Company Debt), which default (i) is caused by a failure to pay principal of or premium, if any, or interest on such Debt prior to the expiration of any applicable grace period provided in such Debt ("Payment Default") or (ii) results in the acceleration of such Debt prior to its stated maturity and, in each case, the principal amount of any such Debt, together with the principal amount of any other Debt under which there has been a Payment Default or the maturity of which has been so accelerated, totals US$50 million (or the equivalent thereof at the time of determination) or more in the aggregate;

(f) one or more final judgments or decrees for the payment of money of US$50 million (or the equivalent thereof at the time of determination) or more in the aggregate are rendered against us or any Significant Subsidiary and are not paid (whether in full or in installments in accordance with the terms of the judgment) or otherwise discharged and, in the case of each such judgment or decree, either (i) an enforcement proceeding has been commenced by any creditor upon such judgment or decree and is not dismissed within 30 days following commencement of such enforcement proceedings or (ii) there is a period of 60 days following such judgment during which such judgment or decree is not discharged, waived or the execution thereof stayed;

(g) certain events of bankruptcy, insolvency or liquidation relating to us or any Significant Subsidiary; or

(h) except as permitted by the indenture, any guarantee of the notes is held to be unenforceable or invalid in a judicial proceeding or ceases for any reason to be in full force and effect or any Subsidiary Guarantor, or any Person acting on behalf of any Subsidiary Guarantor, denies or disaffirms such Subsidiary Guarantor's obligations under its guarantees of the notes.

A Default under clause (c) or (d) above will not constitute an Event of Default under the notes until the trustee or the holders of at least 25% in principal amount of the notes then outstanding, as the case may be, notify us of the Default and we do not cure such Default within the time specified after receipt of such notice.

The trustee is not to be charged with knowledge of any Default or Event of Default (other than a payment default) or knowledge of any cure of any Default or Event of Default (other than a payment default) with respect to the notes unless written notice of such Default or Event of Default has been given to an authorized officer of the trustee with direct responsibility for administration of the indenture by us or any holder in the manner specified in the indenture.

If an Event of Default (other than an Event of Default specified in clause (g) above) with respect to the notes occurs and is continuing, the trustee or the holders of not less than 25% in principal amount of the notes then outstanding, as the case may be, may declare all unpaid principal of and accrued interest on the notes to be due and payable immediately, by a notice in writing to us, and upon any such declaration such amounts will become due and payable immediately. If an Event of Default specified in clause (g) above with respect to any note occurs and is continuing, then the principal of and accrued interest on all notes will become and be immediately due and payable without any declaration or other act on the part of the trustee or any holder.

The trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request or direction of any of the holders, unless such holders will have offered to the trustee indemnity and/or security

reasonably satisfactory to the trustee. Subject to such provision for the indemnification of and security to the trustee, the holders of a majority in aggregate principal amount of the outstanding notes will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee in respect of the notes or exercising any trust or power conferred on the trustee in respect of the notes.

Defeasance

We may at any time terminate all of our obligations and those of the Subsidiary Guarantors with respect to the notes ("defeasance"), except for certain obligations, including those to the trustee and the agents appointed under the indenture, those regarding any trust established for a defeasance and obligations to register the transfer or exchange of the notes, to replace mutilated, destroyed, lost or stolen notes and to maintain agencies in respect of notes. We may at any time terminate our obligations under certain covenants set forth in the indenture with respect to the notes, and any omission to comply with such obligations will not constitute a Default or an Event of Default with respect to the notes ("covenant defeasance"). In order to exercise either defeasance or covenant defeasance, we must irrevocably deposit in trust, for the benefit of the holders of the notes, with the trustee money in U.S. dollars or U.S. government obligations, or a combination thereof, in such amounts as will be sufficient, in the opinion of an internationally recognized firm of independent public accountants expressed in a written certificate delivered to the trustee, without consideration of any reinvestment, to pay the principal of, premium (if any) and interest on the notes to redemption or maturity and comply with certain other conditions, including the delivery of an opinion of legal counsel of recognized standing to the effect that the holders of the notes will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the defeasance and will be subject to U.S. federal income tax on the same amount and in the same manner and at the same time as would otherwise have been the case (and in the case of a defeasance that is not a covenant defeasance, such opinion shall be based on a change in law or a ruling of the U.S. Internal Revenue Service).

Satisfaction and Discharge

The indenture will be discharged and will cease to be of further effect (except as to surviving rights of registration of transfer or exchange of the notes and the rights of the trustee, as expressly provided for in the indenture) as to all outstanding notes when:

(a) either:

(i) all of the notes previously authenticated and delivered (except lost, stolen or destroyed notes which have been replaced or paid and notes for whose payment money has previously been deposited in trust or segregated and held in trust by us and thereafter repaid to us or discharged from such trust) have been delivered to the trustee for cancellation; or

(ii) all notes not previously delivered to the trustee for cancellation (i) have become due and payable or will become due and payable within one year or (ii) are to be called for redemption within one year under irrevocable arrangements satisfactory to the trustee for the giving of notice of redemption by the trustee in the name, and at our expense, and, in each case, we have irrevocably deposited or caused to be deposited with the trustee funds or certain direct, non-callable obligations of, or guaranteed by, the United States sufficient without reinvestment to pay and discharge the entire indebtedness on the notes not previously delivered to the trustee for cancellation, for principal of, premium, if any, and interest on the notes to the date of deposit (in the case of notes that have become due and payable) or to the maturity or redemption date, as the case may be, and any Additional Amounts payable with respect thereto, together with irrevocable instructions from us directing the trustee to apply such funds to the payment;

(b) we have paid all other sums payable by us under the indenture and the notes; and

(c) we have delivered to the trustee an officers' certificate stating that all conditions precedent under the indenture relating to the satisfaction and discharge of the indenture have been complied with.

Amendment, Supplement, Waiver

Subject to certain exceptions, the indenture may be amended or supplemented with the consent of the holders of at least a majority in principal amount of the notes then outstanding, and any past Default or compliance with any provision may be waived with the consent of the holders of at least a majority in principal amount of notes then outstanding. However, without the consent of each holder of notes affected thereby, no amendment may:

(a) reduce the rate of or extend the time for payment of interest on the notes;

(b) reduce the principal, or change the Stated Maturity, of the notes;

(c) reduce the amount payable upon redemption or repurchase of the notes or change the time at which the notes may be redeemed or repurchased;

(d) make any change in the provisions of the indenture described under "— Additional Amounts" that adversely affects the rights of any holder;

(e) change the currency for, or place of payment of, principal or interest on the notes;

(f) impair the right to institute suit for the enforcement of any payment on or with respect to the notes;

(g) waive certain payment defaults with respect to the notes;

(h) reduce the principal amount of notes whose holders must consent to any amendment or waiver; or

(i) make any change in the amendment or waiver provisions which require each holder's consent.

The holders of notes will receive prior notice as described under "—Notices" of any proposed amendment to the notes or the indenture described in this paragraph. After an amendment described in the preceding paragraph becomes effective, we are required to deliver to the holders a notice briefly describing such amendment. However, the failure to give such notice to all holders of notes, or any defect therein, will not impair or affect the validity of the amendment.

The consent of the holders of notes is not necessary to approve the particular form of any proposed amendment. It is sufficient if such consent approves the substance of the proposed amendment.

We and the trustee may, without the consent or vote of any holder of notes, amend or supplement the indenture or the notes for the following purposes:

(a) to cure any ambiguity, omission, defect or inconsistency; *provided* that such amendment or supplement does not materially adversely affect the rights of any holder;

(b) to comply with the covenant described under "—Covenants—Limitation on Consolidation, Merger and Transfer of Assets";

(c) to add guarantees or collateral with respect to the notes;

(d) to release a Subsidiary Guarantor in accordance with the terms of the indenture;

(e) to add to the covenants of the Company for the benefit of holders of the notes;

(f) to surrender any right conferred upon us;

(g) to evidence and provide for the acceptance of an appointment by a successor trustee;

(h) to provide for the issuance of additional notes;

(i) to conform the text of the indenture or the notes to any provision of this "Description of the Notes" to the extent that such provision in this "Description of the Notes" was intended to be a verbatim recitation of a provision of the indenture or the notes; or

(j) to make any other change that does not materially adversely affect the rights of any holder of the notes.

In executing any amendment, waiver or supplemental indenture to the indenture or the notes, the trustee will be entitled to receive an officers' certificate and an opinion of legal counsel of recognized standing, each stating that such amendment, waiver or supplemental indenture is authorized or permitted by the indenture, that it is not inconsistent with the terms of the indenture, and that it shall be valid and binding upon the Company and the Subsidiary Guarantors in accordance with its terms.

Notices

For so long as notes in global form are outstanding, notices to be given to holders will be given to the depositary, in accordance with its applicable policies as in effect from time to time. If notes are issued in individual definitive form, notices to be given to holders will be deemed to have been given upon the mailing by first class mail, postage prepaid, of such notices to holders of the notes at their registered addresses as they appear in the registrar's records. For so long as the notes are listed on the Official List of Euronext Dublin and trading on the Global Exchange Market of Euronext Dublin and the rules of such exchange so require, publication of such notice to the holders of the notes will be in English in a leading newspaper having general circulation in Ireland (which is expected to be the *Irish Times*) or on the website of the Euronext Dublin (www.ise.ie). Neither the failure to give any notice to a particular holder of the notes, nor any defect in a notice given to a particular holder of the notes, will affect the sufficiency of any notice given to another holder of the notes.

Trustee

The Bank of New York Mellon is the trustee under the indenture. Its address is 240 Greenwich Street, Floor 7E, New York, New York 10286.

Except during the continuance of an Event of Default, the trustee will perform only such duties as are specifically set forth in the indenture. During the existence of an Event of Default of which a responsible officer of the trustee has actual knowledge, the trustee will exercise such rights and powers vested in it by the indenture, and use the same degree of care and skill in its exercise as a prudent Person would exercise or use under the circumstances in the conduct of his or her own affairs.

The trustee may resign at any time by so notifying the Company. In addition, the holders of a majority in aggregate principal amount of the notes then outstanding may remove the trustee by so notifying the trustee and may appoint a successor trustee. The Company will remove the trustee if (i) the trustee is no longer eligible; (ii) the trustee is adjudged bankrupt or insolvent; (iii) a receiver or other public officer takes charge of the trustee or its property; or (iv) the trustee otherwise becomes incapable of acting under the indenture.

If the trustee resigns, is removed by the Company or by the holders of a majority in aggregate principal amount of the notes then outstanding and such holders do not reasonably promptly appoint a successor trustee, or if a vacancy exists in the office of trustee for any reason, the Company will promptly appoint a successor trustee. The successor trustee will give notice of its succession to the holders of the notes and, as long as the notes are listed on the Euronext Dublin for trading on the Global Exchange Market and the rules of the exchange so require, the successor trustee will also publish notice as described under "— Notices."

We and our affiliates may from time to time enter into normal banking and trustee relationships with the trustee and its affiliates.

Governing Law and Submission to Jurisdiction

The notes and the indenture will be governed by, and construed in accordance with, the laws of the State of New York.

Each of the parties to the indenture will irrevocably submit to the jurisdiction of the U.S. federal and New York State courts located in the Borough of Manhattan, City and State of New York and to the courts of its own corporate domicile in respect of actions brought against it as a defendant for purposes of all legal actions and proceedings instituted in connection with the notes and the indenture. We and each of the non-U.S. Subsidiary Guarantors have appointed CT Corporation System at 28 Liberty Street, Floor 42, New York, NY, 10005, as its authorized agent upon which process may be served in any such action.

Currency Indemnity

U.S. dollars are the sole currency of account and payment for all sums payable by us and the Subsidiary Guarantors under or in connection with the notes and the indenture, including damages. To the greatest extent permitted under applicable law, any amount received or recovered in a currency other than U.S. dollars (whether as a result of, or of the enforcement of, a judgment or order of a court of any jurisdiction, in the winding-up or dissolution of the Company or otherwise) by any holder of a note in respect of any sum expressed to be due to it from us or a Subsidiary Guarantor will only constitute a discharge to us and the relevant Subsidiary Guarantor to the extent of the U.S. dollar amount which the recipient is able to purchase with the amount so received or recovered in that other currency on the date of that receipt or recovery (or, if it is not practicable to make that purchase on that date, on the first date on which it is practicable to do so). If that U.S. dollar amount is less than the U.S. dollar amount expressed to be due to the recipient under any note, we and the Subsidiary Guarantors will indemnify such holder against any loss sustained by it as a result; and if the amount of U.S. dollars so purchased is greater than the sum originally due to such holder, such holder will, by accepting a note, be deemed to have agreed to repay such excess. In any event, we and the Subsidiary Guarantors will indemnify the recipient against the cost of making any such purchase.

For the purposes of the preceding paragraph, it will be sufficient for the holder of a note to certify in a satisfactory manner (indicating the sources of information used) that it would have suffered a loss had an actual purchase of U.S. dollars been made with the amount so received in that other currency on the date of receipt or recovery (or, if a purchase of U.S. dollars on such date had not been practicable, on the first date on which it would have been practicable, it being required that the need for a change of date be certified in the manner mentioned above). These indemnities will constitute a separate and independent obligation from the other obligations of the Company and the Subsidiary Guarantors, will give rise to a separate and independent cause of action, will apply irrespective of any indulgence granted by any holder of a note and will continue in full force and effect despite any other judgment, order, claim or proof for a liquidated amount in respect of any sum due under any note.

Certain Definitions

The following is a summary of certain defined terms used in the indenture. Reference is made to the indenture for the full definition of all such terms as well as other capitalized terms used herein for which no definition is provided.

"Additional Amounts" has the meaning set forth under "—Additional Amounts" above.

"Alfa" means Alfa, S.A.B. de C.V., the Issuer's parent company, and not its subsidiaries.

"Attributable Value" means as to any particular lease under which the Company or any Subsidiary is at any time liable as lessee and any date as of which the amount thereof is to be determined, the total net obligation of the lessee for rental payments during the remaining term of the lease (including any period for which such lease has been extended or may, at the option of the lessor, be extended) discounted from the respective due dates thereof to such date at a rate per annum equivalent to the interest rate inherent in such lease (as determined in good faith by the Company in accordance with generally accepted financial practice).

"Board of Directors" means, with respect to any Person, the board of directors or similar governing body of such Person.

"business day" means any day, other than a Saturday or Sunday, which is not a day on which banking institutions in New York City or Mexico City are authorized or required by law or executive order to close.

"Capital Lease Obligation" means, at the time any determination is to be made, with respect to any Person, the obligations of such Person to pay rent or other amounts under any lease of, or other arrangement conveying the right to use, real or personal property, or a combination thereof, which obligations are required to be classified and accounted for as capital leases on a balance sheet in accordance with IFRS.

"Capital Stock" means, with respect to any Person, any and all shares of stock, interests, rights to purchase, warrants, options, participations or other equivalents of or interests in (however designated, whether voting or non-voting), such Person's equity including any preferred stock, but excluding any debt securities convertible into or exchangeable for such equity.

"Change of Control" means the occurrence of one or more of the following events:

(a) the consummation of any transaction (including, without limitation, any merger or consolidation) the result of which is that any "person" or "group" (as such terms are used for purposes of Sections 13(d) and 14(d) of the Exchange Act), other than Alfa and its affiliates, becomes the "beneficial owner" (as such term is used in Rule 13d-3 under the Exchange Act), directly or indirectly, of more than 35% of the Voting Stock of the Company and (b) Alfa and its affiliates beneficially own, directly or indirectly, in the aggregate, a lesser percentage of the total Voting Stock of the Company than such other person and do not have the right or ability by voting power, contract or otherwise to elect or designate for election a majority of the Board of Directors of the Company, unless, as a result of such transaction, the ultimate direct or indirect ownership of the Company is substantially the same immediately after such transaction as it was immediately prior to such transaction;

(b) the sale, conveyance, assignment, transfer, lease or other disposition of all or substantially all of the assets of the Company, determined on a consolidated basis, to any "person" or "group" (as such terms are used for purposes of Sections 13(d) and 14(d) of the Exchange Act) other than (i) Alfa, (ii) any subsidiary of Alfa that is a holding company for Alfa's interest in the Company or (iii) one or more of the Subsidiaries of the Company, whether or not otherwise in compliance with the indenture; and

(c) the adoption of any plan or proposal for the liquidation or dissolution of the Company.

Notwithstanding the foregoing, a transaction will not be deemed to involve a Change of Control if (i)(A) the Company becomes a wholly-owned subsidiary of a holding company and (B) the holders of the Voting Stock of such holding company immediately following that transaction are substantially the same as the holders of the Company's Voting Stock immediately prior to that transaction, (ii) it is a transaction pursuant to which the shares of the Company's Voting Stock outstanding immediately prior to such transaction constitute, or are converted into or exchanged for, a majority of the Voting Stock of the surviving person immediately after giving effect to such transaction or (iii) the "person" or "group" referenced in clause (a), (b) or (c) of the preceding paragraph previously became the beneficial owner of the Company's Voting Stock so as to have constituted a Change of Control in respect of which a Change of Control Offer was made (or otherwise would have required a Change of Control Offer in the absence of the waiver of such requirement by the holders of the notes).

"Change of Control Triggering Event" means the occurrence of a Change of Control that results in a Ratings Decline.

"Clearstream" means Clearstream Banking S.A., Luxembourg.

"CNBV" means the Mexican National Banking and Securities Commission, or *Comisión Nacional Bancaria y de Valores*.

"Consolidated Tangible Assets" means, as of any date of determination, the total amount of assets of the Company and its Subsidiaries less Intangible Assets of the Company and its Subsidiaries, on a consolidated basis and according to IFRS, as of the end of the fiscal year immediately preceding such date.

"Debt" means, with respect to any Person, without duplication:

(a) the principal of and premium, if any, in respect of (i) indebtedness of such Person for money borrowed and (ii) indebtedness evidenced by notes, debentures or other similar instruments for the payment of which such Person is responsible or liable;

(b) all Capital Lease Obligations of such Person;

(c) all obligations of such Person issued or assumed as the deferred purchase price of property, all conditional sale obligations of such Person and all obligations of such Person under any title retention agreement (but excluding trade accounts payable or other short-term obligations to suppliers payable within 180 days, in each case arising in the ordinary course of business);

(d) all obligations of such Person for the reimbursement of any obligor on any letter of credit, banker's acceptance or similar credit transaction (other than obligations with respect to letters of credit securing obligations (other than obligations described in clauses (a) through (c) above) entered into in the ordinary course of business of such Person to the extent such letters of credit are not drawn upon or, if and to the extent drawn upon, such drawing is reimbursed no later than the tenth business day following receipt by such Person of a demand for reimbursement following payment on the letter of credit);

(e) all Hedging Obligations;

(f) all obligations of the type referred to in clauses (a) through (d) of other Persons and all dividends of other Persons for the payment of which, in either case, such Person is responsible or liable, directly or indirectly, as obligor, guarantor or otherwise, including by means of any guarantee (other than obligations of other Persons that are customers or suppliers of such Person for which such Person is or becomes so responsible or liable in the ordinary course of business to (but only to) the extent that such Person does not, or is not required to, make payment in respect thereof);

(g) all obligations of the type referred to in clauses (a) through (e) of other Persons secured by any Lien on any property or asset of such Person (whether or not such obligation is assumed by such Person), the amount of such obligation being deemed to be the lesser of the value of such property or assets or the amount of the obligation so secured; and

(h) any other obligations of such Person which are required to be, or are in such Person's financial statements, recorded or treated as debt under IFRS.

"Default" means any event which is, or after notice or passage of time or both would be, an Event of Default.

"DTC" means The Depository Trust Company.

"Euroclear" means Euroclear Bank S.A./N.V.

"Euronext Dublin" means the Irish Stock Exchange plc, trading as Euronext Dublin.

"Exchange Act" means the U.S. Securities Exchange Act of 1934, as amended.

"Fitch" means Fitch Ratings, Inc., or any successor thereto.

"guarantee" means any obligation of any Person directly or indirectly guaranteeing any Debt or other obligation of any Person and any obligation, direct or indirect, contingent or otherwise, of such Person, including an *aval* (a) to

purchase or pay (or advance or supply funds for the purchase or payment of) such Debt or other obligation of such Person (whether arising by virtue of partnership arrangements, or by agreement to keep-well, to purchase assets, goods, securities or services, to take-or pay, or to maintain financial statement conditions or otherwise) or (b) entered into for purposes of assuring in any other manner the obligee of such Debt or other obligation of the payment thereof or to protect such obligee against loss in respect thereof (in whole or in part); *provided*, *however*, that the term "guarantee" will not include endorsements for collection or deposit in the ordinary course of business. The term "guarantee" used as a verb has a corresponding meaning.

"Hedging Obligations" means, with respect to any specified Person, the obligations of such Person under:

(a) interest rate swap agreements (whether from fixed to floating or from floating to fixed), interest rate cap agreements, cross currency swaps and interest rate collar agreements;

(b) other agreements or arrangements designed to manage interest rates or interest rate risk; and

(c) other agreements or arrangements designed to protect such Person against fluctuations in currency exchange rates or commodity prices;

provided, *however*, that the amount of Debt with respect to any Hedging Obligation is the new amount payable if such Hedging Obligation terminated at that time due to a default by such Person.

"holder" means the Person in whose name a note is registered in the register.

"IFRS" means the International Financial Reporting Standards as issued by the International Accounting Standards Board as in effect from time to time, or any financial reporting standards required for public companies by the CNBV and applied by us.

"Intangible Assets" means, with respect to the Company and its Subsidiaries, unamortized deferred charges, goodwill, patents, trademarks, service marks, trade names, copyrights, write-ups of assets over their carrying value at the end of each fiscal year, and all other items which would be treated as intangibles on the balance sheet of the Company and its Subsidiaries (except unamortized debt discount and expense), according to IFRS.

"Investment Grade Rating" means a rating equal to or higher than BBB- (or the equivalent) by Fitch, Baa3 (or the equivalent) by Moody's and BBB- (or the equivalent) by S&P and the equivalent investment grade credit rating from any other Rating Agency.

"Joint Venture Company" means any Subsidiary of the Company, other than a Subsidiary Guarantor, or a Person in which the Company or any of its Subsidiaries participates or holds, directly or indirectly, an equity interest of at least 20%, in each case substantially all of whose activities are governed by a joint venture agreement or similar arrangement set forth in the joint venture entity's charter documents, bylaws or similar entity level documentation, with a third party that is not an affiliate of the Company.

"Joint Venture Company Debt" means Debt (or any portion thereof) of a Joint Venture Company provided that (i) the recourse of the lender thereof (including any agent, trustee, receiver or other Person acting on behalf of such entity) in respect of such Debt is limited to the Joint Venture Company, any debt securities issued by the Joint Venture Company, the Capital Stock of the Joint Venture Company, and any assets, receivables, inventory, equipment, chattels, contracts, intangibles, rights and any other assets of such Joint Venture Company and its Subsidiaries, and (ii) a default with respect to such Debt of a Joint Venture Company would not cause a default on any outstanding Debt of the Company or any Significant Subsidiary (or the payment of which is guaranteed by the Company or any such Significant Subsidiary) whether such Debt or guarantee now exists, or is created after the date of the indenture.

"Lien" means any mortgage, pledge, security interest, conditional sale or other similar lien.

"Mexico" means the United Mexican States.

"Moody's" means Moody's Investors Service, Inc., or any successor thereto.

"Non-Recourse Debt" means Debt (or any portion thereof) of a Subsidiary of the Company that is not a Subsidiary Guarantor (the "Non-Recourse Debtor") used to finance (i) the creation, development, construction, improvement or acquisition of projects, properties or assets and any increases in or extensions, renewals or refinancings of such Debt or (ii) the operations of projects, properties or assets of such Non-Recourse Debtor or its Subsidiaries; provided that the recourse of the lender thereof (including any agent, trustee, receiver or other Person acting on behalf of such entity) in respect of such Debt is limited to the Non-Recourse Debtor, any debt securities issued by the Non-Recourse Debtor, the Capital Stock of the Non-Recourse Debtor, and any assets, receivables, inventory, equipment, chattels, contracts, intangibles, rights and any other assets of such Non-Recourse Debtor and its Subsidiaries connected with the projects, properties or assets created, developed, constructed, improved, acquired or operated, as the case may be, in respect of which such Debt has been incurred.

"Person" means an individual, partnership, limited partnership, corporation, company, limited liability company, unincorporated organization, trust or joint venture, or a governmental agency or political subdivision thereof.

"Rating Agencies" means Moody's, S&P or Fitch (or any other nationally recognized United States rating agency).

"Ratings Affirmation" means, with respect to a guarantee release, a letter issued by a Rating Agency confirming that, after giving effect to such release and taking into account our consolidated indebtedness, the then-applicable rating of the notes would not decrease.

"Ratings Decline" means that at any time within 90 days (which period shall be extended so long as the rating of the notes is under publicly announced consideration for possible downgrade by any Rating Agency or a substitute or successor thereof) after the date of public notice of a Change of Control, of an arrangement that could result in a Change of Control, or of the Company's intention or that of any other Person to effect a Change of Control, (i) in the event the notes are assigned an Investment Grade Rating by at least two of the Rating Agencies prior to such public notice, the rating of the notes by at least two of the Rating Agencies shall be below an Investment Grade Rating; or (ii) in the event the notes are rated below an Investment Grade Rating by at least two of the Rating Agencies prior to such public notice, the rating of the notes by at least two of the Rating Agencies shall be decreased by one or more categories; or (iii) in the event the notes are rated by only two Rating Agencies prior to such public notice, one assigning an Investment Grade Rating and another one assigning a rating below an Investment Grade Rating, (A) the rating of the notes by the Rating Agency assigning an Investment Grade Rating shall be below an Investment Grade Rating or (B) the rating of the notes by the Rating Agency assigning a non-Investment Grade Rating shall be decreased by one or more categories; *provided that*, in each case, any such rating decline is in whole or in part in connection with a Change of Control.

"Relevant Jurisdiction" means Mexico or any other jurisdiction in which the Company or a Subsidiary Guarantor is organized or resident for tax purposes or through or from which payment on the notes is made, or any political subdivision or governmental authority thereof or therein.

"S&P" means S&P Global Ratings Inc., or any successor thereto.

"Securities Act" means the U.S. Securities Act of 1933, as amended.

"Significant Subsidiary" means any Subsidiary of the Company that at the time of determination (a) was a Subsidiary Guarantor, (b) had assets which, as of the date of the Company's most recent quarterly consolidated balance sheet, constituted at least 10% of the Company's total assets on a consolidated basis as of such date or (c) had operating income for the 12-month period ending on the date of the Company's most recent quarterly consolidated statement of income which constituted at least 10% of the Company's total operating income, on a consolidated basis for such period.

"Specified Property" means, as of any date of determination, any real and tangible property owned by us or any Subsidiary that constitutes all or any part of any plant, processing facility or manufacturing facility, and is used in the ordinary course of its business, the gross book value (without duplication of any depreciation reserves) of which real or tangible property exceeds US$25 million.

"Stated Maturity" means, with respect to any security, the date specified in such security as the fixed date on which the principal of such security is due and payable, including pursuant to any mandatory redemption provision (but excluding any provision providing for the repurchase of such security at the option of the holder thereof upon the happening of any contingency unless such contingency has occurred).

"Subsidiary" means any corporation, association, partnership or other business entity of which more than 50% of the total voting power of shares of Capital Stock or other interests (including partnership interests) entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof is at the time owned or controlled, directly or indirectly, by (a) the Company, (b) the Company and one or more Subsidiaries or (c) one or more Subsidiaries.

"U.S. dollars" or "US$" means such coin or currency of the United States of America as at the time of payment shall be legal tender for the payment of public and private debts.

"Voting Stock" means, with respect to any Person, securities of any class of Capital Stock of such Person entitling the holders thereof (whether at all times or only so long as no senior class of stock has voting power by reason of any contingency) to vote in the election of members of the Board of Directors (or equivalent governing body) of such Person.

BOOK-ENTRY, DELIVERY AND FORM

The notes will be issued in the form of fully registered global notes, which will be deposited with, or on behalf of, DTC and registered in the name of Cede & Co., which is DTC's nominee. The notes will be accepted for clearance by DTC. Beneficial interests in the global notes will be shown on, and transfers thereof will be effected only through, book-entry accounts of financial institutions acting on behalf of beneficial owners as direct and indirect participants in DTC. Investors may elect to hold interests in the global notes through either DTC in the United States, or Clearstream or Euroclear, if they are participants in those systems, or, indirectly, through organizations that are participants in those systems. Owners of beneficial interests in the notes will receive all payments relating to their notes in U.S. Dollars. One or more fully registered global notes, representing the aggregate principal amount of notes issued, will be issued and will be deposited with DTC and will bear a legend regarding the restrictions on exchanges and registration of transfer referred to below.

The laws of some jurisdictions may require that some purchasers of securities take physical delivery of securities in definitive form. These laws may impair the ability to transfer beneficial interests in the notes, so long as the notes are represented by global notes.

DTC is a limited-purpose trust company organized under the New York Banking Law, a banking organization within the meaning of the New York Banking Law, a member of the Federal Reserve System, a clearing corporation within the meaning of the New York Uniform Commercial Code, and a clearing agency registered pursuant to the provisions of Section 17A of the Exchange Act. DTC holds and provides asset servicing for issues of U.S. and non- U.S. equity issues, corporate and municipal debt issues, and money market instruments that DTC's direct participants deposit with DTC. DTC also facilitates the post-trade settlement among direct participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between direct participants' accounts. This eliminates the need for physical movement of securities certificates. Direct participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations.

DTC is a wholly owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others, who we refer to as indirect participants, such as U.S. and non-U.S. securities brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a direct or indirect custodial relationship with a direct participant. The rules applicable to DTC and its participants are on file with the SEC.

Purchases of the notes under the DTC system must be made by or through direct participants, who will receive a credit for the notes on DTC's records. The ownership interest of each actual purchaser of notes, (a "beneficial owner") is in turn to be recorded on the direct or indirect participants' records. Beneficial owners will not receive written confirmation from DTC of their purchase. Beneficial owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the direct or indirect participant through which the beneficial owner entered into the transaction. Transfers of ownership interests in the notes are to be accomplished by entries made on the books of direct and indirect participants acting on behalf of beneficial owners. Beneficial owners will not receive certificates representing their ownership interests in notes, except as described below. Under a book-entry format, holders may experience some delay in their receipt of payments, as such payments will be forwarded by the trustee to Cede & Co., as nominee for DTC. DTC will forward the payments to its participants, who will then forward them to indirect participants or holders. Beneficial owners of the notes other than DTC or its nominees will not be recognized by the registrar and transfer agent as registered holders of the notes entitled to the rights of holders thereof. Beneficial owners that are not participants will be permitted to exercise their rights only indirectly through and according to the procedures of participants and, if applicable, indirect participants.

To facilitate subsequent transfers, all notes deposited by direct participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of notes with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual beneficial owners of the notes; DTC's records reflect only the identity of the direct participants to whose accounts the notes are credited, which may or may not be the beneficial owners. The direct and indirect participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to direct participants, by direct participants to indirect participants, and by direct and indirect participants to beneficial owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Redemption notices will be sent to DTC. If less than all of the notes are being redeemed, DTC's practice is to determine by lot the amount of the interest of each direct participant in the notes to be redeemed.

The global notes are exchangeable for certificated securities in definitive, fully registered form without interest coupons only in the following limited circumstances:

- DTC notifies us that it is unwilling or unable to continue as depositary for the global notes or DTC ceases to be a clearing agency registered under the Exchange Act, at a time when DTC is required to be so registered in order to act as depositary, and in each case the Issuer fails to appoint a successor depositary within 90 days of such notice;

- the Issuer notifies the trustee in writing that the global notes will be so exchangeable; or

- if an Event of Default with respect to the notes has occurred and is continuing.

In all cases, certificated securities delivered in exchange for any global note or beneficial interests therein will be registered in the names, and issued in any approved denominations, requested by or on behalf of DTC (in accordance with its customary procedures) and will bear the applicable restrictive legend referred to in "Transfer Restrictions" unless we determine otherwise in accordance with the indenture and in compliance with applicable law.

As long as DTC or its nominee is the registered owner of the global notes, DTC or its nominee, as the case may be, will be considered the sole owner and holder of the global notes and all notes represented by the global notes for all purposes under the indenture. Except in the limited circumstances referred to above, owners of beneficial interests in global notes:

- will not be entitled to have such global notes or the notes represented by the global notes registered in their names;

- will not receive or be entitled to receive delivery of physical certificates in exchange for beneficial interests in global notes; and

- will not be considered to be owners or holders of the global notes or the notes represented by the global notes for any purpose under the indenture.

Payments with respect to the notes represented by the global notes and all transfers and deliveries of the notes will be made to DTC or its nominee, as the case may be, as the registered holder of the notes. DTC's practice is to credit direct participants' accounts upon DTC's receipt of funds and corresponding detail information from us or our agent, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by participants to beneficial owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of that participant and not of us, any of our agents, DTC or the

trustee, subject to any statutory or regulatory requirements as may be in effect from time to time. Payments to Cede & Co. or such other nominee as may be requested by an authorized representative of DTC are the responsibility of us or our agent, disbursement of such payments to direct participants will be the responsibility of DTC, and disbursement of such payments to the beneficial owners will be the responsibility of direct and indirect participants.

Ownership of beneficial interests in the global notes will be limited to participants or persons that may hold beneficial interests through institutions that have accounts with DTC or its nominee. Ownership of beneficial interests in global notes will be shown only on, and the transfer of those ownership interests will be effected only through, records maintained by DTC or its nominee, with respect to participants' interests, or any participant, with respect to interests of persons held by the participant on their behalf. Payments, transfers, deliveries, exchanges, and other matters relating to beneficial interests in global notes may be subject to various policies and procedures adopted by DTC from time to time. Neither we nor any of our agents will have any responsibility or liability for any aspect of DTC's or any direct or indirect participant's records relating to, or for payments made on account of, beneficial interests in global notes, or for maintaining, supervising or reviewing any of DTC's records or any direct or indirect participant's records relating to these beneficial ownership interests.

Although DTC has agreed to the foregoing procedures in order to facilitate transfer of interests in the global notes among participants, DTC is under no obligation to perform or continue to perform these procedures, and these procedures may be discontinued at any time. We will not have any responsibility for the performance by DTC or its direct or indirect participants under the rules and procedures governing DTC.

Because DTC can act only on behalf of direct participants, who in turn act only on behalf of direct or indirect participants, and certain banks, trust companies and other persons approved by it, the ability of a beneficial owner of notes to pledge the notes to persons or entities that do not participate in the DTC system may be limited due to the unavailability of physical certificates for the notes.

DTC has advised us that it will take any action permitted to be taken by a registered holder of any notes under the indenture only at the direction of one or more participants to whose accounts with DTC the notes are credited.

Clearstream and Euroclear will hold interests on behalf of their participants through customers' securities accounts in Clearstream's and Euroclear's names on the books of their respective depositaries, which in turn will hold interests in customers' securities accounts in the depositaries' names on the books of DTC.

Clearstream holds securities for its participating organizations, ("Clearstream Participants") and facilitates the clearance and settlement of securities transactions between Clearstream Participants through electronic book-entry changes in accounts of Clearstream Participants, thereby eliminating the need for physical movement of certificates. Clearstream provides to Clearstream Participants, among other things, services for safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Clearstream interfaces with domestic markets in several countries.

Clearstream is registered as a bank in Luxembourg, and as such is subject to regulation by the Commission de Surveillance du Secteur Financier and the Banque Centrale du Luxembourg, which supervise and oversee the activities of Luxembourg banks. Clearstream Participants are world-wide financial institutions including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations, and may include the initial purchasers or their affiliates. Indirect access to Clearstream is available to other institutions that clear through or maintain a custodial relationship with a Clearstream Participant. Clearstream has established an electronic bridge with Euroclear as the operator of the Euroclear System (the "Euroclear Operator") in Brussels to facilitate settlement of trades between Clearstream and the Euroclear Operator.

Euroclear holds securities and book-entry interests in securities for participating organizations, (the "Euroclear Participants") and facilitates the clearance and settlement of securities transactions between Euroclear Participants, and between Euroclear Participants and participants of certain other securities intermediaries through electronic book-entry changes in accounts of such participants or other securities

intermediaries. Euroclear provides Euroclear Participants, among other things, with safekeeping, administration, clearance and settlement, securities lending and borrowing and related services. Euroclear Participants are investment banks, securities brokers and dealers, banks, central banks, supranationals, custodians, investment managers, corporations, trust companies and certain other organizations, and may include the initial purchasers or their affiliates. Non-participants in Euroclear may hold and transfer beneficial interests in a global note through accounts with a Euroclear Participant or any other securities intermediary that holds a book-entry interest in a global note through one or more securities intermediaries standing between such other securities intermediary and Euroclear.

Securities clearance accounts and cash accounts with the Euroclear Operator are governed by the Terms and Conditions Governing Use of Euroclear and the related Operating Procedures of the Euroclear System, and applicable Belgian law, which we collectively refer to as the "Terms and Conditions." The Terms and Conditions govern transfers of securities and cash within Euroclear, withdrawals of securities and cash from Euroclear and receipts of payments with respect to securities in Euroclear. All securities in Euroclear are held on a fungible basis without attribution of specific certificates to specific securities clearance accounts. The Euroclear Operator acts under the Terms and Conditions only on behalf of Euroclear Participants, and has no record of or relationship with persons holding through Euroclear Participants.

Distributions with respect to notes held beneficially through Clearstream or Euroclear will be credited to the cash accounts of Clearstream Participants or Euroclear Participants, as the case may be, in accordance with their respective procedures, to the extent received by the U.S. depositary for Clearstream or Euroclear, as the case may be. Transfers between Euroclear Participants and Clearstream Participants will be effected in the ordinary way in accordance with their respective rules and operating procedures.

Cross-market transfers between DTC's participating organizations ("DTC Participants"), on the one hand, and Euroclear Participants or Clearstream Participants, on the other hand, will be effected through DTC in accordance with DTC's rules on behalf of Euroclear or Clearstream, as the case may be, by its U.S. depositary; however, such cross-market transactions will require delivery of instructions to Euroclear or Clearstream, as the case may be, by the counterparty in such system in accordance with the rules and procedures and within the established deadlines of such system. Euroclear or Clearstream, as the case may be, will, if the transaction meets its settlement requirements, deliver instructions to its U.S. depositary to take action to effect final settlement on its behalf by delivering or receiving interests in the global note in DTC, and making or receiving payment in accordance with normal procedures for same-day fund settlement applicable to DTC. Euroclear Participants and Clearstream Participants may not deliver instructions directly to their respective U.S. depositaries. Due to time zone differences, the securities accounts of a Euroclear Participant or Clearstream Participant purchasing an interest in a global note from a DTC Participant in DTC will be credited, and any such crediting will be reported to the relevant Euroclear Participant or Clearstream Participant, during the securities settlement processing day, which must be a business day for Euroclear or Clearstream, immediately following the settlement date of DTC. Cash received in Euroclear or Clearstream as a result of sales of interests in a global note by or through a Euroclear Participant or Clearstream Participant to a DTC Participant will be received with value on the settlement date of DTC but will be available in the relevant Euroclear or Clearstream cash account only as of the business day for Euroclear or Clearstream following DTC's settlement date.

Although DTC, Clearstream, Luxembourg and Euroclear have agreed to the foregoing procedures in order to facilitate transfers of securities among participants of DTC, Clearstream, Luxembourg and Euroclear, they are under no obligation to perform or continue to perform such procedures and they may discontinue the procedures at any time. None of us, any of the initial purchasers or the trustee will have any responsibility for the performance by Clearstream or Euroclear or their respective participants of their respective obligations under the rules and procedures governing their operations. In addition, the information in this section concerning DTC and its book-entry system has been obtained from sources that we believe to be accurate, but we assume no responsibility for the accuracy thereof.

TRANSFER RESTRICTIONS

The notes and the subsidiary guarantees have not been, and will not be, registered under the Securities Act, or the securities laws of any other jurisdiction and may not be offered or sold in the United States or to U.S. persons (as defined in Regulation S), except in transactions exempt from, or not subject to, the registration requirements of the Securities Act. Accordingly, we are offering the notes only:

- in the United States to qualified institutional buyers (as defined in Rule 144A) pursuant to Rule 144A; and
- outside the United States to non-U.S. persons in offshore transactions meeting the requirements of Rule 903 of Regulation S.

As used herein, the terms "offshore transaction," "United States" and "U.S. person" have the respective meanings given to them in Regulation S.

Purchasers' Representations and Restrictions on Resale and Transfer

Each purchaser of notes (other than the initial purchasers in connection with the initial issuance and sale of notes) and each owner of any beneficial interest therein will be deemed, by its acceptance or purchase thereof, to have represented and agreed as follows:

- it is purchasing the notes for its own account or an account with respect to which it exercises sole investment discretion and it and any such account is either (a) a qualified institutional buyer and is aware that the sale to it is being made pursuant to Rule 144A or (b) a non-U.S. person that is outside the United States;
- it acknowledges that the notes have not been registered under the Securities Act or with any securities regulatory authority of any state, that the notes are being offered in a transaction that does not involve any public offering in the United States within the meaning of the Securities Act and that the notes may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except as set forth below;
- it understands and agrees that notes initially offered in the United States to qualified institutional buyers will be represented by a global note and that notes offered outside the United States pursuant to Regulation S will also be represented by a global note;
- it will not resell or otherwise transfer any of such notes except (a) to us, (b) within the United States to a qualified institutional buyer in a transaction in compliance with Rule 144A, (c) outside the United States in compliance with Rule 903 or 904 under the Securities Act, (d) pursuant to an exemption from registration under the Securities Act (if available) or (e) pursuant to an effective registration statement under the Securities Act;
- it agrees that it will give to each person to whom it transfers the notes notice of any restrictions on transfer of such notes;
- it acknowledges that prior to any proposed transfer of notes (other than pursuant to an effective registration statement or in respect of notes sold or transferred either in compliance with (a) Rule 144A or (b) Regulation S) the holder of such notes may be required to provide certifications relating to the manner of such transfer as provided in the indenture;
- it acknowledges that the trustee, registrar or transfer agent for the notes will not be required to accept for registration transfer of any notes acquired by it, except upon presentation of evidence satisfactory to us that the restrictions set forth herein have been complied with;
- if it is a non-U.S. purchaser acquiring a beneficial interest in a Regulation S global note offered pursuant to this offering memorandum, it acknowledges and agrees that, until the expiration of the 40-day

"distribution compliance period" within the meaning of Regulation S, any offer, sale, pledge or other transfer shall not be made by it in the United States or to, or for the account or benefit of, a U.S. person, except pursuant to Rule 144A to a qualified institutional buyer taking delivery thereof in the form of a beneficial interest in a U.S. global note;

- it acknowledges that we, the initial purchasers and other persons will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements and agrees that if any of the acknowledgements, representations and agreements deemed to have been made by its purchase of the notes are no longer accurate, it will promptly notify us and the initial purchasers; and

- if it is acquiring the notes as a fiduciary or agent for one or more investor accounts, it represents that it has sole investment discretion with respect to each such account and it has full power to make the foregoing acknowledgements, representations and agreements on behalf of each account.

Legends

The following is the form of restrictive legend which will appear on the face of the Rule 144A global note and which will be used to notify transferees of the foregoing restrictions on transfer:

"THIS NOTE HAS NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY STATE OR OTHER SECURITIES LAWS. THE HOLDER HEREOF, BY PURCHASING THIS NOTE, AGREES FOR THE BENEFIT OF ALPEK, S.A.B. DE C.V. (THE "COMPANY") THAT THIS NOTE OR ANY INTEREST OR PARTICIPATION HEREIN MAY BE OFFERED, RESOLD, PLEDGED OR OTHERWISE TRANSFERRED ONLY (1) TO THE COMPANY, (2) SO LONG AS THIS NOTE IS ELIGIBLE FOR RESALE PURSUANT TO RULE 144A UNDER THE SECURITIES ACT ("RULE 144A"), TO A PERSON WHO THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER (AS DEFINED IN RULE 144A) IN ACCORDANCE WITH RULE 144A, (3) IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH RULE 903 OR 904 OF REGULATION S UNDER THE SECURITIES ACT, (4) PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT (IF AVAILABLE) OR (5) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, AND IN EACH OF SUCH CASES IN ACCORDANCE WITH ANY APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES OR OTHER APPLICABLE JURISDICTION. THE HOLDER HEREOF, BY PURCHASING THIS NOTE, REPRESENTS AND AGREES THAT IT SHALL NOTIFY ANY PURCHASER OF THIS NOTE FROM IT OF THE RESALE RESTRICTIONS REFERRED TO ABOVE. AS USED HEREIN, THE TERMS "OFFSHORE TRANSACTION," "UNITED STATES" AND "U.S. PERSON" HAVE THE RESPECTIVE MEANINGS GIVEN TO THEM BY REGULATION S UNDER THE SECURITIES ACT.

THE FOREGOING LEGEND MAY BE REMOVED FROM THIS NOTE ONLY AT THE OPTION OF THE COMPANY."

The following is the form of restrictive legend which will appear on the face of the Regulation S global note and which will be used to notify transferees of the foregoing restrictions on transfer:

"THIS NOTE HAS NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY STATE OR OTHER SECURITIES LAWS. THE HOLDER HEREOF, BY PURCHASING THIS NOTE, AGREES THAT, PRIOR TO THE EXPIRATION OF THE 40-DAY DISTRIBUTION COMPLIANCE PERIOD (AS DEFINED IN REGULATION S ("REGULATION S") UNDER THE SECURITIES ACT), NEITHER THIS NOTE NOR ANY INTEREST OR PARTICIPATION HEREIN MAY BE OFFERED, RESOLD, PLEDGED OR OTHERWISE TRANSFERRED WITHIN THE UNITED STATES (AS DEFINED IN REGULATION S) OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, A U.S. PERSON (AS DEFINED IN REGULATION S), EXCEPT TO A QUALIFIED INSTITUTIONAL BUYER IN

COMPLIANCE WITH RULE 144A UNDER THE SECURITIES ACT IN A TRANSACTION MEETING THE REQUIREMENTS OF THE INDENTURE REFERRED TO HEREIN.

THE FOREGOING LEGEND MAY BE REMOVED FROM THIS NOTE AFTER 40 DAYS BEGINNING ON AND INCLUDING THE LATER OF (A) THE DATE ON WHICH THE NOTES ARE OFFERED TO PERSONS OTHER THAN DISTRIBUTORS (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT) AND (B) THE ORIGINAL ISSUE DATE OF THE NOTES."

For further discussion of the requirements (including the presentation of transfer certificates) under the indenture to effect exchanges or transfers of interest in global notes and certificated notes, see "Description of the Notes."

Other Jurisdictions

The distribution of this offering memorandum and the offer and sale or resale of the notes may be restricted by law in certain jurisdictions. Persons into whose possession this offering memorandum comes are required by us and the initial purchasers to inform themselves about and to observe any such restrictions.

TAXATION

General

The following summary contains a description of certain material United States and Mexican federal income tax consequences of the purchase, ownership and disposition of the notes by holders that are treated as non-resident of Mexico for tax purposes.

This summary is for general information only and is based upon federal tax laws of the United States and Mexico as in effect on the date of this offering memorandum, including certain of the provisions of the income tax treaty between the United States and Mexico, which we refer to in this offering memorandum as the "Tax Treaty", all of which are subject to change, including changes with retroactive effects. This summary does not purport to be a comprehensive description of all the U.S. or Mexican tax considerations that may be relevant to a decision to purchase, hold or dispose of the notes. The summary does not address any tax consequences under the laws of any state, municipality or locality of Mexico or the United States or the laws of any taxing jurisdiction other than the federal tax laws of Mexico and the United States.

Prospective investors should consult their own tax advisors as to the Mexican and United States tax consequences of the purchase, ownership and disposition of notes, including, in particular, the effect of any foreign (non-Mexican and non-U.S.), national, state, municipal or other non-national tax laws.

Mexico has also entered into or is negotiating several double taxation treaties with various countries that may have an impact on the tax treatment of the purchase, ownership or disposition of notes. Prospective purchasers of notes should consult their own tax advisors as to the tax consequences, if any, of the application of any such treaties.

Mexican Federal Tax Considerations

General

The following is a general summary of the principal Mexican federal income tax consequences of the purchase, ownership and disposition of the notes by holders , whether individuals or corporations, that are treated as non-residents of Mexico for Mexican federal income tax purposes, and that do not hold such notes through a permanent establishment for tax purposes in Mexico to which ownerhisp of, and income under, the notes is attributable; for purposes of this summary, each such non- resident holder is referred to as a "foreign holder".

This summary is based upon the provisions of the the Mexican Income Tax Law (*Ley del Impuesto Sobre la Renta* or the "Mexican Income Tax Law") and regulations in effect on the date of this offering memorandum, all of which are subject to change, including with retroactive effect, or to new or different interpretations, which could affect the continued validity or correctness of this summary.

This summary does not constitute tax advice and does not address all of the Mexican tax consequences that may be applicable to specific holders of the notes and does not purport to be a comprehensive description of all the Mexican tax considerations that may be relevant to a decision to purchase, own or dispose of the notes including a comprehensive description of all Mexican federal tax considerations. This summary does not describe any tax consequences arising under the laws, rules or regulations of any state or municipality of Mexico.

Potential investors should consult with their own tax advisors regarding the particular consequences of the purchase, ownership or disposition of the notes under the laws of Mexico (and the laws of any state or municipality of Mexico) or any other jurisdiction which is in effect or under any applicable double taxation treaty to which Mexico is a party.

Tax residency is a highly technical definition that involves the application of a number of factors that are specified in the Mexican Tax Code (*Código Fiscal de la Federación*). An individual is a resident of Mexico for tax purposes, if such individual has established his or her home in Mexico. When such individual has a home in another jurisditction, the individual will be deemed a resident of Mexico for tax purposes if the center of vital interests of

such individual is located in Mexico; which is deemed to occur if (i) more than 50.0% of the aggregate income realized by such individual in the calendar year is from a Mexican source of income, or (ii) the principal center of the professional activities of such individual is located in Mexico. Any Mexican nationals that are employed by the Mexican government are deemed reseidents of Mexico. Mexican nationals who file a change of tax residence to a country or jurisdiction that does not have a comprehensive exchange of information agreement with Mexico and where such Mexican national's income is subject to a preferred tax regime, as defined by Mexican law, will be considered as a resident of Mexico for tax purposes during the fiscal year of the filing of notice of such residence change and during the following three fiscal years. Unless otherwise proven, Mexican nationals are deemed residents of Mexico for tax purposes. Furthermore, for purposes of Mexican taxation, an individual or corpoation that does not satisfy the requirements described above to be considered a resident of Mexico for tax purposes, is treated as a non-resident of Mexico for tax purposes, and a foreign holder for puposes of this summary, and generally subject to taxation, at a Mexican federal level, as sepecified in this summary.

A legal entity is a resident of Mexico, if it maintains the principal administration of its business or the effective location of its management in Mexico.

If a legal entity or an individual is deemed to have a permanent establishment in Mexico for Mexican tax purposes or is deemed to be a resident of Mexico for tax purposes, any and all income attributable to that permanent establishment of such resident, or to such deemed resident, will be subject to Mexican income taxes, in accordance with applicable tax laws.

Taxation of Interest Payments

Pursuant to the Mexican Income Tax Law, payments of interest on the notes (including original issue discount or any premium paid in respect of the notes, which is deemed to be interest) made by us to foreign holders, will be subject to Mexican withholding tax at a rate of 4.9%, if, as expected, the following requirements are met:

- the issuance of the notes (including the principal characteristics of the notes) is notified to the CNBV pursuant to Article 7 of the Mexican Securities Market Law and Articles 24 Bis, 24 Bis 1 and other applicable provisions of the General Regulations Applicable to Issuers and Other Market Participants (Disposiciones de Carácter General Aplicables a las Emisoras de Valores y a Otros Participantes del Mercado de Valores);

- the notes, as expected, are placed outside of Mexico through banks or brokerage houses, in a country with which Mexico has in force a treaty for the avoidance of double taxation which is in effect (which currently includes the United States); and

- we timely comply with the informational requirements specified from time to time by the Mexican tax authorities under their general rules, including, after completion of the transaction described in this offering memorandum, the filing with the Mexican Tax Administration Service (*Servicio de Administración Tributaria* or "SAT"), fifteen business days after the placement of the notes, of certain information regarding such placement and this offering memorandum (including the principal characteristics of the notes).

If any of the aforementioned requirements is not met, the Mexican withholding tax will be 10.0% or higher. If the effective beneficiaries, whether acting directly or indirectly, individually or jointly with related parties, that receive more than 5% of the interest paid under the notes (i) are persons who own, directly or indirectly, individually or with related parties, 10% of our voting stock, or (ii) are corporations or other entities, of which 20% or more of the voting stock is owned, directly or indirectly, jointly or severally, by persons related to us, then the Mexican withholding tax rate applicable to payments of interest under our notes may increase to the maximum applicable rate according to the law (currently 35%). For these purposes, persons will be related if:

- one person holds an interest in the business of the other person;

- both persons have common interests; or

- a third party has an interest in the business or assets of both persons.

As of the date of this offering memorandum, the Tax Treaty is not expected to have any effect on the Mexican tax consequences described in this summary, because, as described above, under the Mexican Income Tax Law, we expect to be entitled to withhold taxes in connection with interest payments under the notes at a 4.9% rate.

Payments of interest on the notes made by us to non-Mexican pension and retirement funds will be exempt from Mexican withholding tax provided that:

- the applicable fund is duly incorporated pursuant to the laws of its country of residence and is the effective beneficiary of the interest payment;
- such income is exempt from taxes in the country of residence of the applicable fund; and
- such fund provides information to us, that we may in turn provide to the SAT, in accordance with rules issued by SAT for these purposes.

Holders or beneficial owners of the notes may be requested to, subject to specified exceptions and limitations, provide certain information or documentation necessary to enable us to apply the appropriate Mexican withholding tax rate on interest payments under the notes made by us to such holders or beneficial owners. Additionally, the Mexican Income Tax Law provides that, in order for a foreign holder to be entitled to the benefits under the treaties for the avoidance of double taxation entered into by Mexico, which are in effect, it is necessary for the foreign holder to meet the procedural requirements established in such Law. In the event that the specified information or documentation concerning the holder or beneficial owner, if requested, is not timely provided, we may withhold Mexican tax from interest payments on the notes to that holder or beneficial owner at the maximum applicable rate in effect, and our obligation to pay Additional Amounts relating to those withholding taxes will be limited as described under "Description of the Notes—Additional Amounts."

Payments of Principal

Under the Mexican Income Tax Law, payments of principal on the notes made by us to foreign holders, will not be subject to any Mexican withholding tax.

Taxation of Capital Gains

Under the Mexican Income Tax Law, capital gains resulting from the sale or disposition of the notes by a foreign holder to another foreign holder are not taxable in Mexico. Gains resulting from the sale of the notes by a foreign holder to a Mexican resident for tax purposes or to a foreign holder deemed to have a permanent establishment in Mexico for tax purposes, will be subject to the Mexican taxes pursuant to the rules described above with respect to interest payments, in respect of the difference between the nominal value (or the face value) or the acquisition price of the notes and the price obtained upon sale by the seller, and any such withholding taxes will not benefit from our obligations to pay additional amounts.

Taxation of Make-Whole Amount

Under the Mexican Income Tax Law, the payment of the make-whole amounts as a result of the optional redemption of the notes, as provided in "Description of the Notes—Redemption—Optional make-whole redemption" will be subject to the Mexican taxes pursuant to the rules described above with respect to interest payments, as a Make-Whole Amount will be deemed as interest under Mexican law.

Other Mexican Taxes

Under current Mexican tax laws, generally there are no estate, inheritance, succession or gift taxes, applicable to the purchase, ownership or disposition of the notes by a foreign holder. Gratuitous transfers of the notes in certain circumstances may result in the imposition of a Mexican federal tax upon the recipient.

There are no Mexican stamp, issuer registration or similar taxes or duties payable by us or by foreign holders of the notes with respect to the notes (including their issuance).

U.S. Federal Income Tax Considerations

The following is a general summary of certain U.S. federal income tax consequences of the ownership and disposition of the notes. This summary is limited to holders of the notes that purchase the notes at the original issuance, at their "issue price" (as defined below) and who hold the notes as capital assets (within the meaning of the Internal Revenue Code). This summary is based upon provisions of the Internal Revenue Code and U.S. Treasury regulations, rulings and judicial decisions as of the date hereof. Those authorities may be changed, perhaps retroactively, so as to result in United States federal income tax consequences different from those summarized below. This summary does not address all aspects of U.S. federal income taxation that may be relevant to a particular holder or to certain types of holders subject to special treatment, such as persons subject to certain U.S. federal income tax laws regarding expatriates, dealers or traders in securities or foreign currency, banks, financial institutions, insurance companies, tax-exempt organizations, real estate investment trusts, regulated investment companies, pass-through entities (including partnerships and entities and arrangements classified as partnerships for U.S. federal income tax purposes) or persons that hold the notes through pass-through entities, "U.S. Holders" (as defined below) whose functional currency is not the U.S. Dollar, or persons who hold the notes as part of a "straddle," "hedge," "conversion transaction," "synthetic security" or other integrated investment. In addition, this summary does not address alternative minimum tax consequences or the indirect effects on holders of interests in a beneficial owner of the notes. This summary also does not describe any tax consequences arising under the laws of any taxing jurisdiction other than the U.S. federal government.

Each investor should consult its own tax advisor with respect to the U.S. federal, state, local and foreign tax consequences of the ownership and disposition of the notes.

As used in this section, the term "U.S. Holder" means a beneficial owner of the notes that is for U.S. federal income tax purposes: (i) a citizen or individual resident of the United States; (ii) a corporation, or other entity treated as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States or any state thereof (including the District of Columbia); (iii) any estate the income of which is subject to U.S. federal income tax regardless of its source; or (iv) any trust if (A) a court within the United States is able to exercise primary supervision over its administration and one or more U.S. persons have the authority to control all substantial decisions of the trust or (B) the trust has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

A "Non-U.S. Holder" is a beneficial owner of the notes that is neither a U.S. Holder nor a partnership (or entity treated as such for U.S. federal income tax purposes).

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) holds notes, the tax treatment of a partner generally will depend upon the status of the partner and the activities of the partnership. A partner in a partnership that acquires or holds the notes should consult its own tax advisors.

U.S. Holders that use an accrual method of accounting for tax purposes ("accrual method holders") generally are required to include certain amounts in income no later than the time such amounts are reflected on certain financial statements (the "book/tax conformity rule"). The application of the book/tax conformity rule thus may require the accrual of income earlier than would be the case under the general tax rules described below, although it is not entirely clear to what types of income the book/tax conformity rule applies or, in some cases, how the rule is to be applied if it is applicable. Accrual method holders should consult with their tax advisors regarding the potential applicability of the book/tax conformity rule to their particular situation.

No ruling from the IRS has been or will be sought with respect to any of the U.S. federal income tax considerations discussed below, and no assurance can be given that the IRS will not take a position contrary to the discussion below or that any contrary position would not be sustained in court. If you are considering the purchase of notes, you should consult your own tax advisors concerning the particular United States federal income tax consequences to you regarding purchase, ownership and disposition of the notes, as well as the consequences to you arising under the laws of any other taxing jurisdiction.

U.S. Holders

The following summary applies to you if you are a holder of notes that is a U.S. Holder.

Contingent Payment Debt Obligations

Certain debt instruments that provide for one or more contingent payments are subject to U.S. Treasury regulations governing contingent payment debt instruments. A payment is not treated as a contingent payment under these regulations if, as of the issue date of the debt instrument, the likelihood that such payment will be made is remote and/or the payments are incidental. In certain circumstances as set forth in the Description of the Notes, we may be required to redeem the notes in advance of their stated maturity, in which case we may pay amounts on the notes that are in excess of the stated interest or principal of the notes. For example, in the event of a Change of Control (as defined in the indenture), we must offer to repurchase the notes at a purchase price equal to 101% of the then-outstanding principal amount thereof, plus accrued and unpaid interest thereon to, but excluding, the repurchase date (see "Description of the Notes—Change of Control Triggering Event"). We intend to take the position that the possibility that any such payment will be made is remote and/or the payments are incidental and therefore the notes are not subject to the rules governing contingent debt instruments. Our determination that these contingencies are remote and/or incidental is binding on you unless you disclose your contrary position to the IRS in the manner that is required by applicable U.S. Treasury regulations. Our determination is not, however, binding on the IRS. It is possible that the IRS might take a different position from that described above, in which case the timing, character and amount of taxable income in respect of the notes may differ adversely from that described herein. The remainder of this discussion assumes that the notes will not be treated as contingent payment debt instruments.

Stated Interest

The amount of stated interest payments on a note will generally be taxable to you as ordinary income at the time it is paid or accrued in accordance with your method of accounting for tax purposes. In addition to interest payments you receive on the notes, you will be required to include in income any Additional Amounts and any tax withheld from the interest payments or Additional Amounts you receive, even if you do not in fact receive this withheld tax. You may be entitled to deduct or credit this tax, subject to certain limitations (including that the election to deduct or credit foreign taxes applies to all of your foreign taxes for a particular tax year). Interest income (including Mexican taxes withheld, if any, from the interest payments and any Additional Amounts) on a note generally will be considered foreign source income and generally should constitute "passive category income" for foreign tax credit purposes. You may be denied a foreign tax credit for foreign taxes imposed with respect to the notes where you do not meet a minimum holding period requirement during which you are not protected from risk of loss. The rules governing the foreign tax credit are complex. You are urged to consult your tax advisors regarding the availability of the foreign tax credit under your particular circumstances.

Original Issue Discount

The notes will be treated as issued with original issue discount ("OID") for U.S. federal income tax purposes if their stated redemption price at maturity exceeds their "issue price" by more than a *de minimis* amount. The "issue price" of a note generally is the first price at which a substantial amount of the issue of which the note is a part is sold to persons other than bond houses, brokers or similar persons acting in the capacity of underwriters, placement agents or wholesalers. The "stated redemption price at maturity" is generally defined as the sum of all payments provided by the note other than "qualified stated interest," which is stated interest that is unconditionally payable in cash or property (other than debt instruments issued by us) at least annually at a single fixed interest rate over the entire term of the note. If a note is treated as issued with more than a *de minimis* amount of OID, you will be required, regardless of your tax accounting method, to include in ordinary income a portion of the OID for each day during each taxable year in which you held the note, determined by using a constant yield-to-maturity method that reflects compounding interest.

The rules regarding OID are complex. A U.S. holder should consult their own tax advisors regarding the consequences of OID, including the amount of OID that such holder would include in gross income for a taxable year.

Sale, Exchange and Retirement of Notes

Your adjusted tax basis in a note will, in general, be your cost for that note increased by any OID previously included in gross income, if applicable, and reduced (but not below zero) by payments, if any, you have previously received (other than payments of qualified stated interest) on such note. Unless a non-recognition provision of U.S. federal income tax law applies, upon the sale, exchange, retirement or other disposition of a note, you will recognize gain or loss equal to the difference between the amount you realize upon the sale, exchange, retirement or other disposition (i.e. the sum of cash plus the fair market value of all other property received, including any make-whole amount, but less an amount equal to any accrued interest that you did not previously include in income, which will be taxable as ordinary interest income) and the adjusted tax basis of the note. Such gain or loss will be capital gain or loss and will be long-term capital gain or loss if the holding period for such note is more than one year. Long-term capital gains recognized by individuals and certain other non-corporate U.S. Holders generally are eligible for reduced rates of taxation. The deductibility of capital losses is subject to limitations. Such gain or loss will be treated as U.S. source income or loss for foreign tax credit purposes (except that accrued interest income with respect to the notes that is treated as paid as a result of the disposition will constitute income from sources outside the United States and generally will constitute "passive category income" for U.S. foreign tax credit purposes) , unless the applicable provisions in the Tax Treaty provide otherwise. Accordingly, if Mexican tax is imposed on the sale or other disposition of the notes, such tax generally will not be available as a credit for you against U.S. federal income tax unless you have other income treated as derived from foreign sources, in the appropriate category, for purposes of the foreign tax credit rules. The rules governing the foreign tax credit are complex. You are urged to consult your tax advisors regarding the availability of the foreign tax credit under your particular circumstances.

Net Investment Income Tax

Certain U.S. Holders who are individuals, estates or trusts with income that exceeds certain thresholds generally will be subject to a 3.8% tax on "net investment income", including, among other things, interest on, and capital gains from the sale or other taxable disposition of, the notes, subject to certain limitations and exceptions. U.S. Holders should consult their tax advisors regarding the effect, if any, of the net investment income tax on their ownership and disposition of the notes.

Foreign Financial Asset Reporting

You may be required to file IRS Form 8938 (Statement of Specified Foreign Financial Assets) if you own "specified foreign financial assets" with an aggregate value in excess of $75,000 at any time during the taxable year or $50,000 on the last day of the taxable year (or such higher amounts as prescribed by applicable U.S. Treasury regulations). U.S. Treasury regulations provide that "specified foreign financial assets" include any financial accounts held at a non-U.S. financial institution, as well as investment in a note not held through an account with a financial institution. Investors who fail to report required information for any year could become subject to substantial penalties and a significant extension of the statute of limitations for their tax return.

Prospective investors are encouraged to consult with their own tax advisors regarding the possible implications of these U.S. Treasury regulations on their investment in notes.

Non-U.S. Holders

The following summary applies to you if you are a holder of notes that is a Non-U.S. Holder.

The interest income that you derive with respect to the notes (including the amount of any Mexican taxes withheld, if any, and any Additional Amounts) generally will be exempt from United States federal income taxes, including United States withholding tax on payments of interest (other than as described below under "–Backup Withholding and Information Reporting"), unless such income is effectively connected with your conduct of a trade or business in the United States (and, if required by an applicable tax treaty, is attributable to a permanent establishment maintained by the Non-U.S. Holder in the United States).

If you are a Non-U.S. Holder, any gain you realize on a sale, exchange, redemption or retirement of the notes generally will be exempt from United States federal income tax, including United States withholding tax, unless:

- you are an individual who is present in the United States for 183 days or more in the taxable year of the sale who is not a U.S. Holder and certain other conditions are met, including with respect to the source of the gain; or
- your gain is effectively connected with your conduct of a trade or business in the United States (and, if required by applicable tax treaty, is attributable to a permanent establishment maintained by the Non-U.S. Holder in the United States).

Backup Withholding and Information Reporting

Generally, information reporting requirements will apply to all payments we make to a U.S. Holder and the proceeds from a sale of a note paid to a U.S. Holder unless such U.S. Holder is an exempt recipient and demonstrates this fact when so required. To avoid the imposition of backup withholding, a U.S. Holder should (i) provide its taxpayer identification number, (ii) certify that it is not subject to backup withholding, and (iii) otherwise comply with the applicable requirements of the backup withholding rules. Although Non-U.S. Holders generally are exempt from backup withholding and information reporting, a Non-U.S. Holder may, in certain circumstances, be required to comply with certification procedures to prove entitlement to this exemption.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against a holder’s United States federal income tax liability, provided the required information is timely furnished to the IRS. Holders of notes should consult their tax advisors as to their qualification for exemption from backup withholding and the procedure for obtaining such exemption.

PLAN OF DISTRIBUTION

Citigroup Global Markets Inc., HSBC Securities (USA) Inc., J.P. Morgan Securities LLC and MUFG Securities Americas Inc. are acting as joint bookrunners of the offering and initial purchasers.

Subject to the terms and conditions contained in a purchase agreement among us and the initial purchasers, we have agreed to sell to the initial purchasers, and each of the initial purchasers has, severally and not jointly, agreed to purchase from us, the principal amount of the notes that appears opposite its name in the table below:

Initial Purchaser	Principal Amount of Notes
Citigroup Global Markets Inc.	US$153,846,000
HSBC Securities (USA) Inc.	US$153,846,000
J.P. Morgan Securities LLC	US$153,846,000
MUFG Securities Americas Inc.	US$38,462,000
Total	US$500,000,000

The notes will be offered in the United States by the initial purchasers that are registered to offer and sell the notes for sale in the United States. Subject to applicable law, the initial purchasers or their affiliates will offer and sell the notes outside of the United States.

Subject to the terms and conditions set forth in the purchase agreement, the initial purchasers have agreed to purchase all of the notes sold under the purchase agreement if any notes are purchased. If an initial purchaser defaults, the purchase agreement provides that the purchase commitments of the non-defaulting initial purchasers may be increased or the purchase agreement may be terminated.

We have agreed to indemnify the initial purchasers and their controlling persons against certain liabilities in connection with this offering, including liabilities under the Securities Act, or to contribute to payments the initial purchasers may be required to make in respect of those liabilities.

The initial purchasers are offering the notes, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the notes, and other conditions contained in the purchase agreement, such as the receipt by the initial purchasers of officer's certificates and legal opinions. The initial purchasers reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

The initial purchasers have advised us that they propose initially to offer the notes at the offering price set forth on the cover page of this offering memorandum and to certain dealers at that price less a selling concession. After the initial offering, the offering price, concession or any other term of the offering may be changed. The initial purchasers may offer and sell notes through certain of their affiliates.

Notes Are Not Being Registered

The notes have not been registered under the Securities Act, or the securities law of any other jurisdiction, and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons (as defined in Regulation S) except in transactions exempt from, or not subject to, the registration requirements of the Securities Act. Each purchaser of the notes will be deemed to have made acknowledgements, representations and agreements as described under "Transfer Restrictions." In connection with sales outside the United States, each of the initial purchasers has agreed that it will not offer, sell or deliver the notes to, or for the account of, U.S. persons (unless in reliance on Rule 144A) (i) as part of their distribution at any time or (ii) otherwise until 40 days after the later of the commencement of the offering and the closing date, and it will send to each dealer to whom it sells such notes during such period a confirmation or other notice setting forth the restrictions on offers and sales of the notes within the United States or to, or for the account or benefit of, U.S. persons. Resales of the notes are restricted as described under "Transfer Restrictions."

Further, until 40 days after the commencement of the offering, an offer or sale of the notes within the United States by a dealer that is not participating in the offering may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with Rule 144A.

New Issue of Notes

The notes will constitute a new issue of securities with no established trading market. Application has been made to Euronext Dublin for the notes to be admitted to the Official List and to trading on the Global Exchange Market of Euronext Dublin. However, we cannot assure you that the listing application will be approved. We have been advised by the initial purchasers that they presently intend to make a market in the notes after completion of the offering. However, they are under no obligation to do so and may discontinue any market-making activities at any time without any notice. We cannot assure the liquidity of the trading market for the notes. If an active trading market for the notes does not develop, the market price and liquidity of the notes may be adversely affected. If the notes are traded, they may trade at a discount from their initial offering price, depending on prevailing interest rates, the market for similar securities, our operating performance and financial condition, general economic conditions and other factors.

No Sales of Similar Securities

The Issuer and the subsidiary guarantors have agreed that for a period of 30 days after the date of this offering memorandum, the Issuer and the subsidiary guarantors will not, without first obtaining the prior written consent of the initial purchasers, directly or indirectly, sell, offer or announce the offering of, or file any registration statement under the Securities Act in respect of, any long-term, U.S. dollar-denominated debt securities of the Issuer or any subsidiary guarantor offered or sold in the international capital markets, except for the notes sold to the initial purchasers pursuant to the purchase agreement.

Short Positions

In connection with the offering, the initial purchasers may purchase and sell the notes in the open market. These transactions may include short sales and purchases on the open market to cover positions created by short sales. Short sales involve the sale by the initial purchasers of a greater principal amount of notes than they are required to purchase in the offering. The initial purchasers must close out any short position by purchasing notes in the open market.

Similar to other purchase transactions, purchases by the initial purchasers to cover the syndicate short sales may have the effect of raising or maintaining the market price of the notes or preventing or retarding a decline in the market price of the notes. As a result, the price of the notes may be higher than the price that might otherwise exist in the open market.

Neither we nor the initial purchasers make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the notes. In addition, neither we nor the initial purchasers make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Other Relationships

The initial purchasers and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the initial purchasers and their affiliates may 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. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. Affiliates of certain of the initial purchasers are lenders under facilities that may be repaid with the proceeds of the notes. If any of the initial purchasers or their affiliates have a lending relationship with us, certain of those initial purchasers or their affiliates routinely hedge, and certain other of those initial purchasers may hedge,

their credit exposure to us consistent with their customary risk management policies. Typically, these initial purchasers 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 our securities, including potentially the notes offered hereby. Any such credit default swaps or short positions could adversely affect future trading prices of the notes offered hereby. The initial purchasers and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Sales Outside the United States

Neither we nor the initial purchasers are making an offer to sell, or seeking offers to buy, the notes in any jurisdiction where the offer and sale is not permitted. You must comply with all applicable laws and regulations in force in any jurisdiction in which you purchase, offer or sell the notes or possess or distribute this offering memorandum, and you must obtain any consent, approval or permission required for your purchase, offer or sale of the notes under the laws and regulations in force in any jurisdiction to which you are subject or in which you make such purchases, offers or sales. Neither we nor the initial purchasers will have any responsibility therefor.

Selling Restrictions

United Kingdom

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

European Economic Area

The notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("EEA"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive (EU) 2016/97 (as amended, "MiFID II"); or (ii) a customer within the meaning of Directive 2002/92/EC (as amended, the "Insurance Distribution Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II. Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the notes or otherwise making them available to retail investors in the EEA, has been prepared and therefore offering or selling the notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

Canada

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

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

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

Mexico

The notes have not been and will not be registered with the National Securities Registry maintained by the CNBV, and may not be offered or sold publicly in Mexico or otherwise be subject to intermediation activities in Mexico, except that the notes may be offered and sold to investors that qualify as institutional or accredited investors pursuant to the private placement exemption set forth in Article 8 of the Mexican Securities Market Law and regulations thereunder. We will notify the CNBV of the terms and conditions of this offering outside of Mexico as required under applicable law and for statistical and informational purposes only.

Brazil

The offer and sale of the notes will not be carried out by any means that would constitute a public offering in Brazil under Law No. 6,385, of December 7, 1976, as amended, and under CVM Rule (*Instrução*) No. 400, of December 29, 2003, as amended. The offer and sale of the notes have not been and will not be registered with the *Comissão de Valores Mobiliários* in Brazil. Any representation to the contrary is untruthful and unlawful. Any public offering or distribution, as defined under Brazilian laws and regulations, of the interests in Brazil is not legal without such prior registration. Documents relating to the offering of the notes, as well as information contained therein, may not be supplied to, nor may they be used in connection with any offer for sale of the notes to persons in Brazil.

Switzerland

The notes may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (the "SIX") or on any other stock exchange or regulated trading facility in Switzerland. This offering memorandum has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this offering memorandum nor any other offering or marketing material relating to the notes or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this offering memorandum nor any other offering or marketing material relating to the offering, the issuer, or the notes have been or will be filed with or approved by any Swiss regulatory authority. In particular, this offering memorandum will not be filed with, and the offer of notes will not be supervised by, the Swiss Financial Market Supervisory Authority, and the offer of notes has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (the "CISA"). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of note.

Japan

The notes have not been and will not be registered under the Securities and Exchange Law of Japan (the "Securities and Exchange Law"), and the notes have not, directly or indirectly, been offered or sold and will not be, directly or indirectly, offered or sold in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Securities and Exchange Law and any other applicable laws and regulations of Japan.

Hong Kong

The notes may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), or (ii) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the

document being a “prospectus” within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong) and no advertisement, invitation or document relating to the notes may be issued or may be in the possession of any person for the purpose of issue (in each case, whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to notes which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Singapore

This offering memorandum has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, the notes were not offered or sold or caused to be made the subject of an invitation for subscription or purchase and will not be offered or sold or caused to be made the subject of an invitation for subscription or purchase, and this offering memorandum or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the notes, has not been circulated or distributed, nor will it be circulated or distributed, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in the SFA) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in 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 2(1) of the SFA) or securities-based derivatives contracts (as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries’ rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the notes pursuant to an offer made under Section 275 of the SFA except:

(a) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA; or

(b) where no consideration is or will be given for the transfer; or

(c) where the transfer is by operation of law; or

(d) as specified in Section 276(7) of the SFA; or

(e) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Any reference to the SFA is a reference to the Securities and Futures Act, Chapter 289 of Singapore and a reference to any term as defined in the SFA or any provision in the SFA is a reference to that term as modified or amended from time to time including by such of its subsidiary legislation as may be applicable at the relevant time.

Chile

The notes being offered will not be registered under the Securities Market Law (*Ley de Mercado de Valores*) in the Securities Registry (*Registro de Valores*) or in the Foreign Securities Registry (*Registro de Valores Extranjeros*) of the CMF and, therefore, the notes are not subject to the supervision of the CMF. As unregistered securities in Chile, we are not required to disclose public information about the notes in Chile. Accordingly, the notes cannot and will not be publicly offered to persons in Chile unless they are registered in the corresponding Securities Registry.

The notes may only be offered in Chile in circumstances that do not constitute a public offering under Chilean law or in compliance with CMF Rule 336. Pursuant to the Securities Market Law, a public offering of securities is an offering that is addressed to the general public or to certain specific categories or groups thereof. Considering that the definition of public offering is quite broad, even an offering addressed to a small group of investors may be considered to be addressed to a certain specific category or group of the public and therefore be considered public under applicable law. However, pursuant to CMF Rule 336, the notes may be privately offered in Chile to certain "qualified investors" identified as such therein (which in turn are further described in CMF Rule 216, dated June 12, 2008).

CMF Rule 336 requires the following information to be provided to prospective investors in Chile:

1. Date of commencement of the offer: September 4, 2019. The offer of the notes is subject General Rule (*Norma de Carácter General*) No. 336, dated June 27, 2012, issued by the CMF;

2. The subject matter of this offer are securities not registered with the Securities Registry (*Registro de Valores*) of the CMF, nor with the Foreign Securities Registry (*Registro de Valores Extranjeros*) of the CMF, due to the notes not being subject to the oversight of the CMF;

3. Since the notes are not registered in Chile there is no obligation by the issuer to make publicly available information about the notes in Chile; and

4. The notes shall not be subject to public offering in Chile unless registered with the relevant Securities Registry of the CMF.

CMF Rule 336 further requires the following information to be included in the Spanish language:

Aviso a los Inversionistas Chilenos

La oferta de los bonos se acoge a la Norma de Carácter General N°336 de la Comisión para el Mercado Financiero. Los bonos que se ofrecen no están inscritos bajo la Ley de Mercado de Valores en el Registro de Valores o en el Registro de Valores Extranjeros que lleva la Comisión para el Mercado Financiero, por lo que tales valores no están sujetos a la fiscalización de ésta. Por tratarse de valores no inscritos en Chile, no existe obligación por parte del emisor de entregar en Chile información pública respecto de estos valores. Los bonos no podrán ser objeto de oferta pública en Chile mientras no sean inscritos en el Registro de Valores correspondiente. Los bonos solo podrán ser ofrecidos en Chile en circunstancias que no constituyan una oferta pública o cumpliendo con lo dispuesto en la Norma de Carácter General N°336 de la Comisión para el Mercado Financiero. De conformidad con la Ley de Mercado de Valores Chilena, se entiende por oferta pública de valores la dirigida al público en general o a ciertos sectores o a grupos específicos de éste. Considerando lo amplio de dicha definición, incluso una oferta dirigida a un pequeño grupo de inversionistas puede ser considerada como una oferta dirigida a ciertos sectores o a grupos específicos del público y por lo tanto considerada como pública bajo la ley aplicable. Sin embargo, en conformidad con lo dispuesto por la Norma de Carácter General N°336, los bonos podrán ser ofrecidos privadamente a ciertos "inversionistas calificados," identificados como tal en dicha norma (y que a su vez están descritos en la Norma de Carácter General N°216 de la Comisión para el Mercado Financiero de fecha 12 de junio de 2008).

La siguiente información se proporciona a potenciales inversionistas de conformidad con la Norma de Carácter General N°336:

1. *La oferta de los bonos comienza el 4 de septiembre de 2019, y se encuentra acogida a la Norma de Carácter General N° 336, de fecha 27 de junio de 2012, de la CMF;*

2. *La oferta versa sobre valores no inscritos en el Registro de Valores o en el Registro de Valores Extranjeros que lleva la CMF, por lo que tales valores no están sujetos a la fiscalización de la CMF;*

3. *Por tratarse de valores no inscritos en Chile no existe la obligación por parte del emisor de entregar en Chile información pública sobre los mismos; y*

4. *Estos valores no podrán ser objeto de oferta pública en Chile mientras no sean inscritos en el Registro de Valores correspondiente.*

Peru

The notes and the information contained in this offering memorandum are not being publicly marketed or offered in Peru and will not be distributed or caused to be distributed to the general public in Peru. Peruvian securities laws and regulations on public offerings will not be applicable to the offering of the notes and therefore, the disclosure obligations set forth therein will not be applicable to us or the sellers of the notes before or after their acquisition by prospective investors. The notes and the information contained in this offering memorandum have not been and will not be reviewed, confirmed, approved or in any way submitted to the SMV nor have they been registered under the Securities Market Law (*Ley del Mercado de Valores*) or any other Peruvian regulations. Accordingly, the notes cannot be offered or sold within Peruvian territory except to the extent any such offering or sale qualifies as a private offering under Peruvian regulations and complies with the provisions on private offerings set forth therein. The notes may not be offered or sold in Peru except in compliance with the securities law thereof.

LISTING AND GENERAL INFORMATION

The Issuer accepts responsibility for the information contained in this listing particulars and having taken all reasonable care to ensure that such is the case, the information contained in this listing particulars is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its import.

Corporate Information

The Issuer was organized and exists under the laws of the United Mexican States. The Issuer was incorporated on April 18, 2011, is registered with the Register of Property and Commerce of the State of Nuevo Leon under n. 126110*1, and has its principal executive office located at Ave. Gómez Morín 1111 Sur, Col. Carrizalejo, San Pedro Garza García, C.P. 66254, Nuevo León, México.

Clearing Systems

The notes have been accepted for clearance through Euroclear and Clearstream. For the Rule 144A notes, the ISIN number is US020564AD27 and the CUSIP number is 020564 AD2. For the Regulation S notes, the ISIN number is USP01703AC49 and the CUSIP number is P01703 AC4.

Listing

Application has been made to Euronext Dublin for the notes to be admitted to the Official List and to trading on the on the Global Exchange Market. Expenses for the admission of the notes to be traded on the Global Exchange Market will be €4,540. Physical copies of our published annual audited consolidated financial statements and any published quarterly unaudited consolidated financial statements will be available in either physical or electronic form at our principal executive offices, as well as at the offices of the trustee, registrar, paying agent and transfer agent, as such addresses are set forth in this offering memorandum. Our subsidiary guarantors do not publish separate non-consolidated financial statements. We do not publish unconsolidated financial statements.

The Bank of New York Mellon SA/NV, Dublin Branch is acting solely in its capacity as listing agent for the Issuer (and not on its own behalf) in connection with the application for admission of the notes to the Official List of Euronext Dublin and trading on its Global Exchange Market.

The notes have not been and will not be listed in the BMV or registered with the Mexican National Securities Registry and therefore the notes may not be offered or sold publicly, or otherwise be the subject of brokerage activities in Mexico, except pursuant to a private placement exemption set forth under Article 8 of the Mexican Securities Market Law.

Credit Ratings

The notes received a rating of "Baa3" from Moody's, "BBB-" from S&P's Financial Services LLC and "BBB-" from Fitch Ratings. Note that such ratings are limited in scope, and we cannot assure you that such credit ratings will remain in effect for any given period of time or that such ratings will not be lowered, suspended or withdrawn entirely by the rating agencies. See "Risk Factors—Risk Factors Related to the Notes—. We cannot assure you that the credit ratings for the notes will not be lowered, suspended or withdrawn by the rating agencies."

Conflicts of Interest

For information regarding potential conflicts of interest, see "Risk Factors—Risks Relating to Our Business—We are controlled by Alfa, whose interests may not be aligned with your interests as a noteholder," and "Related Party Transactions." We are not aware of any potential conflict of interests between any duties to the Issuer of the members of our board of directors and their private interests and/or other duties. Other than with respect to the commission payable to the initial purchasers in connections with the offering, we are not aware of any person having a material interest in the offering.

Authorization

We have obtained all necessary consents, approvals and authorizations in connection with the issuance and performance of the notes.

No Material Adverse Change

Except as disclosed in this offering memorandum, there has been no material adverse change in the prospects of the issuer since December 31, 2018, the date of its last published audited financial statements. Except as disclosed in this offering memorandum, there has been no significant change in the financial or trading position or prospects of us and our subsidiaries taken as a whole since June 30, 2019, the last financial period for which either audited financial information or interim financial information has been published.

Documents Available for Inspection

For the duration of the listing of the notes on the Official List and their admission to trading on the Global Exchange Market of Euronext Dublin, physical copies of the following documents may be inspected at our main office located at Ave. Gómez Morín 1111 Sur, Col. Carrizalejo, San Pedro Garza García, C.P. 66254, Nuevo León, México:

(a) the memorandum and articles of association of the Issuer and the subsidiary guarantors;

(b) the historical financial information for years ended December 31, 2018 and 2017;

(c) the Indenture and subsidiary guarantees; and

(d) all reports, letters, and other documents, historical financial information, valuations and statements prepared by any expert at the Issuer's request, any part of which is included or referred to in this listing particulars.

Litigation Statement

Except as disclosed in this offering memorandum, we have not been involved in any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Issuer aware) over the past 12 months, which may have, or have had in the recent past, significant effects on our financial position or profitability.

LEGAL MATTERS

The validity of the notes will be passed upon for us by Paul Hastings LLP, our United States counsel, and for the initial purchasers by Cleary Gottlieb Steen & Hamilton LLP, United States counsel to the initial purchasers. Certain matters of Mexican law relating to the notes will be passed upon for the initial purchasers by Ritch, Mueller, Heather y Nicolau, S.C., special Mexican counsel to the initial purchasers.

INDEPENDENT AUDITORS

The consolidated financial statements as of and for the year ended December 31, 2016, included in this offering memorandum, have been audited by PricewaterhouseCoopers, S.C., independent auditors, as stated in their report appearing herein.

The audited consolidated financial statements as of and for the years ended December 31, 2017 and 2018, together with the notes thereto, included in this offering memorandum, have been audited by Galaz Yamazaki Ruiz Urquiza S.C., Member of Deloitte Touche Tohmatsu Limited, independent accountant, as stated in their report appearing herein, and a member of the Mexican Institute of Public Accountants (*Instituto Mexicano de Contadores Públicos, A.C.)*.

INDEX TO FINANCIAL STATEMENTS

Annual Audited Consolidated Financial Statements

	Page
Report of Independent Auditors for the year ended December 31, 2018 and 2017	F-4
Consolidated Statements of Financial Position as of December 31, 2018, 2017 and 2016........................	F-8
Consolidated Statements of Profit (Loss) for the years ended December 31, 2018, 2017 and 2016	F-9
Consolidated Statements of Comprehensive Income for the years ended December 31, 2018, 2017 and 2016	F-10
Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2018, 2017 and 2016	F-11
Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017 and 2016...........	F-12
Notes to the Consolidated Financial Statements	F-13

Unaudited Condensed Consolidated Interim Financial Statements

Unaudited Condensed Consolidated Interim Statements of Financial Position as of June 30, 2019 (unaudited) and December 31, 2018 (audited)..........	F-72
Unaudited Condensed Consolidated Interim Statements of Income for the six months ended June 30, 2019 and 2018	F-73
Unaudited Condensed Consolidated Interim Statements of Comprehensive Income for the six months ended June 30, 2019 and 2018	F-74
Unaudited Condensed Consolidated Interim Statements of Changes in Stockholders' Equity for the six months ended June 30, 2019 and 2018	F-75
Unaudited Condensed Consolidated Interim Statements of Cash Flows for the six months ended June 30, 2019 and 2018	F-76
Notes to the Unaudited Condensed Consolidated Interim Financial Statements	F-77

Alpek, S. A. B. de C. V. and Subsidiaries
(Subsidiary of Alfa, S. A. B. de C. V.)

Consolidated Financial Statements as of and for the Years Ended December 31, 2018, 2017 and 2016, and Independent Auditors' Reports Dated January 31, 2019 and February 17, 2017

Alpek, S. A. B. de C. V. and Subsidiaries
(Subsidiary of Alfa, S. A. B. de C. V.)

Independent Auditors' Reports and Consolidated Financial Statements as of and for the Years Ended December 31, 2018, 2017 and 2016

Table of Contents **Page**

Independent Auditors' Reports	1
Consolidated Statements of Financial Position	5
Consolidated Statements of Profit (Loss)	6
Consolidated Statements of Comprehensive Income (Loss)	7
Consolidated Statements of Changes in Stockholders' Equity	8
Consolidated Statements of Cash Flows	9
Notes to Consolidated Financial Statements	10

Deloitte.

Galaz, Yamazaki,
Ruiz Urquiza, S.C.
Av. Juárez 1102, piso 40
Colonia Centro
64000 Monterrey, N.L.
México

Tel: +52 (81) 8133 7300
www.deloitte.com/mx

Independent Auditors' Report to the Board of Directors and Stockholders of Alpek, S. A. B. de C. V.

Opinion

We have audited the consolidated financial statements of Alpek, S. A. B. de C. V. and Subsidiaries (the "Company"), which comprise the consolidated statements of financial position as of December 31, 2018 and 2017, and the consolidated statements of profit (loss), the consolidated statements of comprehensive income (loss), the consolidated statements of changes in equity and the consolidated statements of cash flows for the years then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2018 and 2017, and its consolidated financial performance and its consolidated cash flows for the years then ended, in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board.

Basis for Opinion

We conducted our audits in accordance with International Standards on Auditing (ISA). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Company in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) together with the Code of Ethics issued by the Mexican Institute of Public Accountants (IMCP Code), and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code and with the IMCP Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Matter

The Company's consolidated financial statements for the year ended December 31, 2016, have been audited by other auditors, who expressed an unqualified opinion on February 17, 2017.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. We have determined that the matters described below are the key audit matters which should be communicated in our report.

Deloitte se refiere a Deloitte Touche Tohmatsu Limited, sociedad privada de responsabilidad limitada en el Reino Unido, y a su red de firmas miembro, cada una de ellas como una entidad legal única e independiente. Conozca en www.deloitte.com/mx/conozcanos la descripción detallada de la estructura legal de Deloitte Touche Tohmatsu Limited y sus firmas miembro.

Business combination - Companhia Petroquímica de Pernambuco (Petroquímica SUAPE) y Companhia Integrada Textil de Pernambuco (CITEPE)

As disclosed in Note 2c. to the consolidated financial statements, Alpek, S. A. B. de C. V. ("Alpek") acquired all of the shares representing the respective share capital of Petroquímica SUAPE and CITEPE. Both companies operate an integrated PTA-PET site in Ipojuca, Pernambuco, Brazil, with an installed capacity of 640,000 and 450,000 tons per year of PTA and PET, respectively. The total consideration amounted to US$435 million, paid in Brazilian reals at the closing date of the transaction. The fair value of the assets acquired and assumed liabilities determined and recognized at the acquisition date amounted to US$792 million and US$137 million, respectively. Additionally, a gain in business combination of US$220 million was recognized. Due to the significant judgments used by management in the valuation models to determine the consideration, the fair value of the assets acquired and liabilities assumed, particularly property, plant and equipment, as well as the intangible assets, we involved our experts in valuation to evaluate the premises and criteria used by the administration and its independent expert and we carry out the following procedures:

- We evaluated the capacity and independence of the independent expert.
- We verified that the models used by the administration to determine the fair values were those used and recognized to value assets with similar characteristics in the industry.
- We challenged management's financial projections and compared them with the performance and historical trends of the Company's businesses.
- We evaluated that management's projections were consistent with those approved by the Board of Directors of the Company.
- We reviewed the most relevant valuation assumptions (discount rate, multiple of EBITDA, sales multiples, as well as the determination of the useful life of the assets), and compared them with independent market sources.

The results of our procedures were satisfactory and we agree with the fair value of the acquired assets and liabilities assumed recognized by the Company.

Joint venture - Grupo Mossi & Ghisolfi ("M&G")

Impairment of assets derived from agreements with various subsidiaries of Grupo Mossi & Ghisolfi ("M&G")

As disclosed in Note 2b. and 2e. to the consolidated financial statements, in 2015, Alpek entered into agreements with M&G Resins USA, LLC ("M&G"), one for capacity reservation and another of tooling services, for which the latter agreed to supply PET for its plant to be constructed in Corpus Christi, Texas. As a result of this agreement, Alpek paid $7,745 million pesos (US$435 million) to M&G. In 2017, due to M&G's inability to complete the construction of the plant, the Company recognized an impairment for a total amount of $11,456 million pesos (net of taxes, $8,721) for its assets associated with M&G.

In October 2017, M&G, as owner of the assets under construction, requested a voluntary reorganization petition under Chapter 11 of the Bankruptcy Code of the United States of America ("USA"). As a result of the foregoing, during 2018 Alpek, Indorama Ventures, LLC ("Indorama") and Far Eastern Investment ("Far Eastern") made a joint proposal to the bankruptcy administrator for the acquisition of the aforementioned assets under construction and created a joint venture for this purpose, from which the constitution of Corpus Christi Polymers LLC ("CCP") was incorporated as the legal vehicle for the acquisition. The acquisition agreement for the assets amounted to US$1,199 million in cash and other capital contributions (capacity reservation) made by CCP in 2018. Alpek was recognized for US$200 million, which partially represented the capacity reservation rights paid in 2015, US$133 million as part of its contributions to CCP and US$67 million (US$62 at present value) for the sale to Indorama and Far Eastern of a portion of said capacity reservation agreement; therefore, the Company reversed US$195 million of the impairment recognized in 2017.

Due to the significant judgments used by management to determine the partial reversal of the impairment of Alpek's assets associated with M&G, our audit procedures focused on reviewing elements and significant judgments considered by the Company. Regarding the recognized effects of reversal of impairment, we obtained and read the contractual agreements of the transaction and performed the following procedures:

- We reviewed the contractual agreements between the joint venture participants.
- We reviewed the cash contributions made to CCP and the legal documentation that supports the contribution of capacity reservation rights.
- We verified the authorization granted by the competition authorities of the United States of America for the acquisition of the assets of M&G.
- We discussed with management and confirmed that at the date of the consolidated financial statements all the obligations of the parties to comply with the acquisition have been fulfilled.

The results of our procedures were satisfactory and we agree with the judgments used by management to reverse the impairment.

Information other than the Consolidated Financial Statements and Auditors' Report Thereon

Management is responsible for the other information presented. The other information includes two documents, the Annual Stock Exchange Filing and the information that will be incorporated in the Annual Report that the Company must prepare pursuant to the General Provisions Applicable to Issuers and other Participants in the Mexican Stock Exchange and file it with the National Banking and Securities Commission ("CNBV" for its acronym in Spanish). The Annual Stock Exchange Filing and the Annual Report are expected to be made available to us after the date of this auditors' report.

Our opinion of the consolidated financial statements does not cover the other information and we do not express any form of assurance over it.

In connection with our audit of the consolidated financial statements, our responsibility will be to read the other information, when available, and in doing so, consider whether the other information contained therein is materially inconsistent with the consolidated financial statements or with our knowledge obtained in the audit, or otherwise appears to contain a material error. If based on the work we have performed, we conclude that there is a material misstatement therein, we are required to communicate the matter in a statement in the Annual Report required by the CNBV and those charged with governance in the Company.

Responsibilities of management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's consolidated financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit 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 Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company and subsidiaries to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision, and performance of the Company and subsidiaries audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Galaz, Yamazaki, Ruiz Urquiza, S.C.
Member of Deloitte Touche Tohmatsu Limited

C. P. C. César Adrián Garza Tamez
Monterrey, Nuevo León, México
January 31, 2019

Alpek, S. A. B. de C. V. and Subsidiaries
(Subsidiary of Alfa, S. A. B. de C. V.)

Consolidated Statements of Financial Position

As of December 31, 2018, 2017 and 2016
In millions of Mexican pesos

Assets	**Note**	**2018**	**2017**	**2016**
Current assets:				
Cash and cash equivalents	6	$ 4,168	$ 8,795	$ 2,935
Restricted cash	6	3	763	2
Trade and other accounts receivable, net	7	21,934	15,817	15,918
Inventories	8	24,511	16,364	14,853
Derivative financial instruments	4	30	148	56
Prepayments	9	469	305	457
Total current assets		51,115	42,192	34,221
Non-current assets:				
Property, plant and equipment, net	10	47,033	41,535	40,699
Goodwill and intangible assets, net	11	4,368	4,065	11,875
Deferred income taxes	18	1,384	2,424	433
Prepayments	9	38	31	1,570
Other non-current assets	12	15,959	3,531	2,702
Total non-current assets		68,782	51,586	57,279
Total assets		$119,897	$93,778	$91,500
Liabilities and Stockholders' Equity				
Current liabilities:				
Debt	15	$ 10,118	$ 7,408	$ 2,787
Trade and other accounts payable	14	26,051	19,783	15,492
Income tax payable	18	1,279	573	694
Derivative financial instruments	4	1,047	230	71
Provisions	16	81	25	363
Total current liabilities		38,576	28,019	19,407
Non-current liabilities:				
Debt	15	30,012	26,958	21,551
Derivative financial instruments	4	283	473	646
Provisions	16	1,107	155	7
Deferred income taxes	18	4,752	4,403	5,883
Income tax payable	18	469	623	553
Employee benefits	17	1,099	1,061	1,227
Other non-current liabilities	19	436	422	504
Total non-current liabilities		38,158	34,095	30,371
Total liabilities		76,734	62,114	49,778
Stockholders' equity				
Controlling interest:				
Capital stock	20	6,052	6,048	6,048
Share premium		9,106	9,071	9,071
Retained earnings		17,235	3,671	11,292
Other reserves		5,734	8,126	10,662
Total controlling interest		38,127	26,916	37,073
Non-controlling interest	13	5,036	4,748	4,649
Total stockholders' equity		43,163	31,664	41,722
Total liabilities and stockholders' equity		$119,897	$93,778	$91,500

The accompanying notes are an integral part of these consolidated financial statements.

Alpek, S. A. B. de C. V. and Subsidiaries
(Subsidiary of Alfa, S. A. B. de C. V.)

Consolidated Statements of Profit (Loss)

For the years ended December 31, 2018, 2017 and 2016
In millions of Mexican pesos, except for earnings per share amounts

	Note	2018	2017	2016
Revenues		$134,523	$98,998	$90,192
Cost of sales		(116,519)	(88,598)	(76,943)
Gross profit		18,004	10,400	13,249
Selling expenses		(2,136)	(1,747)	(1,578)
Administrative expenses		(3,166)	(2,080)	(2,043)
Other income, net	23	4,564	335	235
Income before impairment of intangible assets and trade receivables		17,266	6,908	9,863
Reversal of impairment of intangible assets (impairment of intangible assets and trade receivables)	2b	3,936	(9,762)	-
Operating income (loss)		21,202	(2,854)	9,863
Financial income	24	442	198	285
Financial expenses	24	(2,183)	(1,482)	(1,414)
Loss due to exchange fluctuation, net	24	(1,042)	(432)	(1,380)
Impairment of financial assets	2e	-	(1,694)	-
Financial result, net		(2,783)	(3,410)	(2,509)
Equity in income of associates and joint ventures		(30)	(4)	(3)
Income (loss) before taxes		18,389	(6,268)	7,351
Income taxes	18	(3,455)	1,713	(2,358)
Net consolidated income (loss)		$ 14,934	$(4,555)	$ 4,993
Income (loss) attributable to:				
Controlling interest		$ 13,633	$(5,487)	$3,625
Non-controlling interest		1,301	932	1,368
		$ 14,934	$(4,555)	$ 4,993
Earnings (losses) per basic and diluted share, in Mexican pesos		$ 6.44	$ (2.59)	$ 1.71
Weighted average outstanding shares (millions of shares)		2,118	2,117	2,117

The accompanying notes are an integral part of these consolidated financial statements.

Alpek, S. A. B. de C. V. and Subsidiaries
(Subsidiary of Alfa, S. A. B. de C. V.)

Consolidated Statements of Comprehensive Income (Loss)

For the years ended December 31, 2018, 2017 and 2016
In millions of Mexican pesos

	Note	2018	2017	2016
Net consolidated income (loss)		$14,934	$(4,555)	$ 4,993
Other comprehensive income (loss) for the year:				
Items that will not be reclassified to the statement of income:				
Remeasurement of employee benefit obligations, net of taxes	17, 18	(55)	50	64
Items that will be reclassified to the statement of income:				
Effect of derivative financial instruments designated as cash flow hedges, net of taxes	4, 18	(560)	123	384
Translation effect of foreign entities	18	(1,814)	(2,461)	6,233
Equity in other comprehensive income of associates and joint ventures.		-	-	(2)
Total other comprehensive income (loss) for the year		(2,429)	(2,288)	6,679
Consolidated comprehensive income (loss)		$12,505	(6,843)	$11,672
Attributable to:				
Controlling interest		$11,241	$(7,570)	$ 9,527
Non-controlling interest		1,264	727	2,145
Comprehensive income (loss) for the year		$12,505	$(6,843)	$11,672

The accompanying notes are an integral part of these consolidated financial statements.

Alpek, S. A. B. de C. V. and Subsidiaries
(Subsidiary of Alfa, S. A. B. de C. V.)

Consolidated Statements of Changes in Stockholders' Equity

For the years ended December 31, 2018, 2017 and 2016
In millions of Mexican pesos

	Capital stock	Share premium	Retained earnings	Other reserves	Tota contro inter
Balances as of January 1, 2016	$ 6,052	$ 9,071	$ 10,009	$ 4,822	$ 29,
Net income	-	-	3,625	-	3,
Total other comprehensive income for the year	-	-	62	5,840	5,
Comprehensive income	-	-	3,687	5,840	9,
Repurchase of own shares	(4)	-	(42)	-	
Dividends declared	-	-	(1,959)	-	(1,
Changes in the non-controlling interest	-	-	-	-	
Effect of transfer of business under common control	-	-	(403)	-	(
Balance as of December 31, 2016	6,048	9,071	11,292	10,662	37,
Net (loss) income	-	-	(5,487)	-	(5,
Total other comprehensive loss for the year	-	-	-	(2,083)	(2,
Comprehensive (loss) income	-	-	(5,487)	(2,083)	(7,
Dividends declared	-	-	(2,667)	-	(2,
Changes in the non-controlling interest	-	-	-	-	
Effect of assumption of non-controlling interest	-	-	(30)	-	
Other	-	-	563	(453)	
Balance as of December 31, 2017	6,048	9,071	3,671	8,126	26,
Net income	-	-	13,633	-	13,
Total other comprehensive income for the year	-	-		(2,392)	(2,
Comprehensive income	-	-	13,633	(2,392)	11,
Dividends declared	-	-	-	-	
Reissuance of shares	4	35	-	-	
Effect of initial adoption of IFRS	-	-	(14)	-	
Other	-	-	(55)	-	
Balance as of December 31, 2018	$ 6,052	$ 9,106	$ 17,235	$ 5,734	$ 38,

The accompanying notes are an integral part of these consolidated financial statements.

Alpek, S. A. B. de C. V. and Subsidiaries
(Subsidiary of Alfa, S. A. B. de C. V.)

Consolidated Statements of Cash Flows

For the years ended December 31, 2018, 2017 and 2016
In millions of Mexican pesos

	2018	2017	2016
Cash flows from operating activities			
Income (loss) before income taxes	$18,389	$ (6,268)	$ 7,351
Depreciation and amortization	2,885	2,635	2,560
(Reversal of impairment) and impairment of long-lived assets	(3,480)	7,702	2
Allowance for doubtful accounts	102	2,011	6
Financial result, net	2,359	3,069	2,265
Gain on changes in the fair value of derivative financial instruments	-	-	(4)
Gain on business combination	(4,597)	(238)	-
Loss on sale of property, plant and equipment	-	-	1
Share of losses of associates accounted for by the equity method	-	-	3
Statutory employee profit sharing, provisions and other items	(60)	(157)	(365)
Subtotal	15,598	8,754	11,819
Movements in working capital			
Increase in trade receivables and other assets	(4,373)	(2,861)	(1,440)
Increase in inventories	(6,977)	(1,874)	(1,439)
Increase in trade and other accounts payable	5,772	4,860	71
Income taxes paid	(1,759)	(1,654)	(2,992)
Net cash flows generated by operating activities	8,261	7,225	6,019
Cash flows from investing activities			
Interest collected	353	99	230
Cash flows in acquisition of property, plant and equipment	(1,979)	(4,416)	(4,543)
Cash flows in acquisition of intangible assets	(26)	(15)	(1,438)
Cash flows in business acquisition, net of cash acquired	(7,120)	-	(390)
Investment in joint ventures and associates	(5,805)	(39)	(82)
Derivative financial instruments	-	-	108
Loans collected from related parties	195	16	1,123
Notes receivable	(1,124)	(2,522)	(1,220)
Collection of notes	17	15	-
Restricted cash	-	(739)	-
Net cash flows used in investing activities	(15,489)	(7,601)	(6,212)
Cash flows from financing activities			
Proceeds from debt	9,137	15,041	3,534
Payments of debt	(3,153)	(4,647)	(2,549)
Interest paid	(2,038)	(1,292)	(1,213)
Derivative financial instruments	(12)	(17)	-
Dividends paid by Alpek, S. A. B. de C. V.	-	(2,667)	(1,959)
Dividends paid to non-controlling interest	(981)	(618)	(2,049)
Reissuance of shares	39	1	-
Repurchase of shares	-	-	(46)
Loans received from related parties	-	-	73
Loan payments to related parties	(2)	(2)	-
Net cash flows generated by (used in) financing activities	2,990	5,799	(4,209)
Net (decrease) increase in cash and cash equivalents	(4,238)	5,423	(4,402)
Effect of changes in exchange rates	(389)	437	687
Cash and cash equivalents at the beginning of the year	8,795	2,935	6,650
Cash and cash equivalents at the end of the year	$ 4,168	$ 8,795	$ 2,935

The accompanying notes are an integral part of these consolidated financial statements.

Alpek, S. A. B. de C. V. and Subsidiaries
(Subsidiary of Alfa, S. A. B. de C. V.)

Notes to the Consolidated Financial Statements

As of and for the years ended December 31, 2018, 2017 and 2016
Millions of Mexican pesos, except where otherwise indicated

1. General Information

Alpek, S. A. B. de C. V. and subsidiaries ("Alpek" or the "Company") operates through two major business segments: polyester chain products and plastic products. The polyester chain business segment, comprises the production of purified terephthalic acid (PTA), polyethylene terephthalate (PET) and polyester fibers, which serves the food and beverage packaging, textile and industrial filament markets. The Plastics & Chemicals business segment, comprises the production of polypropylene (PP), expandable polystyrene (EPS), caprolactam (CPL), fertilizers and other chemicals, which serves a wide range of markets, including the consumer goods, food and beverage packaging, automotive, construction, agriculture, oil industry, pharmaceutical markets and others.

Alpek, the largest petrochemical company in Mexico and the second largest in Latin America, is the main integrated producer of polyester in North America. Alpek operates the largest EPS plant in the continent, and one of the largest PP plants in North America and is the only producer of Caprolactam in Mexico.

The shares of Alpek, S. A. B. de C. V. are traded on the Mexican Stock Exchange ("MSE") and Alfa, S. A. B. de C. V. ("Alfa") is the main holding company. As of December 31, 2018, the percentage of Alpek's shares that traded on the MSE was 17.91%.

Alpek, S. A. B. de C. V. is located at Avenida Gomez Morin Sur No. 1111, Col. Carrizalejo, San Pedro Garza Garcia, Nuevo León, Mexico and operates productive plants located in Mexico, the United States of America, Canada, Argentina, Chile and Brazil.

In the following notes to the financial statements when referring to pesos or "$", it means millions of Mexican pesos. When referring to dollars or "US$", it means millions of dollars from the United States of America. When referring to Euros or "€" it means millions of Euros.

2. Significant events

2018

a. Secured financing to M&G Mexico

On December 29, 2017, the Company signed an agreement to provide secured financing to M&G Polímeros México, S. A. de C. V. ("M&G Mexico"). The credit facility is secured by a second lien on M&G Mexico's PET production plant in Altamira, for a maximum principal amount of US$60. During the year ended December 31, 2018, M&G Mexico disposed of the total amount of the credit facility. This amount was disbursed in several intervals subject to certain conditions, including a restructuring plan that was presented by M&G Mexico and approved by its creditors. Additionally, Alpek holds the credit rights over a US$100 loan made to M&G Mexico, which is secured by a first lien as described in Note 2e.

b. Acquisition of Corpus Christi Project from Mossi & Ghisolfi Group ("M&G")

On March 21, 2018, Alpek announced its participation in the creation of Corpus Christi Polymers LLC ("CCP"), a joint venture formed together with Indorama Ventures Holdings LP ("Indorama") and Far Eastern Investment (Holding) Limited ("Far Eastern"), through which it signed an asset purchase agreement with M&G USA Corp. and its affiliated debtors ("M&G Corp.") to acquire the integrated PTA-PET plant currently under construction in Corpus Christi, Texas, as well as certain intellectual property of M&G Corp. and a desalination/boiler plant that supplies water and steam to the place (the "Corpus Christi Project").

On December 28, 2018, the Company announced that CCP completed the acquisition of the Corpus Christi Project, for an aggregate amount of US$1,199 in cash and other capital contributions. Of this amount, Alpek contributed US$266 in cash and US$133 in other capital contributions, which correspond to a portion of its secured claim with M&G, arising under the Corpus Christi Capacity Reservation Agreement (“Capacity Reservation Agreement”); furthermore, as of December 31, 2018, Alpek has contributed US$16 in cash that remain in CCP’s cash account. In addition, the Company agreed to sell the rest of the Capacity Reservation Agreement to Indorama and Far Eastern (the "buyers"), for which it will obtain US$67 in cash, which will be payable in 3 years in equal parts from each of the buyers, subject to certain conditions. Alpek will recognize its investment in CCP as a joint venture through the equity method.

Once finished, the plant will have a nominal production capacity of 1.1 million and 1.3 million metric tons per year of PET and PTA, respectively. In accordance with the terms of CCP, the partners will provide resources to complete the Corpus Christi Project in the most efficient way. As of December 31, 2018, Alpek has invested US$416 and it is estimated that the project will be completed by the end of 2021.

Additionally, Alpek, Indorama and Far Eastern will each have the right to receive one third of the PTA and PET produced by the Corpus Christi Project upon completion. Moreover, each one is responsible for acquiring their raw materials independently, as well as carrying out the sale and distribution of their corresponding PTA and PET.

In line with the foregoing, Alpek recognized the reversal of a portion of the impairment recorded in 2017 on intangible assets (see Note 2e), for US$195, which correspond to the amount that the Company expects to recover from the Capacity Reservation Agreement, which is recognized as part of its investment in CCP for US$133, and as an account receivable from its joint venture partners for US$62 (recognized at present value).

c. *Acquisition of Petroquímica SUAPE y CITEPE*

On April 30, 2018, Alpek completed the acquisition of 100% of Companhia Petroquímica de Pernambuco ("Petroquímica Suape") and Companhia Integrada Têxtil de Pernambuco ("Citepe"), owned by Petróleo Brasileiro, S.A. ("Petrobras"), through DAK Americas Exterior, S.L. and Grupo Petrotemex, S. A. de C. V., with stakes of 99.99% and 0.01%, respectively. The total consideration paid by the Company was US$435, free of debt, which was paid in Brazilian reals at the closing date of the transaction.

As a result of this transaction, Alpek acquired an integrated PTA-PET site in Ipojuca, Pernambuco, Brazil, with a capacity of 640,000 and 450,000 tons per year of PTA and PET, respectively. Citepe also operates a textured polyester filament plant with a capacity of 90,000 tons per year. The operation was carried out due to Alpek’s strategy of making continuous and selected investments in integration, efficiency and expansion projects, in order to achieve a sustainable growth.

The consolidated financial statements of the Company include the financial information of Petroquímica Suape and Citepe as of the date of acquisition. The acquisition of the business is included in the Polyester segment.

The acquisition of Petroquímica Suape y Citepe met the criteria of a business combination in accordance with the requirements of IFRS 3 *Business Combinations*, for which the Company applied the acquisition method to measure the assets acquired and liabilities assumed in the transaction. The purchase price allocation was determined in 2018, and the adjustments derived from acquisition method accounting were recognized from the date of acquisition. The fair values of the assets acquired and liabilities assumed as a result of this acquisition are as follows:

	US$
Inventories	$ 101
Other current assets[1]	162
Recoverable taxes	115
Property, plant and equipment, net	353
Intangible assets[2]	21
Other non-current assets[3]	40
Current liabilities[4]	(87)
Provisions [5]	(50)
Net acquired assets	655
Bargain purchase gain	(220)
Consideration paid	$ 435

[(1)] Current assets consist of cash and cash equivalents for US$18, accounts receivable for US$98, recoverable taxes for US$45 and others for US$1.

[(2)] Intangible assets consist of customer relationships, which guarantee the existence and continuity of the business from the moment of acquisition.

[(3)] Other non-current assets consist of an indemnification asset for US$23 and others for US$17. The indemnification asset corresponds to the right of reimbursement in case of any disbursement that is made corresponding to labor and civil contingencies.

[(4)] Current liabilities consist of suppliers and accounts payable for US$77 and others for US$10.

[(5)] Provisions consist of provisions for labor contingencies for US$6, provisions for civil contingencies for US$18, provisions for tax contingencies for US$11 and provisions for reimbursement of taxes recovered for Petrobras for US$15.

As a result of this transaction, a gain associated with the business combination was recognized for an amount of US$220, recorded in 2018 (Note 23). Under the terms of IFRS 3, the gain associated with the business combination is mainly the result of Petrobras divesting of these operations as part of its Strategic Plan, in order to optimize its business portfolio and cease its participation in the petrochemical industry; the aforementioned portfolio included the plan to sell Petroquímica Suape and Citepe.

The consolidated statement of cash flows in 2018 presents the incorporation of the operations of Petroquímica Suape and Citepe into a single line within the investment activity, net of cash acquired.

d. Syndicated Credit Facility

On March 28, 2018, Alpek signed a contract to obtain an unsecured loan, for an amount of up to US$710, with MUFG Bank, Ltd. (formerly, The Bank of Tokyo-Mitsubishi UFJ, Ltd.), Citigroup Global Markets Inc., HSBC México S.A., Grupo Financiero HSBC and JPMorgan Chase Bank, N.A. The maturity of the loan is 3 years and has a period of availability of 18 months. The loan accrues interest at a variable rate of LIBOR + a spread that depends on leverage levels, and is subject to be prepaid at any time, totally or partially, without penalty.

<u>2017</u>

e. Impairment of assets related to agreements with various subsidiaries from Mossi & Ghisolfi Group ("M&G")

During 2015, the Company through its subsidiary Grupo Petrotemex, S. A. de C. V. ("Grupo Petrotemex"), held a PTA-PET supply agreement with M&G Resins USA, LLC ("M&G Resins"), by which Grupo Petrotemex would obtain supply rights for 500 thousand tons of PET (produced with 420 thousand tons of PTA) per year, in exchange for the payment of a consideration and supply of raw materials for its production.

Resulting from this agreement, the Company paid US$435 to M&G Resins, of which US$360 were recognized as intangible assets, to be amortized based on their production volumes, and US$75 were recognized as an inventory prepayment. Nevertheless, during 2017, M&G suspended payments and started formal procedures for the restructuring of its operations including bankruptcy declarations in United States and Italy as a consequence of its liquidity problems. As a consequence of the aforementioned events, the Company recognized an impairment for the following concepts:

	Impairment amount		**Effect on deferred tax**	**Recognized in net income**
Intangible assets and prepayments	US$435	$7,745	$1,658	$6,087
Trade and other accounts receivable[(1)]	113	2,017	560	1,457
Long-term notes receivable [(1)]	95	1,694	517	1,177

[(1)] Held with certain M&G subsidiaries.

Subsequently, on October 9, 2017, Alpek celebrated a transfer of rights agreement with Banco Inbursa S.A., over a mortgage-secured, simple credit facility contract with interest, held with M&G Polímeros México, S.A. de C.V. ("M&G Mexico"). The consideration paid by Alpek for the transfer of rights amounts to $1,870, which were recognized in the consolidated financial statements as other non-current assets. This agreement grants Alpek a right in the first instance over other M&G Mexico's creditors, and is guaranteed by a PET plant in Altamira, Mexico, whose fair value exceeds the amount of the right of payment held by Alpek.

f. Acquisition of Selenis Canada, Inc.

On July 29, 2016, through its subsidiary DAK Americas Exterior, S. L., Alpek acquired a controlling interest in Selenis Canada, Inc. ("Selenis", see note 3b) for a total of US$17.2 ($327). The acquired entity is the only producer of PET in Canada, which operates a manufacturing plant in Montreal, Canada with capacity to produce 144 thousand tons per year. This business acquisition is included in the Polyester segment. The consolidated financial statements include the financial information of Selenis beginning on August 1, 2016.

The acquisition of Selenis met the criteria of a business combination according to the requirements of IFRS 3, *Business Combinations*; therefore, the Company applied the acquisition method to measure the assets acquired and liabilities assumed in the transaction. The fair values of assets acquired and liabilities assumed as a result of this acquisition which were completed in 2017 are as follows:

	US$
Trade accounts receivable, net	$ 2.1
Inventories	10.0
Property, plant and equipment, net	69.0
Other assets	1.2
Trade accounts payable	(35.8)
Debt	(4.1)
Other accounts and expenses payable	(5.5)
Contingent liability	(7.5)
Net acquired assets	29.4
Bargain purchase gain	(12.2)
Consideration paid	$ 17.2

As a result of this transaction, a gain on a bargain purchase of US$12.2 was recognized in 2017. The 2016 consolidated financial statements have not been modified retrospectively due to the immaterial impacts of the acquisition method in the accounting adjustments.

2016

g. Monoethylene Glycol (MEG) manufacturing agreement

On December 15, 2014, the Company through its subsidiary DAK Americas LLC ("DAK") entered into a Toll Manufacturing Agreement with Huntsman Petrochemical LLC ("Huntsman") in which will obtain the supply rights of Monoethylene Glycol (MEG), which is used in the production of PET polyester, at a preferred toll rate. Huntsman will develop, own and operate the equipment for the production of MEG in its Port Neches, Texas plant and DAK will supply the raw materials for the production. The installation of equipment and beginning of production took place during June 2016.

Additionally, DAK paid US$65 to Huntsman during the installation of the equipment according to an established calendar and in compliance with certain milestones; therefore, DAK obtained the supply rights up to 28.8 million of pounds of product per year for a 15 year period commencing on the first day of the month in which the equipment was installed and the production began. The payments made are recorded under the intangible assets caption and are amortized within the cost of sales on a straight line basis during the life of the contract since the month of June 2016, once the supply of MEG began.

3. Summary of significant accounting policies

The following are the most significant accounting policies followed by the Company and its subsidiaries, which have been consistently applied in the preparation of their financial information in the years presented, unless otherwise specified:

a) Basis of preparation

The consolidated financial statements of Alpek have been prepared in accordance with International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board ("IASB"). IFRS include all International Accounting Standards ("IAS") in force and all related interpretations issued by the International Financial Reporting Interpretations Committee ("IFRIC"), including those previously issued by the Standing Interpretations Committee ("SIC").

The consolidated financial statements have been prepared on a historical cost basis, except for the cash flow hedges which are measured at fair value, and for the financial assets and liabilities at fair value through profit or loss with changes reflected in the consolidated statement of profit (loss) and for financial assets available for sale.

The preparation of the consolidated financial statements in conformity with IFRS requires the use of certain critical accounting estimates. Additionally, it requires management to exercise judgment in the process of applying the Company's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where judgments and estimates are significant to the consolidated financial statements, are disclosed in Note 5.

b) Consolidation

i. Subsidiaries

The subsidiaries are all the entities over which the Company has control. The Company controls an entity when it is exposed, or has the right to variable returns from its interest in the entity and it is capable of affecting the returns through its power over the entity. When the Company's participation in subsidiaries is less than 100%, the share attributed to outside stockholders is reflected as non-controlling interest. Subsidiaries are consolidated in full from the date on which control is transferred to the Company and up to the date it loses such control.

The accounting method used by the Company for business combinations is the acquisition method. The Company defines a business combination as a transaction through which it obtains control over a business, whereby it has the power to steer and manage the relevant operations of all assets and liabilities of the business with the purpose of providing a return in the form of dividends, lower costs or other economic benefits directly to investors.

The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred and the equity interests issued by the Company. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Identifiable acquired assets and liabilities and contingent liabilities assumed in a business combination are initially measured at their fair values at the acquisition date. The Company recognizes any non-controlling interest in the acquiree based on the share of the non-controlling interest in the net identifiable assets of the acquired entity.

The Company accounts for business combinations of entities using the predecessor method in a jointly controlled entity. The predecessor method involves the incorporation of the carrying amounts of the acquired entity, which includes the goodwill recognized at the consolidated level with respect to the acquiree. Any difference between the carrying value of the net assets acquired at the level of the subsidiary and its carrying amount at the level of the Company is recognized in stockholders' equity.

The acquisition-related costs are recognized as expenses when incurred.

Goodwill is initially measured as excess of the sum of the consideration transferred and the fair value of the non-controlling interest over the net identifiable assets and liabilities assured. If the consideration transferred is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognized directly in the consolidated statement of profit (loss).

If the business combination is achieved in stages, the value in books at the acquisition date of the equity previously held by the Company in the acquired entity is remeasured at its fair value at the acquisition date. Any loss or gain resulting from such remeasurement is recorded in income of the year.

Transactions and intercompany balances and unrealized gains on transactions between Alpek's companies are eliminated in preparing the consolidated financial statements. Alpek's subsidiaries apply the same accounting policies as those disclosed in these consolidated financial statements.

As of December 31, 2018, 2017 and 2016, the main companies that comprise the consolidated financial statements of the Company are as follows:

		Shareholding (%) [2]			
	Country [1]	**2018**	**2017**	**2016**	**Functional currency**
Alpek, S. A. B. de C. V. (Holding Company)					Mexican peso
Grupo Petrotemex, S. A. de C. V. (Holding Company)		100	100	100	US dollar
DAK Americas, LLC	USA	100	100	100	US dollar
Dak Resinas Americas México, S. A. de C. V.		100	100	100	US dollar
DAK Americas Exterior, S. L. (Holding Company)	Spain	100	100	100	Euro
DAK Americas Argentina, S. A.	Argentina	100	100	100	Argentine peso
Compagnie Selenis Canada [3]	Canada	50	50	50	US dollar
Tereftalatos Mexicanos, S. A. de C. V.		91	91	91	US dollar
Akra Polyester, S. A. de C. V.		93	93	93	US dollar
Cogeneración de Energía Limpia de Cosoleacaque, S. A. de C. V.		100	100	100	Mexican peso
Cogeneración de Altamira, S. A. de C. V.		100	100	100	Mexican peso
Companhia Petroquímica de Pernambuco [4]	Brazil	100	-	-	Brazilian real
Companhia Integrada Textil de Pernambuco [4]	Brazil	100	-	-	Brazilian real
Indelpro, S. A. de C. V. (Indelpro)		51	51	51	US dollar
Polioles, S. A. de C. V. (Polioles)		50	50	50	US dollar
Grupo Styropek, S. A. de C. V. (Holding Company)		100	100	100	Mexican peso
Styropek México, S. A. de C. V.		100	100	100	US dollar
Styropek, S. A.	Argentina	100	100	100	Argentine peso
Aislapol, S. A.	Chile	100	100	100	Chilean peso
Styropek do Brasil, LTD	Brazil	100	100	100	Brazilian real
Unimor, S. A. de C. V. (Holding Company)		100	100	100	Mexican peso
Univex, S. A.		100	100	100	Mexican peso

(1) Companies incorporated in Mexico, except those indicated.

(2) Ownership percentage that Alpek has in the holding companies and ownership percentage that such holding companies have in the companies integrating the groups. Ownership percentages and the voting rights are the same.

(3) The purchase agreement of this entity, whose legal name was "Selenis Canada Inc.", included an earn-out clause related to the production of PETG, which was initiated by Selenis (legal entity). Under this clause, the seller holds in escrow the shares not acquired by the Company, which may be released as long as the Company completes the first PETG production run.

(4) Entities acquired in 2018. See note 2.c.

As of December 31, 2018, 2017 and 2016, there are no significant restrictions for investment in shares of subsidiary companies mentioned above.

ii. Absorption (dilution) of control in subsidiaries

The effect of absorption (dilution) of control in subsidiaries, in example, an increase or decrease in the percentage of control, is recorded in stockholders' equity, directly in retained earnings, in the period in which the transactions that cause such effects occur. The effect of absorption (dilution) of control is determined by comparing the book value of the investment before the event of dilution or absorption against the book value after the relevant event. In the case of loss of control, the dilution effect is recognized in income.

When the Company issues purchase obligations on certain non-controlling interests in a consolidated subsidiary and non-controlling stockholders retain the risks and awards on these shares in the consolidated subsidiary, these are recognized as financial liabilities for the present value of the refundable amount of the options, initially recorded with a corresponding reduction in the stockholders' equity, and subsequently accruing through financial charges to income during the contractual period.

iii. Sale or disposal of subsidiaries

When the Company ceases to have control any retained interest in the entity is re-measured at fair value, and the change in the carrying amount is recognized in the consolidated statement of profit (loss). The fair value is the initial carrying value for the purposes of accounting for any subsequent retained interest in the associate, joint venture or financial asset. Any amount previously recognized in comprehensive income in respect of that entity is accounted for as if the Company had directly disposed of the related assets and liabilities. This results in the amounts previously recognized in comprehensive income being reclassified to income for the year.

iv. Associates

Associates are all entities over which the Company has significant influence but not control. Generally, an investor must hold between 20% and 50% of the voting rights in an investee for it to be an associate. Investments in associates are accounted for using the equity method and are initially recognized at cost. The Company's investment in associates includes goodwill identified at acquisition, net of any accumulated impairment loss.

If the equity in an associate is reduced but significant influence is maintained, only a portion of the amounts recognized in the comprehensive income are reclassified to income for the year, where appropriate.

The Company's share of profits or losses of associates, post-acquisition, is recognized in the consolidated statement of profit (loss) and its share in the other comprehensive income of associates is recognized as other comprehensive income. When the Company's share of losses in an associate equals or exceeds its equity in the associate, including unsecured receivables, the Company does not recognize further losses unless it has incurred obligations or made payments on behalf of the associate.

The Company assesses at each reporting date whether there is objective evidence that the investment in the associate is impaired. If so, the Company calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying value and recognizes it in "equity in results of associates recognized using the equity method" in the consolidated statement of profit (loss).

Unrealized gains on transactions between the Company and its associates are eliminated to the extent of the Company's equity in such gains. Unrealized losses are also eliminated unless the transaction provides evidence that the asset transferred is impaired. In order to ensure consistency with the policies adopted by the Company, the accounting policies of associates have been modified. When the Company ceases to have significant influence over an associate, any difference between the fair value of the remaining investment, including any consideration received from the partial disposal of the investment and the book value of the investment is recognized in the consolidated statement of profit (loss).

v. Joint ventures

Joint arrangements are those where there is joint control since the decisions over relevant activities require the unanimous consent of each one of the parties sharing control.

Investments in joint arrangements are classified in accordance with the contractual rights and obligations of each investor such as: joint operations or joint ventures. When the Company holds the right over assets and obligations for related assets under a joint arrangement, this is classified as a joint operation. When the company holds rights over net assets of the joint arrangement, this is classified as a joint venture. The Company has assessed the nature of its joint arrangements and classified them as joint ventures. Joint ventures are accounted for by using the equity method applied to an investment in associates.

c) Foreign currency translation

i. Functional and reporting currency

The amounts included in the financial statements of each of the Company's subsidiaries, associates and joint ventures should be measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The consolidated financial statements are presented in Mexican pesos.

When there is a change in the functional currency of one of the subsidiaries, according to International Accounting Standard 21, *Effects of Changes in Foreign Exchange Rates* ("IAS 21"), this change is accounted for prospectively, translating at the date of the functional currency change, all assets, liabilities, equity, and income items at the exchange rate of that date.

ii. Transactions and balances

Transactions in foreign currencies are translated into the functional currency using the foreign exchange rates prevailing at the transaction date or valuation date when the amounts are re-measured. Gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at the closing exchange rates are recognized as foreign exchange gain or loss in the consolidated statement of profit (loss), except for those which are deferred in comprehensive income and qualify as cash flow hedges.

Changes in the fair value of securities or monetary financial assets denominated in foreign currency classified as available for sale are divided between fluctuations resulting from changes in the amortized cost of such securities and other changes in value. Subsequently, currency fluctuations are recognized in income and changes in the carrying amount arising from any other circumstances are recognized as part of comprehensive income.

iii. Translation of subsidiaries with recording currency other than the functional currency

The financial statements of foreign subsidiaries, having a recording currency different from their functional currency were translated into the functional currency in accordance with the following procedure:

a) The balances of monetary assets and liabilities denominated in the recording currency were translated at the closing exchange rate.

b) To the historical balances of monetary assets and liabilities and stockholders' equity translated into the functional currency the movements that occurred during the period were added, which were translated at the historical exchange rates. In the case of the movements of non-monetary items recognized at fair value, which occurred during the period, stated in the recording currency, these were translated using the historical exchange rates in effect on the date when the fair value was determined.

c) The income, costs and expenses of the periods, expressed in the recording currency, were translated at the historical exchange rate of the date they were accrued and recognized in the consolidated statement of profit (loss), except when they arose from non-monetary items, in which case the historical exchange rate of the non-monetary items was used.

d) The exchange differences arising in the translation from the recording currency to the functional currency were recognized as income or expense in the consolidated statement of profit (loss) in the period they arose.

iv. Translation of subsidiaries with functional currency other than the presentation currency

The results and financial position of all Company entities that have a functional currency different from the presentation currency are translated into the presentation currency as follows, depending on whether the functional currency comes from a non-hyperinflationary or hyperinflationary environment:

Non-hyperinflationary environment

a) Assets and liabilities for each statement of financial position presented are translated at the closing exchange rate at the date of the statement of financial position;

b) Stockholders' equity of each statement of financial position presented is translated at historical exchange rate.

c) Income and expenses for each statement of profit (loss) are translated at average exchange rate (when the average exchange rate is not a reasonable approximation of the cumulative effect of the rates of the transaction, to the exchange rate at the date of the transaction is used); and

d) The resulting exchange differences are recognized in the consolidated statement of other comprehensive income as translation effect.

Hyperinflationary environment

a) Assets, liabilities and equity in the statement of financial position, as well as income and expenses in the income statement, are translated at the closing exchange rate of the statement of financial position, after being restated in its functional currency (Note 3d); and

b) Assets, liabilities, equity, income and expenses of the comparative period, are maintained according to the amount obtained in the translation of the year in question, that is, the financial statements of the preceding period. These amounts are not adjusted to subsequent exchange rates because the Company presents its financial information in Mexican pesos, which correspond to a currency of a non-hyperinflationary environment.

The primary exchange rates in the various translation processes are listed below:

		Local currency to Mexican pesos					
		Closing exchange rate at December 31,			**Average annual exchange rate**		
Country	**Local Currency**	**2018**	**2017**	**2016**	**2018**	**2017**	**2016**
United States	U.S. dollar	19.68	19.74	20.66	20.15	18.94	18.66
Argentina	Argentine peso	0.52	1.06	1.30	0.53	1.14	1.26
Brazil	Brazilian real	5.07	5.96	6.35	5.18	5.91	5.41
Chile	Chilean peso	0.03	0.03	0.03	0.03	0.03	0.03

d) Hyperinflationary effects

As of July 1, 2018, the cumulative inflation from the prior 3 years in Argentina exceeded 100%; consequently, the Argentine peso was classified as a currency of a hyperinflationary economic environment. As a result, the financial statements of the subsidiaries located in that country, whose functional currency is the Argentine peso, have been remeasured and adjusted for inflation in accordance with the requirements of the International Accounting Standard 29, *Financial Information in Hyperinflationary Economies,* ("IAS 29") and have been consolidated in compliance with the requirements of IAS 21. The purpose of applying these requirements is to consider changes in the general purchasing power of the Argentine peso in order to present the financial statements in the measuring unit current at the date of the statement of financial position. The financial statements before including any inflation adjustments were prepared using the historical cost method.

The Company determined the inflation adjustments in its consolidated financial statements in the following manner:

a. The amounts corresponding to non-monetary items of each statement of financial position, which are not measured at the date of the statement of financial position at their fair value or net realizable value, as the case may be, are restated by applying to their historical cost the change of a general price index from the date of acquisition or the date of its last measurement at fair value, to the date of the consolidated statement of financial position;

b. The amounts corresponding to monetary items of the statement of financial position are not restated;

c. The components of stockholders' equity of each consolidated statement of financial position are restated:

    i. at the beginning of the first period of application of IAS 29, except for retained earnings, by applying the change of a general price index from the dates the components were originated to the date of restatement. Restated retained earnings are derived from all the other balances in the statement of financial position;

    ii. at the end of the first period and in subsequent periods, all components of stockholders' equity are restated by applying a general price index from the beginning of the period or the date of contribution, if later.

d. Revenues and expenses are restated by applying the change in the general price index, from the date on which the expenses and revenues were recognized, up to the reporting date.

e. Gains or losses arising from the net monetary position are recognized in the consolidated statement of profit (loss).

As of July 1, 2018, the Company reflects the effects of hyperinflation on the financial information of its subsidiaries in Argentina using price indexes that are considered appropriate in accordance with Resolution 539/19 JG (the "Resolution") of the Argentine Federation of Professional Councils of Economic Sciences. This resolution establishes that a combination of price indices should be used in the calculation of the effects of remeasurement of financial statements. Therefore, the Company has decided to use the Consumer Price Index ("CPI") to restate balances and transactions that have been generated from January 2017; and the IPIM (domestic wholesale price index) for balances and transactions generated for all months prior to 2017, except for the months of November and December 2015, due to the fact that such index was not available. For these months, the Company used the IPCBA (consumer price index of the city of Buenos Aires).

The effects of the restatement of the financial statements of the subsidiaries located in Argentina, were not material; therefore, they were included in the "Financial result, net" line item of the year ended December 31, 2018.

e) Cash and cash equivalents

Cash and cash equivalents include cash on hand, bank deposits available for operations and other short-term investments of high liquidity and high credit quality with original maturities of three months or less, all of which are subject to insignificant risk of changes in value. Bank overdrafts are presented as loans as part of the current liabilities.

f) Restricted cash

Cash and cash equivalents whose restrictions cause them not to comply with the definition of cash and cash equivalents given above, are presented in a separate line in the consolidated statement of financial position and are excluded from cash and cash equivalents in the consolidated statement cash flows.

g) *Financial instruments*

Financial assets

Through December 31, 2017, the Company classified financial assets into the following categories: at fair value through profit or loss, loans and receivables, investments held to maturity and available for sale. The classification depended on the purpose for which the financial assets were acquired.

Beginning January 1, 2018, in accordance to the adoption of IFRS 9, *Financial Instruments*, the Company subsequently classifies and measures its financial assets based on the Company's business model to manage financial assets, and on the characteristics of the contractual cash flows of such assets. This way financial assets can be classified at amortized cost, at fair value through other comprehensive income, and at fair value through profit or loss. Management determines the classification of its financial assets upon initial recognition. Purchases and sales of financial assets are recognized at settlement date.

Financial assets are entirely written off when the right to receive the related cash flows expires or is transferred, and the Company has also substantially transferred all the risks and rewards of its ownership, as well as the control of the financial asset.

Classes of financial assets under IAS 39, in effect through December 31, 2017

i. Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are financial assets held for trading. A financial asset is classified in this category if acquired principally for the purpose of selling in the short term. Derivatives are also categorized as held for trading unless they are designated as hedges.

Financial assets at fair value through profit or loss are initially recognized at fair value and transaction costs are expensed in the consolidated statement of profit (loss). Gains or losses from changes in fair value of these assets are presented in the consolidated income statement as incurred.

Beginning January 1, 2018, financial assets at fair value through profit or loss still maintain their classification according to the assessment of their business model; however, financial assets that were previously classified in this category as of December 31, 2017 and 2016, did not have any measurement impacts and were classified as described in number *vii* of this section.

ii. Loans and receivables

The receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for maturities greater than 12 months after the consolidated statement of financial position date. These are classified as non-current assets.

Loans and receivables are measured initially at fair value plus directly attributable transaction costs and subsequently at amortized cost, using the effective interest method. When circumstances occur that indicate that the amounts receivable will not be collected at the amounts originally agreed or will be collected in a different period, the receivables are impaired.

Beginning January 1, 2018, loans and receivables are considered within the class of financial assets at amortized cost (see number *v* in this section).

iii. Held to maturity investments

If the Company intends and has the demonstrable ability to hold debt securities to maturity, they are classified as held to maturity. Assets in this category are classified as current assets if expected to be settled within the next 12 months, otherwise they are classified as non-current. Initially they are recognized at fair value plus any directly attributable transaction costs, and subsequently they are valued at amortized cost using the effective interest method. Investments held to maturity are recognized or derecognized on the day they are transferred to or by the Company. Beginning January 1, 2018, investments held to maturity are considered within the class of financial assets at amortized cost (see number *v* in this section); however, as of December 31, 2017 and 2016, the Company did not hold this type of investment.

iv. Available for sale investments

Available for sale investments are non-derivative financial assets that are either designated in this category or not classified in any of the other categories. They are included in non-current assets unless their maturity is less than 12 months or management intends to dispose of the investment within the next 12 months after the consolidated statement of financial position date.

Available for sale investments are initially recognized at fair value plus directly attributable transaction costs. Subsequently, these assets are carried at fair value (unless they cannot be measured by their value in an active market and the value is not reliable, in which case they will be recognized at cost less impairment).

Gains or losses arising from changes in fair value of monetary and non-monetary instruments are recognized directly in the consolidated statement of comprehensive income in the period in which they occur.

When investments classified as available for sale are sold or impaired, the accumulated fair value adjustments recognized in equity are reclassified to the consolidated statement of profit (loss).

As of December 31, 2017 and 2016, the Company did not hold this type of investments.

Classes of financial assets under IFRS 9, in effect beginning January 1, 2018

v. Financial assets at amortized cost

Financial assets at amortized cost are those that i) are held within a business model whose objective is to hold said assets in order to collect contractual cash flows; and ii) the contractual terms of the financial asset give rise, on specified dates, to cash flows that are solely payments of principal and interest on the amount of outstanding principal.

vi. Financial assets at fair value through other comprehensive income

Financial assets at fair value through other comprehensive income are those whose business model is based on both collecting contractual cash flows and selling the financial assets; and their contractual terms give rise, on specified dates, to cash flows that are solely payments of principal and interest on the amount of outstanding principal. As of December 31, 2018, the Company does not hold financial assets to be measured at fair value through other comprehensive income.

vii. Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss, in addition to those described in point *i* in this section, are those that do not meet the characteristics to be measured at amortized cost or fair value through other comprehensive income, since: i) they have a business model different to those that seek to collect contractual cash flows, or collect contractual cash flows and sell the financial assets, or otherwise ii) the generated cash flows are not solely payments of principal and interest on the amount of outstanding principal.

Despite the previously mentioned classifications, the Company may make the following irrevocable elections in the initial recognition of a financial asset:

a. Disclose the subsequent changes in the fair value of an equity instrument in other comprehensive income, only if such investment (in which no significant influence, joint control or control is maintained) is not held for trading purposes, or is a contingent consideration recognized as a result of a business combination.

b. Assign a debt instrument to be measured at fair value in profit or loss, if such election eliminates or significantly reduces an accounting mismatch that would arise from the measurement of assets or liabilities or the recognition of profits and losses on them in different basis.

As of December 31, 2018, the Company has not made any of the irrevocable designations described above.

Impairment of financial assets

Through December 31, 2017, the Company assessed, at the end of each reporting period, whether there was objective evidence of impairment of each financial asset or group of financial assets. An impairment loss was recognized if there was objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a “loss event”), and provided that the loss event (or events) had an impact on the estimated future cash flows derived from the financial asset or group of financial assets that could be reliably estimated.

New impairment policy from the adoption of IFRS 9

Beginning January 1, 2018, the Company used a new impairment model based on expected credit losses rather than losses incurred, applicable to financial assets subject to such assessment (i.e. financial assets measured at amortized cost and at fair value through other comprehensive income), as well as lease receivables, contract assets, certain written loan commitments, and financial guarantee contracts. The expected credit losses on these financial assets are estimated from the initial recognition of the asset at each reporting date, using as a reference the past experience of the Company's credit losses, adjusted for factors that are specific to the debtors or groups of debtors, general economic conditions, and an assessment of both the current direction and the forecast of future conditions.

a. Trade receivables

The Company adopted the simplified expected loss calculation model, through which expected credit losses during the account receivable’s lifetime are recognized.

The Company performs an analysis of its portfolio of customer receivables, in order to determine if there are significant customers for whom it requires an individual assessment; meanwhile, customers with similar characteristics that share credit risks (participation in the portfolio of accounts receivable, type of market, sector, geographic area, etc.), are grouped to be evaluated collectively.

In its impairment assessment, the Company may include indications that the debtors or a group of debtors are experiencing significant financial difficulties, and also observable data indicating that there is a significant decrease in the estimated cash flows to be received, including arrears.

For purposes of the historical estimate, the Company considers that the following constitutes an event of default, since historical experience indicates that financial assets are not recoverable when they meet any of the following criteria:

- the debtor does not fulfill its financial agreements; or
- Information obtained internally or from external sources indicates that it is unlikely that the debtor will pay its creditors, including the Company, in its entirety (without considering any guarantee held by the Company).

The Company defined the breach threshold as the period from which the recovery of the account receivable subjected to analysis is marginal, considering the internal risk management customers with similar characteristics sharing credit risks (participation in trade receivables portfolio, type of market, sector, geographic area, etc.), are grouped to be evaluated collectively.

b. Other financial instruments

The Company recognizes credit losses expected during the asset’s lifetime of all financial instruments for which credit risk has significantly increased since its initial recognition (assessed on a collective or individual basis), considering all the reasonable and sustainable information, including the one referring to the future. If at the presentation date, the credit risk a financial instrument has not significantly increased since its initial recognition, the Company calculates the loss allowance for that financial instrument as the amount of expected credit losses in the following 12 months.

In both cases, the Company recognizes in profit or loss of the period the decrease or increase in the expected credit loss allowance at the end of the period.

Management assesses the impairment model and the inputs used therein at least once every 3 months, in order to ensure that they remain in effect based on the current situation of the portfolio.

Financial liabilities

Non-derivative financial liabilities are initially recognized at fair value and are subsequently valued at amortized cost using the effective interest method. Liabilities in this category are classified as current liabilities if expected to be settled within the next 12 months, otherwise they are classified as non-current.

Trade payables are obligations to pay for goods or services that have been acquired or received from suppliers in the ordinary course of business. Loans are initially recognized at fair value, net of transaction costs incurred. Loans are subsequently carried at amortized cost; any difference between the funds received (net of transaction costs) and the settlement value is recognized in the consolidated statement of profit (loss) over the term of the loan using the effective interest method.

Derecognition of financial liabilities

The Company derecognizes financial liabilities if, and only if, the obligations of the Company are fulfilled, cancelled or have expired. The difference between the carrying amount of the derecognized financial liability and the consideration paid and payable is recognized in profit or loss.

Additionally, when the Company carries out a refinancing transaction and the previous liability qualifies to be derecognized, the costs incurred in the refinancing are recognized immediately in profit or loss at the date of termination of the previous financial liability.

Offsetting financial assets and liabilities

Assets and liabilities are offset and the net amount is presented in the consolidated statement of financial position when the right to offset the recognized amounts is legally enforceable and there is an intention to settle on a net basis or to realize the asset and settle the liability simultaneously.

h) Derivative financial instruments and hedging activities

All derivative financial instruments are identified and classified as fair value hedges or cash flow hedges, for trading or the hedging of market risks and are recognized in the consolidated statement of financial position as assets and/or liabilities at fair value and similarly measured subsequently at fair value. The fair value is determined based on recognized market prices and its fair value is determined using valuation techniques accepted in the financial sector.

The fair value of hedging derivatives is classified as a non-current asset or liability if the remaining maturity of the hedged item is more than 12 months and as a current asset or liability if the remaining maturity of the hedged item is less than 12 months.

Derivative financial instruments classified as hedges are contracted for risk hedging purposes and meet all hedging requirements; their designation at the beginning of the hedging operation is documented, describing the objective, primary position, risks to be hedged and the effectiveness of the hedging relationship, characteristics, accounting recognition and how the effectiveness is to be measured.

Fair value hedges

Changes in the fair value of derivative financial instruments are recorded in the consolidated statement of profit (loss). The change in fair value hedges and the change in the primary position attributable to the hedged risk are recorded in the consolidated statement of profit (loss) in the same line item as the hedged position. As of December 31, 2018, 2017 and 2016, the Company does not hold derivative financial instruments classified as fair value hedges.

Cash flow hedges

The changes in the fair value of derivative instruments associated to cash flow hedges are recorded in stockholders' equity. The effective portion is temporarily recorded in comprehensive income, within stockholders' equity and is reclassified to profit or loss when the hedged position affects these. The ineffective portion is immediately recorded in income.

Net investment hedge in a foreign transaction

Beginning March 1, 2018, the Company applies the hedge accounting to currency risk arising from its investments in foreign transactions for variations in exchange rates arising between the functional currency of such transaction and the functional currency of the holding entity, regardless of whether the investment is maintained directly or through a sub-holding entity. Variation in exchange rates is recognized in the other items of comprehensive income as part of the translation effect, when the foreign transaction is consolidated.

To this end, the Company designates the debt denominated in a foreign currency as a hedging instrument; therefore, the exchange rate effects caused by the debt are recognized in other components of comprehensive income, on the translation effects line item, to the extent that the hedge is effective. When the hedge is not effective, exchange differences are recognized in profit or loss.

Suspension of hedge accounting

The Company suspends hedge accounting when the derivative financial instrument or the non-derivative financial instrument has expired, is cancelled or exercised, when the derivative or non-derivative financial instrument is not highly effective to offset the changes in the fair value or cash flows of the hedged item. The replacement or successive renewal of a hedging instrument for another one is not an expiration or resolution if such replacement or renewal is part of the Company's documented risk management objective and it is consistent with this.

On suspending hedge accounting, in the case of fair value hedges, the adjustment to the carrying amount of a hedged amount for which the effective interest rate method is used, is amortized to income over the period to maturity. In the case of cash flow hedges, the amounts accumulated in equity as a part of comprehensive income remain in equity until the time when the effects of the forecasted transaction affect income. In the event the forecasted transaction is not likely to occur, the income or loss accumulated in comprehensive income are immediately recognized in the consolidated statement of profit (loss). When the hedge of a forecasted transaction appears satisfactory and subsequently does not meet the effectiveness test, the cumulative effects in comprehensive income in stockholders' equity are transferred proportionally to the consolidated statement of profit (loss), to the extent the forecasted transaction impacts it.

The fair value of derivative financial instruments reflected in the consolidated financial statements of the Company, is a mathematical approximation of their fair value. It is computed using proprietary models of independent third parties using assumptions based on past and present market conditions and future expectations at the closing date.

i) Inventories

Inventories are stated at the lower of cost or net realizable value. Cost is determined using the average cost method. The cost of finished goods and work-in-progress includes cost of product design, raw materials, direct labor, other direct costs and production overheads (based on normal operating capacity). It excludes borrowing costs. The net realizable value is the estimated selling price in the normal course of business, less the applicable variable selling expenses. Costs of inventories include any gain or loss transferred from other comprehensive income corresponding to raw material purchases that qualify as cash flow hedges.

j) Property, plant and equipment

Items of property, plant and equipment are recorded at cost less the accumulated depreciation and any accrued impairment losses. The costs include expenses directly attributable to the asset acquisition.

Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be reliably measured. The carrying amount of the replaced part is derecognized. Repairs and maintenance are recognized in the consolidated statement of profit (loss) during the year they are incurred. Major improvements are depreciated over the remaining useful life of the related asset.

When the Company carries out major repairs or maintenance of its property, plant and equipment assets, and the cost is recognized in the book value of the corresponding asset as a replacement, provided that the recognition criteria are met. The remaining portion of any major repair or maintenance is derecognized. The Company subsequently depreciates the recognized cost in the useful life assigned to it, based on its best estimate of useful life.

Depreciation is calculated using the straight-line method, considering separately each of the asset's components, except for land, which is not subject to depreciation. The estimated useful lives of the classes of assets are as follows:

Buildings and constructions	40 to 50 years
Machinery and equipment	10 to 40 years
Vehicles	15 years
Furniture and lab and IT equipment	2 to 13 years
Other	3 to 20 years

The spare parts to be used after one year and attributable to specific machinery are classified as property, plant and equipment in other fixed assets.

Borrowing costs related to financing of property, plant and equipment whose acquisition or construction requires a substantial period (nine months), are capitalized as part of the cost of acquiring such qualifying assets, up to the moment when they are suitable for their intended use or sale.

Assets classified as property, plant and equipment are subject to impairment tests when events or circumstances occur indicating that the carrying amount of the assets may not be recoverable. An impairment loss is recognized in the consolidated statement of profit (loss) in other expenses, net, for the amount by which the carrying amount of the asset exceeds its recoverable amount. The recoverable amount is the higher of fair value less costs to sell and value in use.

The residual value and useful lives of assets are reviewed at least at the end of each reporting period and, if expectations differ from previous estimates, the changes are accounted for as a change in accounting estimate.

Gains and losses on disposal of assets are determined by comparing the sale value with the carrying amount and are recognized in other expenses, net, in the consolidated statement of profit (loss).

k) Leases

The classification of leases as finance or operating depends on the substance of the transaction rather than the form of the contract.

Leases in which a significant portion of the risks and rewards relating to the leased property are retained by the lessor are classified as operating leases. Payments made under operating leases (net of incentives received by the lessor) are recognized in the consolidated statement of profit (loss) based on the straight-line method over the lease period.

Leases where the Company assumes substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalized at the beginning of the lease, at the lower of the fair value of the leased property and the present value of the minimum lease payments. If its determination is practical, in order to discount the minimum lease payments to present value, the interest rate implicit in the lease is used; otherwise, the incremental borrowing rate of the lessee should be used. Any initial direct costs of the leases are added to the original amount recognized as an asset.

Each lease payment is allocated between the liability and finance charges to achieve a constant rate on the outstanding balance. The corresponding rental obligations are included in non-current debt, net of finance charges. The interest element of the finance cost is charged to the income for the year during the period of the lease, so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. Property, plant and equipment acquired under finance leases are depreciated over the shorter of the asset's useful life and the lease term.

As of January 1, 2019, as a result of the adoption of IFRS 16, *Leases*, the Company´s accounting policy for the treatment of leases as a lessee, has been modified according with what it is detailed in Note 3y.

l) Intangible assets

Intangible assets are recognized in the consolidated statement of financial position when they meet the following conditions: they are identifiable, provide future economic benefits and the Company has control over such benefits.

Intangible assets are classified as follows:

i. Indefinite useful life

These intangible assets are not amortized and are subject to annual impairment assessment. As of December 31, 2018, 2017 and 2016, no factors have been identified limiting the life of these intangible assets.

ii. Finite useful life

These assets are recognized at cost less the accumulated amortization and impairment losses recognized. They are amortized on a straight, line basis over their estimated useful life, determined based on the expectation of generating future economic benefits, and are subject to impairment tests when triggering events of impairment are identified.

The estimated useful lives of intangible assets with finite useful lives are summarized as follows:

Development costs	15.5 years
Supply rights	15 years
Non-competition agreements	5 to 10 years
Customer relationships	6 to 7 years
Software and licenses	3 to 7 years
Intellectual property rights	20 to 25 years
Maquila rights	15 years
Other	20 years

Development costs

Research costs are recognized in income as incurred. Expenditures on development activities are recognized as intangible assets when such costs can be reliably measured, the product or process is technically and commercially feasible, potential future economic benefits are obtained and the Company intends also has sufficient resources to complete the development and to use or sell the asset. Their amortization is recognized in income by the straight-line method over the estimated useful life of the asset. Development expenditures that do not qualify for capitalization are recognized in income as incurred.

Licenses

Licenses acquired in a separate transaction, are recorded at acquisition cost, while those acquired in a business combination are recognized at fair value at acquisition date.

Licenses that have a defined useful life are presented at cost less accumulated amortization. Amortization is recorded by the straight-line method over its estimated useful life.

The acquisition of software licenses is capitalized based on the costs incurred to acquire and use the specific software.

Software development

Costs associated with the maintenance of software are recorded as expenses as incurred.

Development costs directly related with the design and tests of unique and identifiable software products controlled by the Company are recorded as intangible assets when they fulfill the following criteria:

- Technically, it is possible to complete the intangible asset so that it may be available for its use or sale;
- The intangible asset is to be completed for use or sale;
- The ability to use or sell the intangible asset;
- The way in which the intangible asset is to generate probable future economic benefits;

- The availability of adequate technical, financial or other type of resources, to complete the development and use or sell the intangible asset; and
- The ability to reliably calculate the disbursement attributable to the intangible asset during its development.

The amount initially recognized for an intangible asset generated internally will be the sum of disbursements incurred from the moment the element fulfills the conditions for recording, as established above. When no intangible asset internally generated may be recognized, the disbursements for development are charged to income in the period they are incurred.

m) Goodwill

Goodwill represents the excess of the acquisition cost of a subsidiary over the Company's equity in the fair value of the identifiable net assets acquired, determined at the date of acquisition, and is not subject to amortization. Goodwill is shown under goodwill and intangible assets and is recognized at cost less accumulated impairment losses, which are not reversed. Gains or losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold.

n) Impairment of non-financial assets

Assets that have an indefinite useful life, for example, goodwill, are not depreciable and are subject to annual impairment tests. Assets that are subject to amortization are reviewed for impairment when events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of the asset's fair value less costs to sell and its value in use. For the purpose of assessing impairment, assets are grouped at the lowest levels at which separately identifiable cash flows exist (cash generating units). Non-financial long-term assets other than goodwill that have suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

When an impairment loss is reversed, the carrying amount of the asset or cash generating unit, is increased to the revised estimated value of its recoverable amount, in such a way that the adjusted carrying amount does not exceed the carrying amount that would have been determined if an impairment loss had not been recognized for that asset or cash generating unit in previous years. The reversal of an impairment loss is recognized immediately in the consolidated statement of profit (loss).

o) Income tax

The amount of income taxes in the consolidated statement of profit (loss) represents the sum of the current and deferred income taxes.

The amount of income taxes included in the consolidated statement of profit (loss) represents the current tax and the effects of deferred income tax assets determined in each subsidiary by the asset and liability method, applying the rate established by the legislation enacted or substantially enacted at the consolidated statement of financial position date, wherever the Company operates and generates taxable income. The applicable rates are applied to the total temporary differences resulting from comparing the accounting and tax bases of assets and liabilities, and that are expected to be applied when the deferred tax asset is realized or the deferred tax liability is expected to be settled, considering, when applicable, any tax-loss carryforwards, prior to the recovery analysis. The effect of the change in current tax rates is recognized in current income of the period in which the rate change is determined.

Management periodically evaluates positions taken in tax returns with respect to situations in which the applicable law is subject to interpretation. Provisions are recognized when appropriate, based on the amounts expected to be paid to the tax authorities.

Deferred tax assets are recognized only when it is probable that future taxable profits will exist against which the deductions for temporary differences can be taken.

The deferred income tax on temporary differences arising from investments in subsidiaries and associates is recognized, unless the period of reversal of temporary differences is controlled by the Company and it is probable that the temporary differences will not reverse in the near future.

Deferred tax assets and liabilities are offset when a legal right exists, and when the taxes are levied by the same tax authority.

p) Employee benefits

i. Pension plans

Defined contribution plans:

A defined contribution plan is a pension plan under which the Company pays fixed contributions into a separate entity. The Company has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to their service in the current and past periods. The contributions are recognized as employee benefit expense on the date that is required the contribution.

Defined benefit plans:

A defined benefit plan is a plan which specifies the amount of the pension an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation.

The liability recognized in the consolidated statement of financial position in respect of defined benefit plans is the present value of the defined benefit obligation at the consolidated statement of financial position date less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using discount rates in conformity with IAS 19, *Employee Benefits,* that are denominated in the currency in which the benefits will be paid, and have maturities that approximate the terms of the pension liability.

Actuarial gains and losses from adjustments and changes in actuarial assumptions are recognized directly in other items of the comprehensive income in the year they occur and will not be reclassified to the results of the period.

The Company determines the net finance expense (income) by applying the discount rate to the liabilities (assets) from net defined benefits.

Past-service costs are recognized immediately in the consolidated statement of profit (loss).

ii. Post-employment medical benefits

The Company provides medical benefits to retired employees after termination of employment. The right to access these benefits usually depends on the employee's having worked until retirement age and completing a minimum of years of service. The expected costs of these benefits are accrued over the period of employment using the same criteria as those described for defined benefit pension plans.

iii. Termination benefits

Termination benefits are payable when employment is terminated by the Company before the normal retirement date or when an employee accepts voluntary termination of employment in exchange for these benefits. The Company recognizes termination benefits in the first of the following dates: (a) when the Company can no longer withdraw the offer of these benefits, and (b) when the Company recognizes the costs from restructuring within the scope of the IAS 37 and it involves the payment of termination benefits. If there is an offer that promotes the termination of the employment relationship voluntarily by employees, termination benefits are valued based on the number of employees expected to accept the offer. The benefits that will be paid in the long term are discounted at their present value.

iv. Short-term benefits

The Company grants benefits to employees in the short term, which may include wages, salaries, annual compensation and bonuses payable within 12 months. The Company recognizes an undiscounted provision when it is contractually obligated or when past practice has created an obligation.

v. Employee participation in profit and bonuses

The Company recognizes a liability and an expense for bonuses and employee participation in profits when it has a legal or assumed obligation to pay these benefits and determines the amount to be recognized based on the profit for the year after certain adjustments.

q) Provisions

Liability provisions represent a present legal obligation or a constructive obligation as a result of past events where an outflow of resources to meet the obligation is likely and where the amount has been reliably estimated. Provisions are not recognized for future operating losses.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the value of money over time and the risks specific to the obligation. The increase in the provision due to the passage of time is recognized as interest expense.

When there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognized even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

A restructuring provision is recorded when the Company has developed a formal detailed plan for the restructure, and a valid expectation for the restructure has been created between the people affected, possibly for having started the plan implementation or for having announced its main characteristics to them.

r) Share based payment

The Company's compensation plans are based 50% on the market value of the shares of its holding entity and the other 50% on the market value of the shares of Alpek, S. A. B. de C. V., granted to certain senior executives of the Company and its subsidiaries. The conditions for granting such compensation to the eligible executives include compliance with certain financial metrics such as the level of profit achieved, and remaining in the Company for up to 5 years, among other requirements. The Board of Directors of Alfa has appointed a technical committee to manage the plan, and it reviews the estimated cash settlement of this compensation at the end of the year. The payment plan is subject to the discretion of Alfa’s senior Management. Adjustments to this estimate are charged or credited to the consolidated statement of profit (loss).

The fair value of the amount payable to employees in respect of share-based payments which are settled in cash is recognized as an expense, with a corresponding increase in liabilities, over the period of service required. The liability is included within other liabilities and is adjusted at each reporting date and the settlement date. Any change in the fair value of the liability is recognized as compensation expense in the consolidated statement of profit (loss).

s) Treasury shares

The Company’s stockholders periodically authorize a maximum amount for the acquisition of the Company's own shares. Upon the occurrence of a repurchase of its own shares, they become treasury shares and the amount is presented as a reduction to stockholders' equity at the purchase price. These amounts are stated at their historical value.

t) Capital stock

The Company's common shares are classified as capital stock within stockholders’ equity. Incremental costs directly attributable to the issuance of new shares are included in equity as a reduction from the consideration received, net of tax.

u) Comprehensive income

Comprehensive income is composed of net income plus the annual effects of their capital reserves, net of taxes, which are comprised of the translation of foreign subsidiaries, the effects of derivative cash flow hedges, actuarial gains or losses, the effects of the change in the fair value of financial instruments available for sale, the equity in other items of comprehensive income of associates and joint ventures as well as other items specifically required to be reflected in stockholders’ equity, and which do not constitute capital contributions, reductions and distributions.

v) Segment reporting

Segment information is presented consistently with the internal reporting provided to the chief operating decision maker who is the highest authority in operational decision-making, resource allocation and assessment of operating segment performance.

w) Revenue recognition

Revenues comprise the fair value of the consideration received or to receive for the sale of goods and services in the ordinary course of the transactions, and are presented in the consolidated statement of income, net of the amount of variable considerations, which comprise the estimated amount of returns from customers, rebates and similar discounts and payments made to customers with the objective that goods are accommodated in attractive and favorable spaces at their facilities.

To recognize revenues from contracts with customers, the comprehensive model for revenue recognition is used, which is based on a five-step approach consisting of the following: (1) identify the contract; (2) identify performance obligations in the contract; (3) determine the transaction price; (4) allocate the transaction price to each performance obligation in the contract; and (5) recognize revenue when the Company satisfies a performance obligation.

i. Revenue from the sale of goods and products

Contracts with customers are formalized by commercial agreements complemented by purchase orders, whose costs comprise the promises to produce, distribute and deliver goods based on the contractual terms and conditions set forth, which do not imply a significant judgment to be determined. When there are payments related to obtaining contracts, they are capitalized and amortized over the term of the contract.

Performance obligations held by the Company are not separable, and are not partially satisfied, since they are satisfied at a point in time, when the customer accepts the products. Moreover, the payment terms identified in most sources of revenue are short-term, with variable considerations including discounts given to customers, without financing components or guarantees. These discounts are recognized as a reduction in revenue; therefore, the allocation of the price is directly on the performance obligations of production, distribution and delivery, including the effects of variable consideration.

The Company recognizes revenue at a point in time, when control of sold goods has been transferred to the customer, which is given upon delivery of the goods promised to the customer according to the negotiated contractual terms. The Company recognizes an account receivable when the performance obligations have been met, recognizing the corresponding revenue; moreover, the considerations received before completing the performance obligations of production and distribution are recognized as customer advances.

Dividend income from investments is recognized once the rights of stockholders to receive this payment have been established (when it is probable that the economic benefits will flow to the Company and the revenue can be reliably determined).

The Company's management adopted IFRS 15, *Revenue from Contracts with Customers,* on January 1, 2018 using the modified retrospective method applied to the contracts in force on the date of adoption; thus, the accounting policy applied as of said date, is not comparable to that used for the years ended December 31, 2017 and 2016.

x) Earnings per share

Earnings per share are calculated by dividing the profit attributable to the stockholders of the controlling interest by the weighted average number of common shares outstanding during the year. As of December 31, 2018, 2017 and 2016, there are no dilutive effects from financial instruments potentially convertible into shares.

y) Changes in accounting policies and disclosures

i. New standards and changes adopted by the Company.

The Company adopted all new standards and interpretations in effect as of January 1, 2018, including the annual improvements to IFRS, as described below:

IFRS 9, Financial Instruments

IFRS 9, *Financial Instruments*, replaces IAS 39, *Financial Instruments: Recognition and Measurement,* and is mandatorily effective for periods beginning on or after January 1, 2018. IFRS 9 includes the introduction of a new expected loss impairment model and limited changes to the classification and measurement requirements for financial assets. More specifically, the new impairment model is based on expected credit losses rather than incurred losses, and will apply to debt instruments measured at amortized cost or fair value through other comprehensive income (FVTOCI), lease receivables, contract assets and certain written loan commitments and financial guarantee contracts.

In regards of the expected loss impairment model, the initial adoption requirement of IFRS 9 is retrospective and establishes an option to adopt it without modifying the financial statements of previous years by recognizing the initial effect on retained earnings at the date of adoption. In case of hedge accounting, IFRS 9 allows application with a prospective approach.

The Company had no impacts associated with the new measurement category of fair value through other comprehensive income, because it does not currently hold any instruments that qualify for this treatment; however, potential impacts could arise should it change its investment strategy in the future. Additionally, there were no impacts related to hedge accounting.

Lastly, regarding the new impairment model based on expected losses, management of the Company decided to adopt the standard retrospectively, recognizing the effects on retained earnings as of January 1, 2018. On this date, derived from the new requirements, the Company recognized an adjustment of $14, net of deferred taxes, for increasing the allowance for impairment of accounts receivable. In addition, the number of disclosures increased in the Company's consolidated financial statements.

IFRS 15, Revenues from contracts with customers

IFRS 15, *Revenues from Contracts with Customers*, effective for periods beginning January 1, 2018. Under this standard, revenue recognition is based on the transfer of control, i.e. notion of control is used to determine when a good or service is transferred to the customer. The standard also presents a single comprehensive model for the accounting for revenues from contracts with customers and replaces the most recent revenue recognition guidance, including the specific orientation of the industry. This comprehensive model introduces a five-step approach for revenue recognition: (1) identifying the contract; (2) identifying the performance obligations in the contract; (3) determining the transaction price; (4) allocating the transaction price to the performance obligations in the contract; and (5) recognizing revenue when the Company satisfies a performance obligation.

Management of the Company adopted this standard using the modified retrospective approach applied to contracts in effect at the date of initial adoption on January 1, 2018, and determined that there were no impacts as of that date. Furthermore, the amount of disclosures required in the financial statements, both annual and interim, is increased.

IFRIC 22, Interpretation on foreign currency transactions and advance consideration

This new Interpretation clarifies the accounting for transactions that include the receipt or payment of advance consideration in a foreign currency. The interpretation is being issued to reduce diversity in practice related to the exchange rate used when an entity reports transactions that are denominated in a foreign currency in accordance with IAS 21 in circumstances in which consideration is received or paid before the related asset, expense, or income is recognized. Effective for annual reporting periods beginning after January 1, 2018.

The Company translates advance considerations at the exchange rate on the date of the transaction, either received or paid, and recognizes them as non-monetary items; therefore, it did not have significant impacts in the adoption of this interpretation in its consolidated financial statements.

ii. New standards and interpretations yet to be adopted by the Company.

A number of new standards, amendments and interpretations of standards have been issued, are not yet effective for reporting periods ended December 31, 2018, and have not been early adopted by the Company.

Below is a summary of these new standards and interpretations as well as the Company's assessment as to the potential impacts on the consolidated financial statements:

IFRS 16, Leases

IFRS 16, *Leases*, supersedes IAS 17, *Leases*, and the related interpretations. This new standard brings most leases on balance sheet for lessees under a single model, eliminating the distinction between operating and finance leases, while the model for lessors remains without significant changes. IFRS 16 is effective from January 1, 2019 and the Company decided to adopt it with the recognition of all the effects as of that date, without changing prior years.

Under this standard, lessees will recognize the right of use of an asset and the corresponding lease liability. The right-of-use asset will be depreciated based on the contractual term or, in some cases, on its economic useful life. On the other hand, the financial liability will be measured at initial recognition, discounting future minimum lease payments at present value according to a term, using the discount rate that represents the lease funding cost; subsequently, the liability will accrue interest through maturity.

The Company will apply the exemptions to not to recognize an asset and a liability as described above, for leases with a term of less than 12 months (provided that they do not contain purchase or term renewal options), and for those agreements where the acquisition of an individual asset of the contract was less than US$5,000 (five thousand dollars). Therefore, payment for such leases will continue to be recognized as expenses within operating income.

The Company adopted IFRS 16 on January 1, 2019; therefore, it recognized a right-of-use asset and a lease liability of $3,255.

In addition, the Company adopted and applied the following practical expedients provided by IFRS 16:

- Account for as leases the payments made in conjunction with the rent, and that represent services (for example, maintenance and insurance).
- Create portfolios of contracts that are similar in terms, economic environment and characteristics of assets, and use of a funding rate by portfolio to measure leases.
- Not to revisit the previously reached conclusions for service agreements which were analyzed as of December 31, 2018 under IFRIC 4, *Determining Whether a Contract Contains a Lease*, and where it had been concluded that there was no implicit lease.

The Company has taken the required steps to implement the changes that the standard represents in terms of internal control, tax and systems affairs, from the adoption date.

Lastly, as a result of these changes in accounting, some performance indicators of the Company, such as operating income and adjusted EBITDA, will be affected because what was previously recognized as an operating rental expense equivalent to rental payments, now a portion will be recognized by reducing the financial liability (which will not affect the statement of income), and the other portion will be recognized as a financial expense under the operating income indicator. On the other hand, the expense for depreciation of right-of-use assets will affect operating income linearly, but without representing a cash outflow, which will benefit the adjusted EBITDA.

IFRIC 23, Interpretation on uncertainty over income tax treatments

This new interpretation clarifies how to apply the recognition and measurement requirements in IAS 12, *Income Tax*, when there is uncertainty over income tax treatments. Uncertain tax treatment is a tax treatment for which there is uncertainty over whether the relevant taxation authority will accept the tax treatment under tax law. In such circumstances, the Company shall recognize and measure its current or deferred tax assets or liabilities by applying the requirements in IAS 12 based on taxable profit (tax loss), tax bases, unused tax losses, unused tax credits, and the tax rates determined by applying this interpretation.

An entity shall apply IFRIC 23 for annual reporting periods beginning on or after January 1, 2019. Earlier application is permitted and the fact must be disclosed. On initial application, the Interpretation must be applied retrospectively under the requirements of IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*, modifying comparative periods or retrospectively with the cumulative effect of initially applying the Interpretation as an adjustment to the opening balance of retained earnings, without modifying comparative periods.

The Company determined that the impacts of the implementation of this Interpretation as of January 1, 2019 are not material, considering the prevailing conditions of the tax positions that it has taken at the date of adoption and the faculties of the competent authorities to assess tax positions held by the Company at the same date.

4. Financial instruments and risk management

The Company's activities expose it to various financial risks: market risk (including exchange rate risk, price risk and interest rate variation risk), credit risk and liquidity risk.

The Company has a general risk management program focused on the unpredictability of financial markets, and seeks to minimize the potential adverse effects on its financial performance.

The objective of the risk management program is to protect the financial health of its business, taking into account the volatility associated with foreign exchange and interest rates. Sometimes, the Company uses derivative financial instruments to hedge certain exposures to risks. In addition, due to the nature of the industries in which it participates, the Company has performed hedges of input prices with derivative financial instruments.

Alfa has a Risk Management Committee (RMC), comprised of the Board's Chairman, the Chief Executive Officer ("CEO"), Chief Financial Officer ("CFO") and a Risk Management Officer ("RMO") acting as technical secretary. The RMC reviews derivative transactions proposed by the subsidiaries of Alfa, including Alpek, in which a potential loss analysis surpasses US$1. This Committee supports both the CEO and the President of Board of Alfa. All new derivative transactions which the Company proposes to enter into, as well as the renewal or cancellation of derivative arrangements, must be approved by both Alpek's and Alfa's CEO, according to the following schedule of authorizations:

	Maximum possible loss US$	
	Individual transaction	**Annual cumulative transactions**
Chief Executive Officer of the Company	1	5
Risk Management Committee of Alfa	30	100
Finance Committee	100	300
Board of Directors of Alfa	>100	>300

The proposed transactions must meet certain criteria, including that the hedges are lower than established risk parameters, and that they are the result of a detailed analysis and properly documented. Sensitivity analysis and other risk analyses should be performed before the operation is entered into.

Alfa's risk management policy indicates that hedging positions should always be less than the projected exposure to allow an acceptable margin of uncertainty. Exposed transactions are expressly prohibited. The Company's policy indicates that the further the exposure is, the lower the coverage, based on the following table:

	Maximum coverage (as a percentage of the projected exposure)
	Current year
Commodities	100
Energy costs	75
Exchange rate for operating transactions	80
Exchange rate for financial transactions	100
Interest rates	100

Capital management

The Company's objectives when managing capital is to safeguard its ability to continue as a going concern, so that it can continue to provide returns to stockholders and benefits to other stakeholders, as well as maintaining an optimal capital structure to reduce the cost of capital.

To maintain or adjust the capital structure, the Company may adjust the amount of dividends paid to stockholders, return equity to stockholders, issue new shares or sell assets to reduce debt.

Alpek reviews capital based on a leverage ratio. This percentage is calculated by dividing total liabilities by total stockholders' equity.

The financial ratio of total liabilities/total equity was 1.77, 1.96 and 1.19 as of December 31, 2018, 2017 and 2016, respectively, resulting in a leverage ratio that meets the Company's management and risk policies.

Financial instruments by category

The following are the Company's financial instruments by category.

As of December 31, 2018, 2017 and 2016, financial assets and liabilities consist of the following:

	As of December 31,		
	2018	**2017**	**2016**
Cash and cash equivalents	$ 4,168	$ 8,795	$ 2,935
Restricted cash	3	763	2
Financial assets measured at amortized cost[1]:			
Trade and other accounts receivable	17,287	15,817	15,918
Other non-current assets	5,372	2,880	2,127
Financial assets measured at fair value through profit or loss[1]:			
Financial assets available for sale	-	-	172
Derivate financial instruments[2]	30	148	56
	$26,860	$28,403	$21,210
Financial liabilities measured at amortized cost:			
Debt	$40,130	$34,366	$24,338
Trade and other accounts payable	24,217	19,783	15,492
Financial liabilities measured at fair value:			
Share-based payments	-	-	31
Derivative financial instruments[2]	1,330	703	717
	$65,677	$54,852	$40,578

(1) As described in Note 3y, the Company did not have impacts associated with the introduction of the new category of financial assets measured at fair value through other comprehensive income, derived from the adoption of IFRS 9. Therefore, all financial assets that were measured at fair value as of December 31, 2017 and 2016, from January 1, 2018, were classified as financial assets measured at fair value through profit or loss. Therefore, the presentation of comparative information is adequate, since it reflects the consistency in the recognition and measurement principles at both reporting dates.

(2) The Company designated the derivative financial instruments that comprise this balance, as accounting hedges, according to what is described in Note 4.

Fair value of financial assets and liabilities valued at amortized cost

The amount of cash and cash equivalents, restricted cash, trade and other accounts receivable, other current assets, trade and other accounts payable, current debt and other current liabilities approximate their fair value, due to their short maturity. The net carrying amount of these accounts represents the expected cash flows to be received as of December 31, 2018, 2017 and 2016.

The carrying amount and estimated fair value of assets and liabilities valued at amortized cost is presented below:

	As of December 31, 2018		As of December 31, 2017		As of December 31, 2016	
	Carrying amount	**Fair value**	**Carrying amount**	**Fair value**	**Carrying amount**	**Fair value**
Financial assets:						
Non-current accounts receivable	$ 4,756	$4,745	$ 2,880	$ 2,880	$2,127	$2,131
Financial liabilities:						
Non-current debt	30,317	30,211	27,096	27,997	21,551	21,946

The carrying amount of the debt, for purposes of computing its fair value, is presented gross of interest payable and issuance costs.

The estimated fair values as of December 31, 2018, 2017 and 2016 were determined based on discounted cash flows and with reference to the yields at the closing of the debt securities, using rates reflecting a similar credit risk, depending on the currency, maturity period and country where the debt was acquired. The primary rates used are the Interbank Equilibrium Interest Rate ("TIIE" for its acronym in Spanish) for instruments in Mexican pesos and London Interbank Offer Rate ("Libor") for instruments in U.S. dollars. Measurement at fair value for non-current accounts receivable is deemed within Level 3 of the fair value hierarchy, while, for the financial debt, the measurement at fair value is deemed within Levels 1 and 2 of the hierarchy, as described herein below.

Market risks

(i) Exchange rate risk

The Company is exposed to foreign exchange risk, primarily derived from the transactions and balances that the subsidiaries conduct and have in foreign currency, respectively. A foreign currency is that which is different from the functional currency of an entity. In addition, the Company is exposed to changes in the value of foreign investments (subsidiary entities that have a functional currency different from that of the ultimate holding company), which arise from changes in the exchange rates between the functional currency of the foreign operation and the functional currency of the holding company (pesos); therefore, the Company applies hedge accounting to mitigate this risk, designating financial liabilities as hedging instruments, regardless of whether the foreign investment is directly or indirectly maintained through a subholding.

The behavior of the exchange rates fluctuations between the Mexican peso, U.S. dollar and the euro represents an important factor for the Company due to the effect that such currencies have on its consolidated results, and because, in addition, Alpek has no interference in its determination.

Historically, in certain times when the Mexican peso has appreciated against other currencies, such as the U.S. dollar, the Company's profit margins have been reduced. On the other hand, when the Mexican peso has lost value, Alpek's profit margins have been increased. However, there is no assurance that this correlation will be repeated in case the exchange rate between the Mexican peso and any other currency fluctuates again, because these effects also depend on the balances in foreign currency that the entities of the Company hold.

Accordingly, the Company sometimes enters into derivative financial instruments in order to keep under control the integrated total cost of its financing and the volatility associated with exchange rates. Additionally, as most of the Company' revenues are in U.S. dollars, there is a natural hedge against its obligations in U.S. dollars.

The Company has the following assets and liabilities in foreign currency in relation to the functional currency of the subsidiary entities, translated to millions of Mexican pesos at the closing exchange rate as of December 31, 2018:

	MXN	**USD**	**EUR**
Financial assets	$19,897	$ 22,788	$1,034
Financial liabilities	22,545	36,185	25
Foreign exchange financial position	$(2,648)	$(13,397)	$1,009

The exchange rates used to translate the foreign currency financial positions to Mexican pesos are those described in Note 3.

Based on the financial positions in foreign currency maintained by the Company, a hypothetical variation of 10% in the MXN/USD and MXN/EUR exchange rate and keeping all other variables constant, would result in an effect of $(1,227) on the consolidated statement of profit (loss) and stockholders' equity.

Financial instruments to hedge net investments in foreign transactions

Beginning March 1, 2018, the Company designated certain non-current debt instruments as hedging instruments to net investments in foreign transactions, in order to mitigate the variations in exchange rates arising between the functional currency for such transactions and the functional currency of the holding or sub-holding company that maintains these investments.

The Company formally designated and documented each hedging relationship establishing objectives, strategy to hedge the risk, the identification of the hedging instrument, the hedged item, the nature of the risk to be hedged, and the methodology to assess the effectiveness. Given that the exchange rate hedging relationship is clear, the method that the Company used to assess the effectiveness consisted of a qualitative effectiveness test by comparing the critical terms between the hedging instruments and the hedged items. The hedging effectiveness results confirm that the hedging relationships are highly effective due to the economic relationship between the hedging instrument and the hedged items.

The hedge will be effective as long as the notional debt designated as a hedging instrument is equal to or less than the value of the net assets of the covered foreign operation. On the other hand, when the value of the net assets of the foreign operation is less than the notional value of the designated debt, the Company rebalances the hedging relationship and recognizes the ineffectiveness in the income statement.

As of December 31, 2018, Alpek maintains the following hedging relationships:

Holding	Functional Currency	Hedging Instrument	Notional Value		Hedged Item	Net assets of the hedged item	
Alpek, S. A. B. de C. V.	MXN	Senior Notes 144A fixed rate	US$	2	Indelpro	US$	219
		Senior Notes 144A fixed rate		60	Temex		124
		Bank loan, Libor +1.10[(1)]		150	Dak Americas Ms		179
		Bank loan, LIBOR +1.25		180	Dak Resinas Americas		91
		Bank loan, LIBOR +1.25		110	Akra Polyester		261
			US$	502		US$	874

(1) This hedging instrument includes two provisions of a loan maintained by the Company. The conditions of each of the provisions are detailed in Note 15.

From the date of designation until December 31, 2018, the Company's average hedging ratio amounted to 55.2%, therefore, the exchange rate fluctuation generated by the hedging instruments from the date of designation until December 31, 2018 amounted to a net loss of $324, which was recognized in other comprehensive income, offsetting the translation effect generated by each foreign investment. The hedging effectiveness results confirm that the hedging relationships are highly effective due to the economic relationship between the hedging instrument and the hedged items.

Derivative financial instruments to hedge exchange rate risks

As of December 31, 2016, the Company held USD/MXN forwards. As of December 31, 2017, the Company had no contracted financial instruments derived from exchange rate. However, as of December 31, 2018, the Company holds forwards (USD/MXN and EUR/USD) to cover different needs. In the case of the USD/MXN ratio, the Company seeks to cover short-term needs, which correspond to the sale of U.S. dollars for the purchase of raw materials in Mexican pesos. For its part, the EUR/USD ratio is used because part of Alpek's revenues are received in Euros, therefore, a highly probable forecasted transaction related to revenues budgeted in said foreign currency has

been documented as a hedged item. The conditions of the derivative financial instruments and the considerations of their valuation as hedging instruments are mentioned below:

Characteristics	Forwards EUR/USD	Forwards USD/MXN
Notional amount	6	16
Currency	EUR	USD
Average strike	1.1756 EUR/USD	20.79 MXN/USD
Maturity	Monthly through March 31, 2020	Weekly through February 27, 2019
Carrying amount of the forward	1	17
Change in the fair value of the forward to measure ineffectiveness	1	17
Recognized in OCI, net of reclassifications	-	(8)
Effectiveness test results	100%	100%
Fair value as of December 31, 2017	-	-
Fair value as of December 31, 2016	-	(12)

In measuring the effectiveness of these hedges, the Company determined that they are highly effective because changes in the fair value and cash flows of each hedged item are compensated within the range of effectiveness established by management. The prospective effectiveness test for the EUR/USD and USD/MXN exchange rates resulted in 100%, confirming that there is an economic relationship between the hedging instruments and the hedged items. Furthermore, both the credit profile of the Company and its counterparties are positive and no changes are expected in the mid-term; thus, the credit risk component is not expected to dominate the hedging relationship. The method used by the Company is the offsetting of cash flows using a hypothetical derivative, which consists in comparing the changes in the fair value of the hedging instrument with the changes in the fair value of the hypothetical derivative that would result in an identical hedge.

In accordance with the notional amounts described and the way in which the flows of the derivatives are exchanged, the average coverage ratio for the USD/MXN exchange rate is 77% and 86% for the EUR/USD ratio. If necessary, a rebalancing will be done to maintain this relationship for the strategy.

In this hedging relationship, the source of ineffectiveness may be caused by the difference in the settlement date of the derivative and the hedged item, and that the expected amount becomes a lower amount than the hedging instruments. For the year ended December 31, 2018, no ineffectiveness was recognized in profit or loss.

(ii) Price risk

In carrying out its activities, the Company depends on the supply of raw materials provided by its suppliers, both in Mexico and abroad, among which are intermediate petrochemicals, principally.

In recent years, the price of certain inputs has shown volatility, especially those related to oil and natural gas.

In order to fix the selling prices of certain of its products, the Company has entered into agreements with certain customers. At the same time, it has entered into transactions involving derivatives on natural gas that seek to reduce price volatility of the prices of this input.

Additionally, the Company has entered into derivative financial instruments transactions to hedge purchases of certain raw materials, since these inputs have a direct or indirect relationship with the prices of its products.

The derivative financial operations have been privately contracted with various financial institutions, whose financial strength was highly rated at the time by rating agencies. The documentation used to formalize the contract operations is that based generally on the "Master Agreement", generated by the "International Swaps & Derivatives Association" ("ISDA"), which is accompanied by various accessory documents known in generic terms as "Schedule", "Credit Support Appendix" and "Confirmation".

Regarding natural gas, Pemex is the only supplier in Mexico. The selling price of natural gas is determined based by the price of that product on the "spot" market in South Texas, USA, which has experienced volatility. For its part, the Mexican Electric Commission is a decentralized public company in charge of producing and distributing electricity in Mexico. Electricity rates have also been influenced by the volatility of natural gas, since most power plants are gas-based.

The Company entered into various derivative agreements with various counterparties to protect it against increases in prices of natural gas and other raw materials. In the case of natural gas derivatives, hedging strategies for products were designed to mitigate the impact of potential increases in prices. The purpose is to protect the price from volatility by taking positions that provide stable cash flow expectations, and thus avoid price uncertainty. The reference market price for natural gas is the Henry Hub New York Mercantile Exchange (NYMEX). The average price per MMBTU for 2018, 2017 and 2016 was 3.2, 3.0 and 2.31 US dollars, respectively.

As of December 31, 2018, 2017 and 2016, the Company had hedges of natural gas prices for a portion expected of consumption needs in Mexico and the United States.

Derivative forward contracts to hedge adverse changes in commodity prices

The Company uses natural gas to operate, and some of its main raw materials are paraxylene, ethylene and monoethylene glycol (MEG). Therefore, an increase in the price of natural gas, paraxylene, ethylene and monoethylene glycol (MEG), would have a negative impact on the operating cash flows. The objective of the hedge designated by the Company is to mitigate against the exposure in the price increase of the aforementioned commodities, for future purchases by contracting swaps where a variable price is received and a fixed price is paid. The Company has implemented a strategy called roll-over, through which it analyzes on a monthly basis if more derivatives are contracted to expand the time or the amount of coverage; currently, the Company has contracted hedges until December 2024.

These derivative financial instruments have been classified as cash flow hedges for accounting purposes. In this sense, management has documented, as a hedged item, a highly probable transaction in relation to the budget for purchases of these commodities. The conditions of the derivative financial instruments and the considerations of their valuation as hedging instruments are mentioned below:

Characteristics	**Swaps Gas Natural**	**Swaps Paraxylene (Px1)**	**Swaps Nafta**	**Swaps Ethylene**	**Swaps MEG**	**Swaps Ethane**
Notional amount	17,288,760	297,200	10,500	118,000,000	33,500	10,200,000
Units	MMBtu	MT	MT	lb	MT	gal
Price received	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value
Price paid (average)	4.35 USD/MMBtu	$1,057/MT	$459/MT	$0.21/lb	$741/MT	$0.32/gal
Maturity (monthly)	December 2024	December 2019	September 2019	December 2019	December 2019	December 2019
Net position of the swap [(1)(2)]	(478)	(710)	(3)	(12)	(70)	(2)
Change in the fair value to measure ineffectiveness	200	(803)	(3)	(28)	(70)	(2)
Balance recognized in OCI, net of reclassifications	(478)	(710)	(3)	(12)	(70)	(2)
Effectiveness test results	99%	99.82%	99.82%	99.60%	99.59%	99.59%
Fair value as of December 31, 2017	(703)	125	-	23	-	-
Fair value as of December 31, 2016	(646)	(24)	-	20	-	1

(1) Due to the high volume of operations, the net position of derivative financial instruments is presented; however, since these instruments do not meet the criteria for the offsetting of financial instruments, they are presented in their gross amounts in the consolidated statement of financial position.

(2) The change in the fair value of the derivative financial instruments recognized in OCI for the year ended December 31, 2018 is $(721).

For commodity hedging relationships, management is designating as a hedged item a specific risk, which is defined by the underlying assets that are clearly identified in the corresponding purchase invoices. The designated risk components cover most of the changes in the fair value of the hedged item as a whole.

On the other hand, in the measurement of the effectiveness of these hedges, the Company determined that they are highly effective because the changes in the fair value and cash flows of each hedged item are compensated within the range of effectiveness established by management. The method used by the Company is to offset cash flows using a hypothetical derivative, which consists of comparing the changes in the fair value of the hedging instrument with the changes in the fair value of the hypothetical derivative that would result in a perfect hedge.

According to the notional amounts described and the way in which the flows of the derivatives are exchanged, the average coverage ratio for the natural gas is 30%, 72% for the paraxylene, 44% for the ethylene and 33% for ethane. If necessary, a rebalancing will be done to maintain this relationship for the strategy.

The source of ineffectiveness can be caused mainly by the difference in the settlement date of the hedging instruments and the hedged items, and that the budget becomes less than the hedging instruments. For the years ended December 31, 2018, 2017 and 2016, there was no ineffectiveness recognized in profit or loss.

(iii) Interest rate risk

The Company is exposed to interest rate risk mainly for long-term loans bearing interest at variable rates. Fixed-interest loans expose the Company to interest rate risk at fair value, which reflects that Alpek might be paying interest at rates significantly different from those of an observable market.

As of December 31, 2018, 62% of the financing accrues interest at a fixed rate, and 38% at a variable rate.

As of December 31, 2018, if interest rates on variable rate loans are increased or decreased by 100 basis points in relation to the rate in effect, the income and stockholders' equity of the Company would change by $303.

Derivative financial instruments to hedge interest rate risks

In order to mitigate the risk of the volatility associated with the reference interest rates (LIBOR) of the long-term liabilities described above, the Company contracted interest rate swaps ("IRS") and designated the interest payments derived from the debts it maintains as a covered item.

The conditions of the derivative financial instrument and the considerations of its valuation as a hedging instrument are mentioned below:

Characteristics of the swap	**Interest rate swap**
Currency	USD
Notional	US$290
Financial asset interest rate	Libor 3m
Financial liability interest rate (average)	2.897%
Maturity	26/03/2021
Carrying amount of the swap	(42)
Change in the fair value of the swap to measure ineffectiveness	(42)
Recognized in OCI, net of reclassifications	39
Reclassification from OCI to profit or loss	(3)
Change in the fair value of the hedged item to measure ineffectiveness	42

As of December 31, 2018, this hedge is highly effective, given that the critical terms of the derivative and the loan are perfectly matched, so it is confirmed that there is an economic relationship. In addition, both the credit profile of the Company and the counterparty are good and are not expected to change in the medium term; therefore, the credit risk component is not considered to be significant to the hedging relationship. The method used to evaluate effectiveness is through a qualitative evaluation comparing the critical terms between the hedging instrument and the hedged instrument.

In accordance with the notionals described and the way in which the flows of derivative financial instruments are exchanged, the average hedging ratio is 100%. If necessary, a rebalancing will be done to maintain this relationship for the strategy. In this hedge relationship, the source of ineffectiveness is mainly credit risk; for the year ended December 31, 2018, there was no ineffectiveness recognized in profit or loss.

Credit risk

Credit risk represents the potential loss due to non-compliance of counterparts in their payment obligations. Credit risk is generated from cash and cash equivalents, derivative financial instruments and deposits with banks and financial institutions as well as credit exposure to customers, including receivables and committed transactions.

The Company determines, from a business standpoint and credit risk profile, the significant customers with whom it maintains an account receivable, distinguishing those that require an individual credit risk assessment. For the rest of the customers, the company carries out its classification according to the type of market in which they operate (domestic or foreign), according with the business and internal risk administration. Each subsidiary is responsible for managing and analyzing credit risk for each of its new customers before setting the terms and conditions of payment. If wholesale customers are rated independent, these are the ratings used. If there is no independent rating, the Company’s risk control group evaluates the creditworthiness of the customer, taking into account their financial position, past experience and other factors. The maximum exposure to credit risk is given by the balances of these items as presented in the consolidated state of financial position.

Individual risk limits are determined based on internal and external ratings in accordance with limits set by the Board of Directors. The use of credit risk is monitored regularly. Sales to retail customers are in cash or by credit card. During the years ended December 31, 2018, 2017 and 2016, credit limits were not exceeded.

In addition, the Company performs a qualitative evaluation of economic projections, with the purpose of determining the possible impact on probabilities of default and the rate of recovery that it assigns to its clients.

During the year ended December 31, 2018, there have been no changes in the techniques of estimation or assumption.

Liquidity risk

Projected cash flows are determined at each operating entity of the Company and subsequently the finance department consolidates this information. The finance department of the Company continuously monitors the cash flow projections and liquidity requirements of the Company ensuring that sufficient cash and highly liquid investments are maintained to meet operating needs, and it’s that some flexibility is maintained through open and committed credit lines. The Company regularly monitors and makes decisions ensuring that the limits or covenants set forth in debt contracts are not violated. The projections consider the financing plans of the Company, compliance with covenants, compliance with minimum liquidity ratios and internal legal or regulatory requirements.

The Company’s treasury department invests those funds in time deposits and marketable securities whose maturities or liquidity allow flexibility to meet the cash needs of the Company.

The following table analyzes the derivative and non-derivative, grouped according to their maturity, from the date of the consolidated statement of financial position to the contractual maturity date. Derivative financial liabilities are included in the analysis if their contractual maturities are required to understand the timing of the Company's cash flows. The amounts disclosed in the table are contractual undiscounted cash flows.

	Less than a year	**From 1 to 5 years**	**More than 5 years**
As of December 31, 2018			
Trade and other accounts payable	$26,051	$ -	$ -
Current and non-current debt (excluding debt issuance costs)	11,333	34,082	-
Derivative financial instruments	1,047	283	-
As of December 31, 2017			
Trade and other accounts payable	$19,783	$ -	$ -
Current and non-current debt (excluding debt issuance costs)	8,639	25,478	6,239
Derivative financial instruments	230	473	-

	Less than a year	**From 1 to 2 years**	**From 2 to 5 years**	**More than 5 years**
As of December 31, 2016				
Trade and other accounts payable	$15,492	$ -	$ -	$ -
Current and non-current debt (excluding debt issuance costs)	3,820	2,491	3,427	20,882
Derivative financial instruments	71	187	459	-

Fair value hierarchy

The following is an analysis of financial instruments measured in accordance with the fair value hierarchy. The 3 different levels used are presented below:

- Level 1: Quoted prices for identical instruments in active markets.
- Level 2: Other valuations including quoted prices for similar instruments in active markets that are directly or indirectly observable.
- Level 3: Valuations made through techniques where one or more of their significant data inputs are unobservable.

The derivative financial instruments of the Company that are measured at fair value as of December 31, 2018, 2017 and 2016, are located within level 2 of the fair value hierarchy.

There were no transfers between Level 1 and 2 or between Level 2 and 3.

The specific valuation techniques used to value financial instruments include:

- Market quotations or trader quotations for similar instruments.
- The fair value of interest rate swaps is calculated as the present value of estimated future cash flows based on observable yield curves.
- The fair value of forward exchange agreements is determined using exchange rates at the closing balance date, with the resulting value discounted at present value.
- Other techniques such as the analysis of discounted cash flows, which are used to determine fair value of the remaining financial instruments.

5. Critical accounting estimates and judgments

Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

5.1 Critical accounting estimates and assumptions.

The Company makes estimates and assumptions concerning the future. The resulting accounting estimates will be, by definition, seldom equal to the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below:

a) *Estimated impairment of goodwill and intangible assets with indefinite useful lives*

The Company performs annual tests to determine whether goodwill and intangible assets with indefinite useful lives have suffered any impairment (see Note 11). For impairment testing, goodwill and intangible assets with indefinite lives are allocated to those groups of cash-generating units ("CGUs") from which the Company has considered that economic and operational synergies of business combinations are generated. The recoverable amounts of the CGUs have been determined based on the calculations of their value in use, which require the use of estimates. The most significant of these estimates are as follows:

- Estimates of future gross and operating margins, according to the historical performance and industry expectations for each CGU group.
- Discount rate based on the weighted average cost of capital (WACC) of each CGU or group of CGUs.
- Long-term growth rates.

b) *Recoverability of deferred tax assets*

Alpek has tax loss carryforwards, which can be used in the following years until maturity expires. Based on the projections of taxable income that Alpek will generate in the subsequent years through a structured and robust business plan, management has determined that current tax losses will be used before they expire and, therefore, it was considered probable that the deferred tax assets for such losses will be recovered.

c) *Long-lived assets*

The Company estimates the useful lives of long-lived assets in order to determine the depreciation and amortization expenses to be recorded during the reporting period. The useful life of an asset is calculated when the asset is acquired and is based on past experience with similar assets, considering anticipated technological changes or any other type of changes. Were technological changes to occur faster than estimated, or differently than anticipated, the useful lives assigned to these assets could have to be reduced. This would lead to the recognition of a greater depreciation and amortization expense in future periods. Alternatively, these types of technological changes could result in the recognition of a charge for impairment to reflect the reduction in the expected future economic benefits associated with the assets.

The Company reviews depreciable and amortizable assets on an annual basis for signs of impairment, or when certain events or circumstances indicate that the book value may not be recovered during the remaining useful life of the assets. For intangible assets with an indefinite useful life, the Company performs impairment tests annually and at any time that there is an indication that the asset may be impaired.

To test for impairment, the Company uses projected cash flows, which consider the estimates of future transactions, including estimates of revenues, costs, operating expenses, capital expenses and debt service. In accordance with IFRS, discounted future cash flows associated with an asset or CGU are compared to the book value of the asset or CGU being tested to determine if impairment or a reversal or impairment exist.

d) *Estimation of default probabilities and recovery rate to apply the model of expected losses in the calculation of impairment of financial assets*

The Company assigns to customers with whom it maintains an account receivable at each reporting date, either individually or as a group, an estimate of the probability of default on the payment of accounts receivable and the estimated recovery rate, with the purpose of reflecting the cash flows expected to be received from the outstanding balances on said date.

e) *Business combinations*

When business combinations are concluded, the acquisition method is required to recognize the identifiable net assets acquired at fair value, at the date of acquisition; any excess of the consideration paid on the identified net assets is recognized as goodwill, which is subject to impairment tests at least once a year. On the other hand, any excess of the net assets acquired over the consideration paid is recognized as a gain in profit or loss.

To estimate the fair value of the assets acquired and liabilities assumed, the Company uses observable market data to the extent in which this is available. When the input data of Level 1 is not available, the Company hires an independent qualified appraiser to perform the valuation. Management works closely with the independent qualified appraiser to establish the valuation techniques, the premises, the appropriate input data and the criteria to be used in the valuation models.

5.2 Critical judgments in applying the entity's accounting policies

a) *Determination of exercise of control over certain investments in shares*

The Company has evaluated critical control factors and has concluded that it should consolidate the financial statements of its subsidiaries Polioles and Indelpro. The analysis performed by the Company included the assessment of the substantive decision making rights of the respective shareholders set forth in their bylaws, resulting in management's conclusion that it has the power to govern their relevant activities.

6. Cash and cash equivalents and restricted cash

The cash and cash equivalents are comprised as follows:

	As of December 31,		
	2018	**2017**	**2016**
Cash on hand and in banks	$ 1,559	$ 3,429	$1,886
Short-term bank deposits	2,609	5,366	1,049
Total cash and cash equivalents	$ 4,168	$ 8,795	$2,935

Restricted cash

At December 31, 2018, 2017 and 2016, the Company has restricted cash of approximately $3, $763 and $2, respectively. These balances include amounts that are required to be held in escrow as deposits related to workers' compensation reserves. As of December 31, 2018, the decrease in the balance as compared to the prior year, is due to the fact that the restricted cash held as of December 31, 2017, as part of the deposit to finalize the acquisition of Petroquimica Suape and Citepe (Note 2c), was used in the closing of the transaction. The restricted cash balance is classified as a current asset in the consolidated statement of financial position based on the maturity date of the restriction.

7. Trade and other receivables, net

Trade and other accounts receivable are comprised as follows:

	As of December 31,		
	2018	**2017**	**2016**
Trade accounts receivable	$18,139	$13,175	$11,377
Trade and other accounts receivable from related parties (Note 26)	712	926	1,101
Recoverable taxes	4,647	3,714	3,384
Notes receivable	506	-	-
Interest receivable	16	-	2
Sundry debtors	473	469	240
Allowance for impairment of trade and other accounts receivable	(2,559)	(2,467)	(186)
Current portion	$21,934	$15,817	$15,918

The movements of the impairment estimate of customers and other accounts receivable in 2017, with the impairment model used by the Company, are analyzed as follows:

	2017	**2016**
Opening balance as of January 1	$ (186)	$(155)
Allowance for impairment of trade and other accounts receivable(1)	(2,073)	(60)
Receivables written off during the year	5	15
Write-off of unused impairment allowance	26	24
Foreign exchange variation	(239)	(10)
Ending balance as of December 31	$ (2,467)	$ (186)

(1) Includes the impairment disclosed in Note 2e.

The changes in the impairment allowance for trade and other receivables in 2018, with the new expected losses model u
follows:

Customers or customer groups	Gross carrying amount	Collaterals or guarantees	Outstanding balance (risk exposure)	Default probability range	Loss given default range	Opening balance – Impairment allowance	Increases in the allowance
Grupo Petrotemex							
National trade receivables	$ 4,568	$ -	$ 4,568	0% - 0.24%	10.30% - 35.00%	$ (39)	$ (33)
Foreign trade receivables	3,383	-	3,383	0% - 0.14%	34.00%	(1)	(37)
DAK Americas	3,523	-	3,523	0.12%	34.00%	(53)	(46)
M&G	2,254	-	2,254	100.00%	100.00%	(2,260)	-
Grupo Unimor	246	-	246	3.15%	50.00%	-	-
Grupo Styropek							
National trade receivables	226	-	226	0% - 100%	0% - 10.0%	(18)	(16)
Foreign trade receivables	393	-	393	0% - 100%	0% - 10.0%	-	-
Foreign entities	353	-	353	0.13% - 100%	0% - 92.05%	(1)	(2)
Polioles							
National trade receivables	413	-	413	0.01% - 0.14%	0% - 10.00%	(1)	(1)
National trade receivables	117	-	117	0.00%	0% - 10.00%	(21)	(2)
Indelpro	2,200	2,158	42	1.68%	1.92%	(49)	(14)
Other	463	-	463	0% - 100%	100.00%	(14)	-
Total	**$ 18,139**	**$ 2,158**	**$ 15,981**			**$ (2,457)**	**$ (151)**
Secured notes receivable	3,149	3,149	-	0%	0%	-	-
Notes receivable[(1)]	1,352	-	1,352	0% - 100%	100%	-	-
Total	**$ 4,501**	**$ 3,149**	**$ 1,352**			$ -	$ -

(1) The opening balance of the estimate of impairment of receivables includes $30 of the current portion of long-term notes receivables, wh
the estimate of impairment of trade and other accounts receivable as of January 1, 2018.

The net change in the allowance for impairment of trade and other receivables for $102 in the year ended December 31, 2018, was mainly due to the increase in the probability of default assigned to certain customers with respect to the beginning of the year, in which the new methodology of impairment of financial assets was applied.

The Company has long-term receivables that are guaranteed with the properties described in Note 2a, which have been used by management to mitigate the exposure to credit risk of such financial assets, and therefore has not recognized an impairment in their carrying amount.

8. Inventories

	As of December 31,		
	2018	**2017**	**2016**
Finished goods	$ 13,632	$ 8,844	$ 8,419
Raw material and other consumables	8,916	5,891	4,924
Materials and tools	1,423	1,049	1,002
Production in progress	540	580	508
	$ 24,511	$ 16,364	$14,853

For the years ended December 31, 2018, 2017 and 2016, a provision amounting to $15, $17 and $22, respectively, related to damaged, slow-moving and obsolete inventory was recognized in the consolidated statement of profit (loss).

At December 31, 2018, 2017 and 2016, there were no inventories pledged as collateral.

9. Prepayments

The current portion and non-current portion of prepaid expenses is summarized as follows:

	As of December 31,		
	2018	**2017**	**2016**
Current portion [(1)]	$ 469	$ 305	$ 457
Non-current portion[(2)]	38	31	1,570
Total prepayments	$ 507	$ 336	$2,027

(1) This item mainly consists of advertising and prepaid insurance.

(2) As of December 31, 2016, this line item was represented primarily by inventory prepayments of $1,550 related to supply rights, as described in Note 2e. As of December 31, 2017, the decrease in the balance in comparison to the prior year is due to the event described in the same note.

10. Property, plant and equipment, net

	Land	Buildings and constructions	Machinery and equipment	Vehicles	Furniture, lab and information technology equipment
For the year ended December 31, 2016					
Opening balance	$ 3,264	$ 4,136	$ 21,144	$ 75	$ 288
Additions	1	11	31	8	5
Additions for business acquisitions	-	54	875	-	1
Disposals	(8)	-	(3)	-	(1)
Impairment	-	-	(1)	-	(1)
Translation effect	367	752	4,061	13	58
Depreciation charges recognized in the year	-	(241)	(1,904)	(13)	(87)
Transfers	100	137	1,068	(13)	64
Ending balance as of December 31, 2016	3,724	4,849	25,271	70	327
As of December 31, 2016					
Cost	3,724	14,198	68,412	329	1,774
Accumulated depreciation	-	(9,349)	(43,141)	(259)	(1,447)
Net carrying amount as of December 31, 2016	$ 3,724	$ 4,849	$ 25,271	$ 70	$ 327
For the year ended December 31, 2017					
Opening balance	$ 3,724	$ 4,849	$ 25,271	$ 70	$ 327
Additions	-	13	100	1	5
Additions for business acquisitions	-	59	655	2	1
Disposals	-	-	(2)	-	-
Impairment	(123)	(3)	(14)	(1)	-
Impairment reversal	-	-	201	-	-
Translation effect	(107)	(209)	(1,335)	(5)	(9)
Depreciation charges recognized in the year	-	(251)	(1,948)	(14)	(82)
Transfers	-	158	1,070	9	31
Ending balance as of December 31, 2017	3,494	4,616	23,998	62	273
As of December 31, 2017					
Cost	3,494	13,867	67,714	320	1,739
Accumulated depreciation	-	(9,251)	(43,716)	(258)	(1,466)
Net carrying amount as of December 31, 2017	$ 3,494	$ 4,616	$ 23,998	$ 62	$ 273
For the year ended December 31, 2018					
Opening balance	$ 3,494	$ 4,616	$ 23,998	$ 62	$ 273
Additions	-	2	71	2	4
Additions for business acquisitions	369	2,592	3,249	-	64
Disposals	(11)	-	(35)	(3)	-
Impairment	-	(1)	(16)	-	-
Translation effect	(14)	(203)	(160)	(3)	1

	Land	Buildings and constructions	Machinery and equipment	Vehicles	Furniture, lab and information technology equipment
Depreciation charges recognized in the year	-	(390)	(2,052)	(15)	(85)
Transfers	-	268	1,177	16	93
Ending balance as of December 31, 2018	3,838	6,884	26,232	59	350
As of December 31, 2018					
Cost	3,838	18,003	73,914	328	1,914
Accumulated depreciation	-	(11,119)	(47,682)	(269)	(1,564)
Net carrying amount as of December 31, 2018	$ 3,838	$ 6,884	$ 26,232	$ 59	$ 350

Depreciation expenses of $2,483, $2,253 and $2,217 were recorded in cost of sales, $13, $3 and $4, in selling ex
administrative expenses in 2018, 2017 and 2016, respectively.

The Company has capitalized costs of loans on qualified assets for $314, $233 and $51 for the years ended Dece
respectively. Costs from loans were capitalized at the weighted average borrowing rate of approximately 5.4%, 5

11. Goodwill and intangible assets, net

	Definite life					
Cost	**Development costs**	**Supply rights**	**Non-competence agreements**	**Customer relationships**	**Software and licenses**	**Intellectual property, maquila righ and others**
As of January 1, 2016	$ 780	$ 5,288	$ 196	$ 627	$ 111	$ 2,83
Additions	7	947	-	-	-	48
Transfers	-	-	-	1	1	
Translation effect	158	1,204	15	125	16	62
As of January 1, 2017	945	7,439	211	753	128	3,93
Additions	7	-	-	30	140	
Disposals	-	-	(90)	-	-	
Impairment	-	(6,410)	-	-	-	
Translation effect	(42)	(1,029)	(15)	(32)	(5)	(1
As of December 31, 2017	910	-	106	751	263	3,76
Additions	11	-	-	-	19	23
Additions for business acquisitions	-	-	-	384	289	
Translation effect	(3)	-	(18)	(15)	(16)	
As of December 31, 2018	$ 918	$ -	$ 88	$ 1,120	$ 555	$ 3,99
Amortization						
As of January 1, 2016	(362)	-	(143)	(237)	(53)	(5
Amortization	(46)	-	(19)	(54)	(24)	(1
Transfers	-	-	-	-	-	
Translation effect	(78)	-	(15)	(53)	(11)	(1
As of January 1, 2017	(486)	-	(177)	(344)	(88)	(8
Amortization	(42)	-	(14)	(53)	(27)	(2
Disposals	-	-	90	-	-	
Translation effect	20	-	15	13	4	2
As of December 31, 2017	(508)	-	(86)	(384)	(111)	(9
Amortization	(24)	-	(12)	(62)	(38)	(2
Additions for business acquisitions	-	-	-	-	(285)	
Disposals	-	-	-	-	-	
Translation effect	1	-	16	2	16	
As of December 31, 2018	$ (531)	$ -	$ (82)	$ (444)	$ (418)	$ (1,2
Net carrying amount						
Cost	945	7,439	211	753	128	3,93
Amortization	(486)	-	(177)	(344)	(88)	(8
As of December 31, 2016	$ 459	$ 7,439	$34	$ 409	$ 40	$ 3,12
Cost	910	-	106	751	263	3,76
Amortization	(508)	-	(86)	(384)	(111)	(9
As of December 31, 2017	$ 402	$ -	$ 20	$ 367	$ 152	$ 2,77
Cost	918	-	88	1,120	555	3,99
Amortization	(531)	-	(82)	(444)	(418)	(1,2
As of December 31, 2018	$ 387	$ -	$ 6	$ 676	$ 137	$ 2,79

Of the total amortization expense, $326, $326 and $295 have been recorded in cost of sales and $17, $14 and $20 in administrative expenses in 2018, 2017 and 2016, respectively.

Incurred research and development expenses that have been recorded in the 2018, 2017 and 2016 consolidated statements of profit (loss) were $53, $65 and $62, respectively.

Impairment testing of goodwill and indefinite lived intangible assets

Goodwill is allocated to operating segments that are expected to benefit from the synergies of the business combination, irrespective of whether other assets or liabilities of the acquirer are assigned to those units or groups of units. As of December 31, 2018, 2017 and 2016, goodwill of $338, $339 and $362, respectively, arises primarily from the Polyester segment.

The recoverable amount from the operating segments has been determined based on calculations of values in use. These calculations use cash flow projections based on pre-tax financial budgets approved by Management covering a period of 5 years.

The gross and operating margins included in the estimates of value in use have been estimated based on the historical performance and the growth expectations of the market in which each group of CGUs operates. The long-term growth rate used in estimating the value in use is consistent with the projections included in industry reports. The present value of the cash flows was discounted using a specific discount rate after taxes for each group of CGUs and reflects the specific risks associated with each of them.

The key assumptions used in calculating the value in use in 2018, 2017 and 2016, were as follows:

	2018	**2017**	**2016**
Estimated gross margin	5.7%	6.3%	6.3%
Growth rate	1.0%	0.0%	0.0%
Discount rate	8.9%	9.0%	9.0%

12. Other non-current assets

	As of December 31,		
	2018	**2017**	**2016**
Notes receivable[1]	$ 3,995	$ 2,143	$1,382
Due from related parties (Note 26)	761	738	745
Trade receivables related with business acquisitions	616	-	-
Financial assets available for sale	-	-	172
Total other non-current financial assets	5,372	2,881	2,299
Investment in associates and joint ventures[2]	8,746	483	403
Recoverable taxes	1,736	-	-
Other	105	167	-
Total other assets	$ 15,959	$ 3,531	$2,702

(1) As of December 31, 2018, this item mainly consists of the financing described in Note 2a. As of December 31, 2017, this item mainly consisted of a transfer of rights that bears monthly interest at a rate of LIBOR + 4.0% and expected maturity in April 2020. As of December 31, 2016, this item mainly consisted of a loan receivable that accrued semi-annual interest at a 6.99% (LIBOR + 5.3%), and maturity in December 2019.

(2) Investment in associates and joint ventures

The Company's account of investments in associates and joint ventures consists of the following:

	Shareholding %	**2018**	**2017**	**2016**
Clear Path Recycling, LLC	49.90%	$ 305	$317	$361
Terminal Petroquímica Altamira, S.A. de C.V.	42.00%	35	34	31
Agua Industrial del Poniente, S.A. de C.V.	47.60%	66	61	-
Galpek, LDA	50.00%	236	71	11
Corpus Christi Polymers LLC	33.30%	8,104	-	-
Investment in associates and joint ventures as of December 31		$8,746	$483	$403

Below is summarized the net income of investments in associates and joint ventures, which are accounted for by the equity method:

	2018	2017	2016
Net (loss) income	$ (61)	$ 22	$(4)
Other comprehensive loss			(2)
Comprehensive income (loss)			(6)
Investment in associates and joint ventures as of December 31	$8,746	$ 483	$403

There are neither commitments nor contingencies liabilities regarding the Company's investment in associates and joint ventures as of December 31, 2018, 2017 or 2016.

13. Subsidiaries with significant non-controlling interest

The significant non-controlling interest, is integrated as follows:

	Non-controlling ownership percentage	Non-controlling interest income for the period			Non-controlling interest as of December 31st,		
		2018	2017	2016	2018	2017	2016
Indelpro, S. A. de C. V. and subsidiary	49%	$1,138	$823	$1,101	$4,135	$3,941	$3,631
Polioles, S. A. de C. V. and subsidiary	50%	38	75	251	294	341	474
Other		125	34	16	607	466	544
		$1,301	$932	$1,368	$5,036	$4,748	$4,649

The summarized consolidated financial information as of December 31, 2018, 2017 and 2016, and for the years then ended, corresponding to each subsidiary with a significant non-controlling interest is shown below:

	Indelpro, S. A. de C. V. and subsidiary			Polioles, S. A. de C. V. and subsidiary		
	2018	2017	2016	2018	2017	2016
Statement of financial position						
Current assets	$ 5,076	$ 4,456	$3,739	$ 1,775	$ 1,940	$2,248
Non-current assets	7,458	7,451	7,737	1,005	1,046	$1,150
Current liabilities	2,230	1,555	1,489	824	880	909
Non-current liabilities	1,865	2,310	2,577	1,369	1,424	1,540
Stockholders' equity	8,439	8,042	7,410	587	682	949
Statements of income						
Revenues	14,494	12,322	11,991	3,736	3,525	3,517
Consolidated net income	2,323	1,679	2,246	76	150	502
Total comprehensive income of the year	2,239	1,392	3,542	63	77	596
Comprehensive income attributable to non-controlling interest	1,097	682	1,735	32	39	298
Dividends paid to non-controlling interest	902	379	1,022	79	165	945
Statements of cash flows						
Net cash flows generated by (used in) operating activities	3,232	1,895	2,328	129	260	(460)
Net cash flows (used in) generated by investing activities	(286)	(343)	(444)	363	174	1,967
Net cash flows used in financing activities	(2,273)	(936)	(2,356)	(418)	(394)	(1,702)
Increase (decrease) in cash and cash equivalents	611	597	(394)	89	48	(227)

14. Trade and other accounts payable

	As of December 31,		
	2018	2017	2016
Trade accounts payable	$ 22,330	$ 17,255	$13,151
Short-term employee benefits	889	416	610
Advances from customers	18	69	45
Taxes other than income taxes	927	746	600
Due to related parties (Note 26)	392	326	337
Other accrued accounts and expenses payable	1,495	971	750
	$ 26,051	$ 19,783	$15,492

15. Debt

	As of December 31,		
	2018	2017	2016
Current:			
Bank loans [1]	$ 9,588	$ 7,119	$2,375
Current portion of non-current debt	472	276	230
Notes payable [1]	43	1	178
Interest payable	15	12	4
Current debt	$ 10,118	$ 7,408	$2,787
Non-current:			
Senior Notes	$ 18,777	$ 18,810	$19,677
Unsecured bank loans	11,707	8,424	2,104
Total	30,484	27,234	21,781
Less: current portion of non-current debt	(472)	(276)	(230)
Non-current debt [2]	$ 30,012	$ 26,958	$21,551

(1) As of December 31, 2018, 2017 and 2016, short-term bank loans and notes payable incurred interest at an average rate of 3.55%, 2.42 % and 2.21%, respectively.

(2) The fair value of bank loans and notes payable approximates their current carrying amount because of their short maturity.

The carrying amounts, terms and conditions of non-current debt are as follows:

Description	Currency	Value in MXN	Debt issuance costs	Interest payable	Balance as of December 31, 2018	Balance as of December 31, 2017 [(1)]	Balance as of December 31, 2016 [(1)]	Maturity date MM/DD/YY	Interest rate
Senior Notes 144A/Reg. S / fixed rate	USD	$12,775	$ (61)	$ 64	$12,778	$ 12,800	$13,389	Nov-20-22	4.50%
Senior Notes 144A/Reg. S / fixed rate	USD	5,905	(31)	125	5,999	6,010	6,288	Aug-08- 23	5.38%
Total Senior Notes		18,680	(92)	189	18,777	18,810	19,677		
Bank loan, Libor+1.60%	USD	-	-	-	-	-	1,034	Dec-19-19	2.59%
Bank loan, Libor+1.10%	USD	-	-	-	-	-	415	Apr-02-18	1.95%
Bank loan, Libor+1.00%	USD	-	-	-	-	-	358	Aug-14-18	1.77%
Bank loan, Libor+1.60%	USD	-	-	-	-	-	169	Jan-31-18	2.22%
Bank loan, BADLAR + 1.00%	ARS	19	-	1	20	64	102	Apr-01-20	51.75%
Bank loan, Fixed 19.00%	ARS	5	-	0	5	16	26	Dec-08-20	25.00%
Bank loan, Libor +1.10%	USD	1,969	-	13	1,982	1,996	-	Nov-30-20	3.62%
Bank loan, Libor +1.10%	USD	984	-	5	989	996	-	Nov-30-20	3.55%
Bank loan, Libor +3.25%	USD	1,968	-	21	1,989	1,991	-	Oct-25-22	5.75%
Bank loan, Libor +1.45%	USD	984	-	2	986	988	-	Dec-15-22	4.23%
Bank loan, Libor +1.25%	USD	2,165	-	4	2,169	-	-	Mar-28-21	4.03%
Bank loan, Libor +1.25%	USD	3,543	-	24	3,567	-	-	Mar-28-21	3.76%
Bank loan, Libor +1.10%	USD	-	-	-	-	988	-	Jul-06-21	2.67%
Bank loan, Libor +2.40%	USD	-	-	-	-	989	-	Jul-17-20	3.86%
Bank loan, Libor +1.00%	USD	-	-	-	-	396	-	Apr-03-20	2.34%
Total unsecured bank loans		11,637	-	70	11,707	8,424	2,104		
Total		$30,317	$ (92)	$ 259	$30,484	$27,234	$21,781		

(1) As of December 31, 2017 and 2016, debt issuance costs were $108 and $127.

As of December 31, 2018, the annual maturities of non-current debt are as follows:

	2020	2021	2022	2023 and thereafter	Total
Bank loans	$ 3,354	$ 6,791	$ 1,279	$ -	$ 11,424
Senior Notes	-	-	12,714	5,874	18,588
	$ 3,354	$ 6,791	$ 13,993	$ 5,874	$ 30,012

As of December 31, 2018, 2017 and 2016, the Company has committed unused lines of credit totaling US$728, US$166 and US$383, respectively.

Covenants:

Loan contracts and debt agreements contain restrictions, primarily relating to compliance with financial ratios, which include the following:

a) Interest hedge ratio: it is calculated by dividing the profit before financial result, net, share of result of associates and joint ventures, income taxes, depreciation and amortization (EBITDA) by the net interest charges for the last four quarters of the analyzed period. This factor cannot be less than 3.0 times.

b) Leverage ratio: defined as the result of dividing the consolidated net debt (current and non-current debt, excluding debt issuance costs less restricted and unrestricted cash and cash equivalents) by the EBITDA of the last four quarters of the period analyzed. This factor cannot be greater than 3.5 times.

   Additionally, there are other restrictions in regards of incurring additional debt or making loans that require mortgaging assets, dividend payments and submission of financial information, which if not met or remedied within a specified period to the satisfaction of creditors may cause the debt to become payable immediately. During 2018, 2017 and 2016, the financial ratios were calculated according to the formulas set forth in the loan agreements. As of December 31, 2018 and the date of issuance of these consolidated financial statements, the Company and its subsidiaries complied satisfactorily with such covenants and restrictions.

16. Provisions

	Dismantling, demolition and environmental remediation	Severance payments and other benefits	Legal contingencies	Other	Total
As of January 1, 2016	$ 471	$ 35	$ -	$ 17	$ 523
Increases	-	-	-	-	-
Payments	(210)	(10)	-	(6)	(226)
Translation effect	69	5	-	(1)	73
As of December 31, 2016	$ 330	$ 30	$ -	$ 10	$ 370
Increases	-	-	-	178	178
Payments	(105)	(12)	-	(26)	(143)
Write-offs	(192)	(16)	-	-	(208)
Translation effect	(20)	(2)	-	5	(17)
As of December 31, 2017	13	-	-	167	180
Increases	-	-	639	485	1,124
Payments	(4)	-	-	(56)	(60)
Write-offs	-	-	(18)	-	(18)
Translation effect	-	-	(1)	(37)	(38)
As of December 31, 2018	$ 9	$ -	$ 620	$ 559	$ 1,188

	2018	2017	2016
Short-term provisions	$ 81	$ 25	$363
Long-term provisions	1,107	155	7
As of December 31	$ 1,188	$ 180	$370

As of December 31, 2018, the provisions shown in the table above mainly include $272 (US$14) related to the obligation to give back to Petrobras certain tax credits, in case they are recovered by Petroquímica Suape and Citepe, as well as $620 (US$31) for labor, civil and tax contingencies also derived from the acquisition of Petroquímica Suape and Citepe, for which the Company holds an account receivable, included in other non-current assets, for $616 (US$31).

Additionally, as of December 31, 2018 and 2017, $147 (US$7.5) were related to for the contingent liability for the earn-out payment related to the acquisition of Selenis. As of December 31, 2016, the provisions were mainly related to the closure of the plant in Cape Fear located in Wilmington, North Carolina carried out in June 2013, and its balance amounted to $360 (US$17). The purpose of this closure was to improve cost competitiveness, through distributing production to the most efficient plants in its productive network. During 2017, the Company continued the works of dismantling and demolition of the plant. As of December 31, 2018, the balance of this provision amounts to $9, which, according to the initial estimate made by management, will be extinguished in future years according to the plan of dismantling and demolition of the plant.

17. Employee benefits

The valuation of retirement plan employee benefits includes formal plans and constructive obligations that covers all employees and is based primarily on their years of service, current age and estimated salary at retirement date.

The principal subsidiaries of the Company have established irrevocable trust funds for payment of pensions and seniority premiums and health-care expenses.

Below is a summary of the main financial data of such employee benefits:

	As of December 31,		
	2018	2017	2016
Employee benefit obligations:			
Pension benefits	$ 797	$ 753	$ 940
Post-employment medical benefits	120	148	177
	917	901	1,117
Defined contribution plans	182	160	110
Employee benefits in the consolidated statement of financial position	$1,099	$1,061	$1,227
Charge to the consolidated statement of profit (loss) for:			
Pension benefits	$ (64)	$ (67)	$ (56)
Post-employment medical benefits	(6)	(7)	(8)
	(70)	(74)	(64)
Remeasurements of employee benefit obligations recognized in other comprehensive income of the year	$ (73)	$ 100	$ 100
Remeasurements of accrued employee benefit obligations	$ (88)	$ (31)	$(131)

Pension and post-employment medical benefits

The Company operates defined benefit pension plans based on employees´ pensionable remuneration and length of service. Most plans are externally funded. Plan assets are held in trusts, foundations or similar entities, governed by local regulations and practice in each country, as is the nature of the relationship between the Company and the respective trustees (or equivalent) and their composition.

The Company operates post-employment medical benefit schemes mainly in its subsidiary DAK Americas.

The method of accounting, assumptions and the frequency of valuations are similar to those used for defined benefit pension schemes. Most of these plans are not being funded.

Amounts recognized in the consolidated statement of financial position are determined as follows:

	As of December 31,		
	2018	2017	2016
Present value of defined benefit obligations	$ 3,672	$ 3,998	$ 3,964
Fair value of plan assets	(2,755)	(3,097)	(3,024)
Liability in the statement of financial position	$ 917	$ 901	$ 940

The movements of defined benefit obligations are as follows:

	2018	2017	2016
As of January l,	$3,998	$3,964	$3,546
Service cost	45	44	44
Interest cost	145	155	161
Contributions from plan participants	11	16	-
Remeasurements:			
(Losses) gains from changes in financial assumptions	(191)	174	49
Losses from changes in demographic assumptions and experience adjustments	(7)	(20)	(121)
Translation effect	-	(172)	618
Other benefits	-	177	-
Benefits paid	(328)	(337)	(309)
Plan curtailments	(1)	-	(18)
Settlements	-	(3)	(6)
As of December 31,	$3,672	$3,998	$3,964

The movement in the fair value of plan assets for the year is as follows:

	2018	2017	2016
As of January 1	$(3,097)	$(3,024)	$(2,688)
Interest income	(119)	(122)	(126)
Remeasurements – return on plan assets, excluding interest income	261	(254)	(29)
Translation effect	7	112	(434)
Contributions	(47)	(57)	(33)
Benefits paid	240	248	286
As of December 31	$(2,755)	$(3,097)	$(3,024)

The amounts recorded in the consolidated statement of profit (loss) for the years ended December 31 are the following:

	2018	2017	2016
Service cost	$ (45)	$ (44)	$(44)
Interest cost, net	(26)	(33)	(35)
Effect of plan curtailments and/or settlements	1	3	23
Total included in personnel cost	$ (70)	$ (74)	$(56)

The principal actuarial assumptions are as follows:

	As of December 31,		
	2018	2017	2016
Discount rate Mexico	9.50%	7.25%	7.75%
Discount rate United States	3.89%-4.03%	3.30%-3.49%	3.89%
Inflation rate	3.50%	3.50%	3.50%
Wage increase rate	4.50%	4.50%	4.50%
Medical inflation rate Mexico	6.50%	6.50%	6.50%

The sensitivity analysis of the discount rate for defined benefit obligations is as follows:

	Effect in defined benefit obligations		
	Change in assumption	**Increase in assumption**	**Decrease in assumption**
Discount rate	MX 1%	Decrease by $18	Increase by $20

Sensibility analyses are based on a change in assumptions, while the all other assumptions remain constant. In practice, this is slightly probable, and the changes in some assumptions may be correlated. In the calculation of the sensibility from the defined benefit obligation, significant actuarial assumptions the same method (present value of calculated defined benefit obligation with the projected unit credit method at reporting period) has been applied as in the calculation of liabilities for pensions recognized within the consolidated statement of financial position.

Defined benefit plan assets

Plan assets are comprised as follows:

	As of December 31,		
	2018	**2017**	**2016**
Equity instruments	$ 1,797	$ 2,043	$1,949
Fixed income	958	1,054	1,075
Fair value of plan assets	$ 2,755	$ 3,097	$3,024

18. Income taxes

The Company is subject to income tax, whose rate is 30% in Mexico. The statutory income tax rates applicable to the main foreign subsidiaries were as follows:

	2018	**2017**	**2016**
United States[(1)]	21.0%	35.0%	35.0%
Brazil	34.0%	34.0%	34.0%
Argentina [(1)]	30.0%	35.0%	35.0%
Chile [(1)]	27.0%	25.5%	24.0%
Canada	25.0%	25.0%	25.0%
Spain	25.0%	25.0%	25.0%

(1) On December 22, 2017, the U.S. government enacted substantial changes to its existing tax law ("H.R. 1", originally known as the "Tax Cuts and Jobs Act", or the "Act"). Although most provisions of the Act, including the reduction of the corporate tax rate to 21%, became effective beginning on January 1, 2018, IFRS requires entities to recognize the effect of tax law changes in the period of enactment. Additionally, changes in applicable tax rates were enacted in other jurisdictions where the Company operates, such as Argentina and Chile. In Argentina the corporate tax rate became 30% for 2018 and will remain unchanged in 2019, and will be 25% in 2020, while in Chile it increased to 27% from 2018. The Company determined that the effect derived from the change in tax rates recognized in the consolidated statement of profit (loss) for 2017 was $699.

a. Income taxes recognized in the consolidated statement of profit (loss) are as follows:

	2018	**2017**	**2016**
Current income tax	$(2,549)	$(1,511)	$(2,470)
True-up to prior years' income tax provision	474	188	(33)
Deferred income taxes	(1,380)	3,036	145
Income taxes	$(3,455)	$ 1,713	$(2,358)

b. The reconciliation between the statutory and effective income tax rates is as follows:

	2018	2017	2016
Income (loss) before income taxes	$18,389	$(6,268)	$7,351
Income tax rate	30%	30%	30%
Statutory income tax rate (expense) benefit	(5,517)	1,881	(2,205)
(Less) add income tax effect on:			
Annual adjustment for inflation	(388)	(323)	(71)
Non-deductible expenses	(12)	(11)	(24)
Non-taxable income	1,362	71	27
Effect of different tax rates of other countries other than Mexico	504	385	(51)
True up with respect to prior years' current income tax	474	188	(33)
True up with respect to prior years' deferred income tax	-	-	-
Translation effect from the functional currency	131	192	-
Effect of changes in tax rates	-	(669)	-
Investments in associates and joint ventures	(9)	(1)	(1)
Total income taxes	$(3,455)	$ 1,713	$(2,358)
Effective tax rate	19%	27%	32%

c. The breakdown of the deferred tax asset and deferred tax liability is as follows:

		Asset (liability) December 31,	
	2018	2017	2016
Property, plant and equipment	$ (1,221)	$ 44	$ -
Intangible assets	(246)	1,907	-
Debt issuance costs	(17)	(18)	-
Provisions	123	41	139
Derivative financial instruments	334	-	124
Tax loss carryforwards	1,019	354	1,798
Tax credits, impairment allowance and other	1,489	601	-
Effect of tax rates of other countries and changes in tax rates	(97)	(505)	-
Deferred tax asset	$ 1,384	$ 2,424	$ 2,061
Inventories	(106)	(95)	(66)
Property, plant and equipment, net	(5,757)	(5,884)	(6,328)
Intangible assets	(48)	(41)	(442)
Tax loss carryforwards	177	637	-
Other items	981	855	(675)
Effect of tax rates of other countries and changes in tax rates	1	125	-
Deferred tax liability	$ (4,752)	$ (4,403)	$(7,511)

Deferred income tax assets are recognized on tax loss carryforwards to the extent the realization of the related tax benefit through future tax income is probable. Tax losses amount to $9,328, $3,303 and $5,993 in 2018, 2017 and 2016, respectively.

Tax losses as of December 31, 2018 expire in the following years:

Loss for the year incurred	Tax-loss carryforwards	Expiration year
2011	$ 151	2021
2012	13	2022
2013	54	2023
2014	401	2024
2015	241	2025
2016	380	2026
2017	394	2027
2018	2,354	2028 and later
2018	5,340	No expiration
	$ 9,328	

As of December 31, 2018, the Company holds tax losses to be utilized in Brazil, through Petroquímica Suape and Citepe, for an amount of $5,340, which have no expiration date. The Company has decided to reserve the total amount of these tax losses, according to management's estimate of future reversals of temporary differences; thus, as of December 31, 2018, they do not generate deferred tax assets.

d. Income tax related to other comprehensive income is as follows:

	2018			2017			2016		
	Before taxes	Tax charged	After taxes	Before taxes	Tax charged	After taxes	Before taxes	Tax charged	After taxes
Foreign currency translation effect	$(1,814)	$ -	$(1,814)	$(2,461)	$ -	$(2,461)	$6,233	$ -	$6,233
Remeasurement of employee benefit obligations	(73)	18	(55)	100	(50)	50	100	(36)	64
Effect of derivative financial instruments designated as cash flow hedges	(721)	161	(560)	209	(86)	123	646	(262)	384
Equity in other comprehensive income of associates and joint ventures	-	-	-	-	-	-	(2)	-	(2)
Other comprehensive loss	$(2,608)	$ 179	$(2,429)	$(2,152)	$(136)	$(2,288)	$6,977	$(298)	$6,679

e.Income tax payable consists of the following:

	As of December 31,		
	2018	2017	2016
Current portion	$ 1,279	$ 573	$694
Non-current portion	469	623	553
Total income tax payable	$ 1,748	$ 1,196	$1,247

19. Other non-current liabilities

	As of December 31,		
	2018	2017	2016
Advances from customers [(1)]	$ 361	$ 419	$500
Other	75	3	4
Total other liabilities	$ 436	$ 422	$504

[(1)] This item corresponds to revenues charged in advance and relates to the future delivery of goods.

20. Stockholders' equity

As of December 31, 2018, capital stock is variable, with a fixed minimum of $6,052 represented by 2,118,163,635 ordinary, nominative shares, "Class I" Series "A", with no par value, fully subscribed and paid in. The variable capital entitled to withdrawal will be represented, if issued, by registered "Class II" Series "A" shares without par value.

As of December 31, 2018, the Company does not have treasury shares. As of such date, the market value per share was $24.05 Mexican pesos.

From February to May 2018, the Company sold 1,485,884 shares in the amount of $39, in connection to a repurchase program that was approved by the Company's stockholders and exercised discretionally by Management. During 2017, the Company sold 40,500 shares in the amount of $1, in connection with the abovementioned repurchase program. During 2016, the Company repurchased 1,526,384 shares in the amount of $46, also related to the same initiative.

The net income of the year is subject to decisions made by the General Stockholders' Meeting, the Company's by-laws and the General Law of Mercantile Corporations. In accordance with the General Law of Mercantile Corporations, the legal reserve should be increased annually by 5% of the net annual income until it reaches 20% of the fully paid in capital stock. As of December 31, 2018, 2017 and 2016, the legal reserve amounts to $804, $696 and $514, respectively.

At the ordinary stockholders' meeting of Alpek on February 27, 2017, the stockholders agreed to declare dividends in cash in the aggregate amount of $2,667 (US$143), which were paid in two disbursements from March 8 and September 7 in the same year.

At the General Ordinary Meeting of Alpek, held on February 24, 2016, the stockholders resolved to declare cash dividends on March 4, 2016 in a total amount of $1,959.

The Income Tax Law establishes a tax rate of 10% to the dividends paid to foreign residents and Mexican individuals derived from the profits generated since 2014, also provides that for the years 2001-2013, the net taxable profit will be determined in terms of the Income Tax Law in force in the fiscal year concerned.

Dividends paid are not subject to income tax if they derived from the Net Tax Profit Account (CUFIN Spanish acronym). Any dividends paid in excess of this account will cause an income tax charge based on the tax rate valid in the period in which they are paid. This tax is payable by the Company and may be credited against its income tax in the same year or the following two years. Dividends paid from profits which have previously paid income tax are not subject to tax withholding or to any additional tax payment. As of December 31, 2018, the tax value of the consolidated CUFIN and value of the Capital Contribution Account (CUCA Spanish acronym) amounted to $3,096 and $20,287, respectively.

21. Shared-based payments

Alpek has a stock based compensation scheme referred to at 50% of the value of stock of Alfa and the other 50% of the value of the shares of Alpek, S. A. B. de C. V. for directors of the Company and its subsidiaries. In accordance with the terms of the plan, the eligible directors will obtain a cash payment contingent upon achieving both quantitative and qualitative metrics derived from the following financial measures:

- Improved share price
- Improvement in net income
- Permanence of the executives in the Company

The program consists in determining a number of shares which the executives will have a right to, that will be paid in cash over the next five years; i.e., 20% every year and will be paid at the average price of the shares during the year. These payments are measured at the fair value of the consideration, therefore, because they are based on the price of Alfa and Alpek shares, the measurement is considered to be within level 1 of the fair value hierarchy.

The average price of the shares in pesos used as reference is:

	2018	**2017**	**2016**
Alfa, S. A. B. de C. V.	22.11	21.12	26.73
Alpek, S. A. B. de C. V.	24.13	22.95	26.10

The short-term and long-term liabilities are comprised as follows:

	As of December 31,		
	2018	**2017**	**2016**
Short term	$ 8	$ 7	$ 10
Long term	20	15	21
Total carrying amount	$ 28	$ 22	$ 31

22. Expenses classified by their nature

The total cost of sales and selling and administrative expenses, classified by the nature of the expense, are comprised as follows:

	2018	2017	2016
Raw material and other	$ (95,750)	$(70,121)	$(60,305)
Employee benefit expenses (Note 25)	(5,128)	(4,363)	(4,227)
Human resource expenses	(48)	(32)	(54)
Maintenance	(1,746)	(1,517)	(1,411)
Depreciation and amortization	(2,887)	(2,635)	(2,560)
Advertising expenses	(3)	(3)	(3)
Freight expenses	(5,305)	(5,319)	(4,325)
Consumption of energy and fuel (gas, electricity, etc.)	(5,380)	(4,228)	(3,514)
Travel expenses	(171)	(146)	(170)
Operating lease expenses	(966)	(888)	(775)
Technical assistance, professional fees and administrative services	(1,481)	(1,015)	(937)
Other (insurance and bonds, water, containers and packing, etc.)	(2,956)	(2,158)	(2,283)
Total	$(121,821)	$(92,425)	$(80,564)

23. Other income, net

Other income for the years ended December 31, are comprised as follows:

	2018	2017	2016
Gain on business combination	$ 4,597	$ 238	$ 36
Gain on sale of wastes	-	-	3
Gain on sale of property, plant and equipment	-	-	1
Expenses related to acquisition projects	-	-	(5)
Income from loss recovery [(1)]	-	-	112
Other income	423	147	90
Impairment of property, plant and equipment and other	(456)	(43)	(2)
Other expenses	-	(7)	-
Total	$ 4,564	$ 335	$235

(1) This item represents the recovery insurance related to DAK Argentina.

24. Finance income and costs

Financial result, net for the years ended December 31, are comprised as follows:

	2018	2017	2016
Financial income:			
Interest income on short-term bank deposits	$ 98	$ 65	$ 150
Interest income on loans from related parties	27	27	44
Other financial income	317	106	87
Gain on changes in the fair value of financial assets at fair value through profit or loss	-	-	4
Total financial income	$ 442	$ 198	$ 285
Financial expenses:			
Interest expense on loans to related parties	$ (2)	$ (2)	(1)
Interest expense on bank loans	(893)	(295)	(143)
Non-bank interest expense	(966)	(941)	(926)
Net interest cost on employee benefits	(21)	(40)	(44)
Other financial expenses	(301)	(198)	(300)
Valuation effect of derivative financial instruments	-	(6)	-
Total financial expense	$(2,183)	$(1,482)	$(1,414)
Loss in exchange fluctuation, net			
Foreign exchange gain	3,302	3,125	3,280

Foreign exchange loss	(4,344)	(3,557)	(4,660)
Loss in exchange fluctuation, net	$(1,042)	$ (432)	$(1,380)
Impairment of financial assets	-	(1,694)	-
Financial result, net	$(2,783)	$(3,410)	$(2,509)

25. Employee benefit expenses

Employee benefits expenses for the years ended December 31, are as follows:

	2018	2017	2016
Salaries, wages and benefits	$(3,869)	$(3,188)	$(3,102)
Social security fees	(351)	(318)	(304)
Employee benefits	(44)	(41)	(22)
Other fees	(864)	(816)	(799)
Total	$(5,128)	$(4,363)	$(4,227)

26. Related party transactions

Transactions with related parties during the years ended December 31, 2018, 2017 and 2016, were as follows:

	2018	2017	2016
Income			
Income from sale of goods:			
Stockholders with significant influence over subsidiaries	$1,486	$1,438	$1,343
Income from services:			
Affiliates	263	198	350
Stockholders with significant influence over subsidiaries	220	206	180
Income from financial interest:			
Alfa	25	24	28
Affiliates	-	-	10
Stockholders with significant influence over subsidiaries	2	3	6
Other income:			
Affiliates	-	-	1
Associates and joint ventures	3	10	-
Costs / expenses			
Purchase of finished goods and raw materials:			
Affiliates	-	-	(3)
Stockholders with significant influence over subsidiaries	(992)	(853)	(915)
Expenses from services:			
Affiliates	(394)	(348)	(346)
Associates and joint ventures	-	(21)	-
Stockholders with significant influence over subsidiaries	(24)	(18)	(15)
Financial interest expenses:			
Associates and joint ventures	(2)	(2)	(1)
Other expenses:			
Affiliates	(18)	(31)	(69)
Associates and joint ventures	(38)	(8)	-
Stockholders with significant influence over subsidiaries	-	(2)	(6)
Dividends declared:			
Alfa	-	(2,191)	(1,608)
Other stockholders	-	(476)	(351)
Dividends of subsidiaries to non-controlling interest:			
Stockholders with significant influence over subsidiaries	(981)	(544)	(1,967)
Other stockholders	-	(74)	(82)
Effect of transfer of common control [1]	-	-	(435)

(1) During the month of November 2016, Alpek received from Alfa the transfer of shares representative of 100% of the capital stock of Petrocel, S. A. (company that has the operating rights of a maritime terminal in Altamira, Tamaulipas), thus since that date became a subsidiary of Alpek. The cost of this transactions amounted to $1, and represented the acquisition of negative net assets amounting to $434.

For the year ended December 31, 2018, the remunerations and benefits received by the top officers of the Company amounted to $281 ($309 and $336 in 2017 and 2016, respectively), comprising of base salary and social security benefits, and supplemented by a variable consideration program based on the Company's results and the market value of the shares thereof and of its holding company.

As of December 31, balances with related parties are as follows:

		As of December 31,		
	Nature of the transaction	**2018**	**2017**	**2016**
Short-term accounts receivable:				
Holding company				
Alfa, S. A. B. de C. V.	Administrative services	$190	$190	$ 190
Affiliates				
Innovación y Desarrollo de Energía Alfa Sustentable, S. A. de C. V.	Administrative services	115	115	115
Newpek, LLC	Administrative services	4	14	5
Nemak México, S. A. de C. V.	Administrative services	9	4	7
Terza, S. A. de C. V.	Sale of goods	1	-	1
Sigma Alimentos Lácteos		4	-	-
Shares with significant influence on subsidiaries				
BASF	Sale of goods	132	155	112
BASF	Sale of business	203	405	635
BASF	Lease and administrative services	-	-	2
Basell	Sale of goods	54	43	25
Basell	Administrative services	-	-	9
		$712	$926	$1,101
Long-term accounts receivable:				
Holding company				
Alfa, S. A. B. de C. V. (1)	Financing and interest	$761	$738	$ 745
Short-term accounts payable:				
Affiliates				
Alliax, S. A. de C. V.	Administrative services	$ 21	$ 16	$18
Nemak Exterior, LTD	Administrative services	2	1	1
Alfa Corporativo, S. A. de C. V.	Administrative services	23	10	16
Newpek, S.A.	Administrative services	-	-	3
Servicios Empresariales del Norte, S. A. de C. V.	Administrative services	2	-	2
Alestra, S. de R.L. de C.V.	Administrative services	-	-	2
Axtel, S.A.B. de C.V.		3	-	-
Other	Administrative services	-	4	-
Associates				
Clear Path Recycling, LLC	Financing and interest	69	79	83
Terminal Petroquímica Altamira, S. A. de C. V.	Administrative services	-	-	1
Stockholders with significant influence over subsidiaries				
BASF	Sale of goods	259	-	16
BASF	Sale of raw material	-	195	164
BASF	Commissions and other	-	4	2
Basell	Other	12	17	29
Tepeal		1	-	-
		$392	$326	$ 337

Long-term accounts payable:				
Affiliates				
Alfa Corporativo, S. A. de C. V.	Administrative services	$ 4	$ 3	$ 4

(1) As of December 31, 2018, 2017 and 2016, the loans granted bore interest at average fixed interest rate of 5.34%.

27. Segment reporting

Segment reporting is presented consistently with the financial information provided to the Chief Executive Officer, who is the highest authority in operational decision making, allocation of resources and performance assessment of operating segments.

An operating segment is defined as a component of an entity on which separate financial information is regularly evaluated.

Management controls and assesses its operations through two business segments: the Polyester business and the Plastics and Chemicals business. These segments are managed separately since its products vary and targeted markets are different. Their activities are performed through various subsidiaries.

The operations between operating segments are performed at market value and the accounting policies with which the financial information by segments is prepared, are consistent with those described in Note 3.

The Company has defined Adjusted EBITDA as the calculation of adding operating income, depreciation, amortization, and impairment of long lived assets.

The Company evaluates the performance of each of the operating segments based on Adjusted EBITDA, considering that this indicator is a good metric to evaluate operating performance and the ability to meet principal and interest obligations with respect to indebtedness, and the ability to fund capital expenditures and working capital requirements. Nevertheless, Adjusted EBITDA is not a measure of financial performance under IFRS and should not be considered as an alternative to net income as a measure of operating performance or cash flows as a measure of liquidity.

Following is the condensed financial information of the Company's operating segments:

For the year ended December 31, 2018:	**Polyester**	**Plastics and Chemicals**	**Other**	**Total**
Statement of profit (loss):				
Income by segment	$ 99,664	$ 33,204	$ 1,655	$ 134,523
Inter-segment income	(105)	(279)	384	-
Income from external customers	$ 99,559	$ 32,925	$ 2,039	$ 134,523
Operating income	$ 16,470	$ 4,735	$ (3)	$ 21,202
Depreciation and amortization	2,329	556	-	2,885
Impairment of long-lived assets	(3,481)	1	-	(3,480)
Adjusted EBITDA	$ 15,318	$ 5,292	$ (3)	$ 20,607
Investments in fixed and intangible assets	$ 1,509	$ 491	$ 5	$ 2,005

For the year ended December 31, 2017:	**Polyester**	**Plastics and Chemicals**	**Other**	**Total**
Statement of profit (loss):				
Income by segment	$70,589	$ 28,724	$(315)	$98,998
Inter-segment income	(113)	(202)	315	-
Income from external customers	$70,476	$ 28,522	$ -	$98,998
Operating (loss) income	$(6,814)	$ 3,966	$ (6)	$(2,854)
Depreciation and amortization	2,085	550	-	2,635
Impairment of long-lived assets	7,699	3	-	7,702
Adjusted EBITDA	$ 2,970	$ 4,519	$ (6)	$ 7,483
Investments in fixed and intangible assets	$ 3,420	$ 1,011	$ -	$ 4,431

For the year ended December 31, 2016:	Polyester	Plastics and Chemicals	Other	Total
Statement of (loss) profit:				
Income by segment	$64,336	$ 26,151	$(295)	$90,192
Inter-segment income	(95)	(200)	295	-
Income from external customers	$64,241	$ 25,951	$ -	$90,192
Operating income	$ 4,487	$ 5,413	$ (37)	$ 9,863
Depreciation, amortization and impairment of non-current assets	2,027	535	-	2,562
Adjusted EBITDA	$ 6,514	$ 5,948	$ (37)	$12,425
Investments in fixed and intangible assets	$ 5,234	$ 747	$ -	$ 5,981

The reconciliation between adjusted EBITDA and income before taxes for the years ended December 31, is as follows:

	2018	2017	2016
Adjusted EBITDA	$20,607	$ 7,483	$12,425
Depreciation and amortization	(2,885)	(2,635)	(2,562)
Impairment of long-lived assets	3,480	(7,702)	-
Operating income	21,202	(2,854)	9,863
Financial result, net	(2,783)	(3,410)	(2,509)
Equity in loss of associates and joint ventures	(30)	(4)	(3)
Income (loss) before income taxes	$18,389	$ (6,268)	$ 7,351

Following is a summary of revenues per country of origin for the years ended December 31:

	2018	2017	2016
Mexico	$ 54,282	$47,516	$43,657
United States	57,894	41,438	39,271
Argentina	6,784	5,341	4,405
Brazil	11,291	1,462	1,301
Chile	1,094	921	766
Canada	3,178	2,320	792
Total revenues	$134,523	$98,998	$90,192

The Company's main costumer generated revenue amounting to $12,640 for the year ended December 31, 2018. For the years ended December 31, 2017 and 2016, the Company's main customer was different and generated revenue of $7,596 and $8,654 for such periods, respectively. This revenue is obtained from the Polyester reporting segment and represents 9%, 8% and 10% of the consolidated revenue with external costumers from the years ended December 31, 2018, 2017 and 2016, respectively.

The following table shows the intangible assets and property, plant and equipment by country:

	As of December 31,		
	2018	2017	2016
Mexico	$ 2,243	$ 2,188	$2,344
United States	1,712	1,848	9,524
Chile	-	-	6
Canada	29	1	1
Brazil	384	28	-
Total intangible assets	$ 4,368	$ 4,065	$ 11,875

Mexico	$32,520	$ 32,029	$30,511
United States	6,773	7,546	8,425
Canada	1,068	1,229	968
Argentina	140	271	349
Chile	273	323	318
Brazil	6,259	137	128
Total property, plant and equipment	$47,033	$ 41,535	$40,699

28. Commitments and contingencies

At December 31, 2018, the Company has the following commitments:

a. At December 31, 2018, 2017 and 2016, the Company's subsidiaries had entered into various agreements with suppliers and customers for purchases of raw materials used for production and the sale of finished goods, respectively. The term of these agreements varies between one and five years and generally contain price adjustment clauses.

b. In December 2018, Indelpro entered into an extension agreement with PEMEX Refinación to cover the supply of propylene for the chemical and refining area, whose previous maturity was in 2018, and which establishes the obligation to purchase the maximum level of production available at a referenced market prices. Purchases of propylene during the years ended December 31, 2018, 2017 and 2016 amounted to $2,229, $2,732 and $2,317, respectively. The purchase commitment for the year 2019 amounts to approximately $2,229 and is based on the estimates and assumptions considered for the same year.

As of December 31, 2018, the Company has the following contingencies:

a. During the normal course of the business, the Company may be involved in disputes and litigations. While the results of these can't be predicted, the Company does not believe that there are actions pending to apply, claims or legal proceedings against or affecting the Company which, if it will result in an adverse resolution to the Company, would negatively impact the results of its operations or its financial position.

b. Some of the Company's subsidiaries use hazardous materials to manufacture polyester filaments and staple fibers, polyethylene terephthalate (PET) and terephthalatic acid (PTA) resin, polypropylene (PP) resin, expandable polystyrene (EPS), caprolactam (CPL), chemical specialties and they generate and dispose of waste, such as catalysts and glycols. These and other activities of the subsidiaries are subject to various federal, state and local laws and regulations governing the generation, handling, storage, treatment and disposal of hazardous substances and wastes. According to such laws, the owner or lessor of real estate property may be liable for, among other things, (i) the costs of removal or remediation of certain hazardous or toxic substances located on, in, or emanating from, such property, as well as the related cost of investigation and property damage and substantial penalties for violations of such law, and (ii) environmental contamination of facilities where its waste is or has been disposed of. Such laws impose such liability without regard to whether the owner or lessee knew of, or was responsible for, the presence of such hazardous or toxic substances.

   Although the subsidiaries estimate that there are no existing material liabilities relating to noncompliance with environmental laws and regulations, there can be no assurance that there are no undiscovered potential liabilities related to historic or current operations that will require investigation and/or remediation under environmental laws, or that future uses or conditions will not result in the imposition of an environmental liability or expose them to third-party or related parties actions, such as tort suits. Furthermore, there can be no assurance that changes in environmental regulations in the future will not require the subsidiaries to make significant capital expenditures to change methods of disposal of hazardous materials or otherwise alter aspects of their operations.

c. As of December 31, 2018, the Company is involved in a process of tax litigation with respect to one of its subsidiaries in Brazil, in relation to the demand for payment of the Tax on the Circulation of Goods and Services ("ICMS") that the Ministry of Finance of the State of Sao Paulo ("SFSP", for its initials in Portuguese) has raised against the Company, due to differences in the criteria for the calculation and crediting of said tax. Considering all the circumstances and precedents of jurisprudence available at that date, management and its advisors have determined that it is probable that the Superior Court of Justice of Brazil will issue a judgment in favor of the Company for the amount related to differences in the calculation, which would exempt it from paying $401 in taxes, fines and interest that the SFSP demands; therefore, as of December 31, 2018, the Company has not recognized any provision related to this concept.

   On the other hand, for the concept of ICMS crediting, the amount demanded amounts to $80, and management and its advisors consider that it is not probable that the authorities will issue an unfavorable resolution for the Company; thus, it has not recognized any provision related to this concept as of December 31, 2018.

29. Subsequent events

In preparing the financial statements the Company has evaluated the events and transactions for their recognition or disclosure subsequent to December 31, 2018 and through January 31, 2019 (date of issuance of the consolidated financial statements), and has identified the following subsequent events:

a. On January 6, 2019, the Company signed a final agreement for the sale of its two electric power cogeneration plants, located in Cosoleacaque and Altamira, Mexico. The agreement contemplates the sale of all the representative shares held by Alpek, S. A. B. de C. V. on the equity of the entities that own both plants: Cogeneraciónn de Altamira, S. A. de C. V. and Cogeneración de Energía Limpia de Cosoleacaque, S. A. de C. V., for an amount of US$801, to ContourGlobal Terra 3 S.à.r.l. ("CG Terra 3"), a subsidiary of ContourGlobal PLC.

   Also, as part of the transaction, Alpek, S. A. B. de C. V. will sign with CG Terra 3, among others, an option contract, by virtue of which Alpek, S. A. B. de C. V. undertakes to sell its shares representing the capital stock of Tereftalatos Mexicanos Gas, S. A. de C. V. (whose assets include gas pipelines that transport natural gas from the point of interconnection of the integrated national transport system to the point of consumption), in favor of CG Terra 3, in the event that the latter exercises the purchase option within a maximum term of 5 years from the date of signature of the option contract. The option will be subject to compliance with certain precedent conditions under the contract, and its price will be subject to working capital adjustments.

   The agreed price will be subject to certain adjustments established in the purchase agreement and must be paid at the close of the transaction, which is expected during the first months of 2019, and is subject to customary closing terms and conditions, including corporate approvals and from the Federal Commission of Economic Competition.

b. On January 9, 2019, the Company announced that one of its subsidiaries signed an agreement with Perpetual Recycling Solutions, LLC ("Perpetual"), for the purchase of a PET recycling facility located in Richmond, Indiana, United States of America. The PET recycling plant has a capacity to produce approximately 45,000 tons per year of high quality recycled PET flakes, and its acquisition will complement the Company's PET recycling operations in Argentina and North Carolina.

   The closing of the transaction is subject to compliance with preceding conditions and is expected during the first quarter of 2019.

30. Authorization to issue the consolidated financial statements

On January 31, 2019, the issuance of the accompanying consolidated financial statements was authorized by José de Jesús Valdez Simancas, General Director, and José Carlos Pons de la Garza, Administration and Finance Director.

These consolidated financial statements are subject to the approval of the Company’s ordinary shareholders’ meeting.

Alpek, S. A. B. de C. V. and Subsidiaries
(Subsidiary of Alfa, S. A. B. de C. V.)

Unaudited Condensed Consolidated Interim Financial Statements as of June 30, 2019 and December 31, 2018 and for the six-month periods ended June 30, 2019 and 2018

Alpek, S. A. B. de C. V. and Subsidiaries
(Subsidiary of Alfa, S. A. B. de C. V.)

Unaudited Condensed Consolidated Interim Financial Statements as of June 30, 2019 and December 31, 2018 and for the six-month periods ended June 30, 2019 and 2018

Table of Contents

	Page
Unaudited Condensed Consolidated Interim Statements of Financial Position	1
Unaudited Condensed Consolidated Interim Statements of Income	2
Unaudited Condensed Consolidated Interim Statements of Comprehensive Income	3
Unaudited Condensed Consolidated Interim Statements of Changes in Stockholders' Equity	4
Unaudited Condensed Consolidated Interim Statements of Cash Flows	5
Notes to the Unaudited Condensed Consolidated Interim Financial Statements	6

Alpek, S. A. B. de C. V. and Subsidiaries
(Subsidiary of Alfa, S. A. B. de C. V.)

Unaudited Condensed Consolidated Interim Statements of Financial Position

As of June 30, 2019 and December 31, 2018
In millions of Mexican pesos

Assets	**Note**	**As of June 30, 2019**	**As of December 31, 2018**
Current assets:			
Cash and cash equivalents	6	$ 5,493	$ 4,168
Restricted cash	6	3	3
Trade and other accounts receivable, net	7	19,521	21,934
Inventories	8	18,923	24,511
Derivative financial instruments		9	30
Prepayments		577	469
Other	2a, 9	8,604	-
Total current assets		53,130	51,115
Non-current assets:			
Property, plant and equipment, net	9	38,220	47,033
Right of use asset, net	10	3,243	-
Goodwill and intangible assets, net	11	4,166	4,368
Deferred income taxes		1,411	1,384
Prepayments		16	38
Other non-current assets		14,991	15,959
Total non-current assets		62,047	68,782
Total assets		$ 115,177	$ 119,897
Liabilities and Stockholders' Equity			
Current liabilities:			
Debt	12	$ 11,341	$ 10,118
Lease liability		927	-
Trade and other accounts payable		19,258	26,051
Income taxes payable		654	1,279
Derivative financial instruments		1,450	1,047
Provisions		49	81
Other	2a	761	-
Total current liabilities		34,440	38,576
Non-current liabilities:			
Debt	12	30,733	30,012
Lease liability		2,359	-
Derivative financial instruments		244	283
Provisions		1,100	1,107
Deferred income taxes		3,801	4,752
Income taxes payable		403	469
Employee benefits		1,121	1,099
Other non-current liabilities		391	436
Total non-current liabilities		40,152	38,158
Total liabilities		74,592	76,734
Stockholders' equity			
Controlling interest:			
Capital stock	14	6,050	6,052
Share premium		9,098	9,106
Retained earnings		15,846	17,235
Other reserves		4,883	5,734
Total controlling interest		35,877	38,127
Non-controlling interest		4,708	5,036
Total stockholders' equity		40,585	43,163
Total liabilities and stockholders' equity		$ 115,177	$ 119,897

The accompanying notes are an integral part of these unaudited condensed consolidated interim financial statements.

Alpek, S. A. B. de C. V. and Subsidiaries

(Subsidiary of Alfa, S. A. B. de C. V.)

Unaudited Condensed Consolidated Interim Statements of Income

For the six-month periods ended June 30, 2019 and 2018
In millions of Mexican pesos, except for earnings per share amounts

	Note	June 30, 2019	June 30, 2018
Revenues		$ 62,992	$ 62,888
Cost of sales		(57,071)	(53,978)
Gross profit		5,921	8,910
Selling expenses		(1,013)	(1,027)
Administrative expenses		(1,413)	(1,501)
Other income, net	15	326	4,773
Operating income		3,821	11,155
Financial income		360	201
Financial expenses		(1,329)	(990)
Gain due to exchange fluctuation, net		185	499
Financial result, net		(784)	(290)
Equity in loss of associates and joint ventures		(4)	(9)
Income before taxes		3,033	10,856
Income taxes	13	(944)	(1,305)
Net consolidated income		$ 2,089	$ 9,551
Income attributable to:			
Controlling interest		$ 1,581	$ 8,839
Non-controlling interest		508	712
		$ 2,089	$ 9,551
Earnings per basic and diluted share, in Mexican pesos		$ 0.75	$ 4.17
Weighted average outstanding shares (millions of shares)		2,118	2,117

The accompanying notes are an integral part of these unaudited condensed consolidated interim financial statements.

Alpek, S. A. B. de C. V. and Subsidiaries
(Subsidiary of Alfa, S. A. B. de C. V.)

Unaudited Condensed Consolidated Interim Statements of Comprehensive Income

For the six-month periods ended June 30, 2019 and 2018
In millions of Mexican pesos

	June 30, 2019	June 30, 2018
Net consolidated income	$ 2,089	$ 9,551
Other comprehensive loss for the period:		
Items that will be reclassified to the statement of income:		
Effect of derivative financial instruments designated as cash flow hedges, net of taxes	(107)	(52)
Translation effect of foreign entities	(881)	(2,547)
Total other comprehensive loss for the period	(988)	(2,599)
Consolidated comprehensive income	$ 1,101	$ 6,952
Attributable to:		
Controlling interest	$ 730	$ 6,227
Non-controlling interest	371	725
Comprehensive income for the period	$ 1,101	$ 6,952

The accompanying notes are an integral part of these unaudited condensed consolidated interim financial statements.

Alpek, S. A. B. de C. V. and Subsidiaries
(Subsidiary of Alfa, S. A. B. de C. V.)

Unaudited Condensed Consolidated Interim Statements of Changes in Stockholders' Equi

For the six-month period ended June 30, 2019 and 2018
In millions of Mexican pesos

	Capital stock	Share premium	Retained earnings	Other reserves	Total controlling interest	Non-controllin interest
Balance as of January 1, 2018	$ 6,048	$ 9,071	$ 3,671	$ 8,126	$ 26,916	$ 4,748
Net income	-	-	8,839	-	8,839	712
Total other comprehensive loss for the year	-	-	-	(2,612)	(2,612)	13
Comprehensive income	-	-	8,839	(2,612)	6,227	725
Dividends declared	-	-	-	-	-	(521
Reissuance of shares	4	35	-	-	39	
Effect of initial adoption of IFRS 9	-	-	(14)	-	(14)	
Balance as of June 30, 2018	$ 6,052	$ 9,106	$ 12,496	$ 5,514	$ 33,168	$ 4,952
Balance as of January 1, 2019	$ 6,052	$ 9,106	$ 17,235	$ 5,734	$ 38,127	$ 5,036
Net income	-	-	1,581	-	1,581	508
Total other comprehensive loss for the year	-	-	-	(851)	(851)	(137
Comprehensive income	-	-	1,581	(851)	730	371
Dividends declared			(2,778)	-	(2,778)	(697
Repurchase of shares, net	(2)	(8)	-	-	(10)	
Changes in the non-controlling interest	-	-	(190)	-	(190)	(4
Other	-	-	(2)	-	(2)	2
Balance as of June 30, 2019	$ 6,050	$ 9,098	$ 15,846	$ 4,883	$ 35,877	$ 4,708

The accompanying notes are an integral part of these unaudited condensed consolidated interim financial statements.

Alpek, S. A. B. de C. V. and Subsidiaries
(Subsidiary of Alfa, S. A. B. de C. V.)

Unaudited Condensed Consolidated Interim Statements of Cash Flows

For the six-month periods ended June 30, 2019 and 2018
In millions of Mexican pesos

	June 30, 2019	June 30, 2018
Cash flows from operating activities		
Income before income taxes	$ 3,033	$10,856
Depreciation and amortization	1,939	1,400
Impairment of long-lived assets	1	14
Allowance for doubtful accounts	53	54
Financial result, net	548	93
Gain on business combination	-	(4,597)
Statutory employee profit sharing, provisions and other items	(77)	(47)
Subtotal	5,497	7,773
Movements in working capital		
Decrease (increase) in trade receivables and other assets	2,221	(3,093)
Decrease (increase) in inventories	5,476	(2,727)
(Decrease) increase in trade and other accounts payable	(6,151)	3,255
Income taxes paid	(1,719)	(772)
Net cash flows generated by operating activities	5,324	4,436
Cash flows from investing activities		
Interest collected	119	175
Cash flows in acquisition of property, plant and equipment	(1,313)	(878)
Cash flows in acquisition of intangible assets	(21)	(12)
Cash flows in business acquisition, net of cash acquired	(672)	(7,127)
Investment in joint ventures and associates	(33)	(942)
Loans collected from related parties	158	193
Notes receivable	-	(688)
Collection of notes	19	17
Net cash flows used in investing activities	(1,743)	(9,262)
Cash flows from financing activities		
Proceeds from debt	10,663	6,203
Payments of debt	(7,607)	(4,079)
Interest paid	(1,140)	(896)
Lease payments	(447)	-
Dividends paid by Alpek, S. A. B. de C. V.	(2,778)	-
Dividends paid to non-controlling interest	(697)	(521)
Acquisition of non-controlling interest	(194)	-
Reissuance of shares	116	39
Repurchase of shares	(126)	-
Loan payments to related parties	-	(1)
Net cash flows (used in) generated by financing activities	(2,210)	745
Net increase (decrease) in cash and cash equivalents	1,371	(4,081)
Effect of changes in exchange rates	(46)	(288)
Cash and cash equivalents at the beginning of the period	4,168	8,795
Cash and cash equivalents at the end of the period	$ 5,493	$ 4,426

The accompanying notes are an integral part of these unaudited condensed consolidated interim financial statements.

Alpek, S. A. B. de C. V. and Subsidiaries
(Subsidiary of Alfa, S. A. B. de C. V.)

Notes to the Unaudited Condensed Consolidated Interim Financial Statements

As of June 30, 2019 and December 31, 2018 and for the six-month periods ended June 30, 2019 and 2018
Millions of Mexican pesos, except where otherwise indicated

1. General Information

Alpek, S. A. B. de C. V. and subsidiaries ("Alpek" or the "Company") operates through two major business segments: polyester chain products and plastic products. The polyester chain business segment, comprises the production of purified terephthalic acid (PTA), polyethylene terephthalate (PET) and polyester fibers, which serves the food and beverage packaging, textile and industrial filament markets. The Plastics & Chemicals business segment, comprises the production of polypropylene (PP), expandable polystyrene (EPS), caprolactam (CPL), fertilizers and other chemicals, which serves a wide range of markets, including the consumer goods, food and beverage packaging, automotive, construction, agriculture, oil industry, pharmaceutical markets and others.

Alpek is the largest petrochemical company in Mexico, the second largest in Latin America, and is the main integrated producer of polyester in North America. It operates the largest EPS plant in the North American continent, and one of the largest PP plants in North America and is the only producer of Caprolactam in Mexico.

The shares of Alpek, S. A. B. de C. V. are traded on the Mexican Stock Exchange ("MSE") and has Alfa, S. A. B. de C. V. ("Alfa") as its main holding company. As of June 30, 2019, the percentage of shares that traded on the MSE was 17.88%.

Alpek is located at Avenida Gomez Morin Sur No. 1111, Col. Carrizalejo, San Pedro Garza Garcia, Nuevo León, Mexico and operates productive plants located in Mexico, the United States of America, Canada, Argentina, Chile and Brazil.

In the following notes to the financial statements when referring to pesos or "$", it means millions of Mexican pesos. When referring to dollars or "US$", it means millions of dollars from the United States of America. When referring to Euros or "€" it means millions of Euros.

The results of the Company's operations are not materially affected by seasonality. Although end markets such as water, carbonated soft drinks, food packaging, construction, appliance packaging, certain apparel and fertilizers experience some seasonality, the historical impact on the demand for Alpek's products has not been material.

2. Significant events

2019

a. ***Sale of two electric power cogeneration plants for US$801***

On January 6, 2019, the Company announced that it had signed an agreement for the sale of its Cosoleacaque and Altamira cogeneration power plants, located in Mexico. Under the terms of the agreement Alpek, S. A. B. de C. V. will sell all of its shares of the companies that own both facilities: Cogeneración de Altamira, S. A. de C. V. ("CGA") and Cogeneración de Energía Limpia de Cosoleacaque, S. A. de C. V. ("CELCSA"), for an aggregate amount of US$801, to ContourGlobal Terra 3 S.à.r.l. ("CG Terra 3"), a subsidiary of ContourGlobal PLC. In accordance with the purchase agreement, the price will be subject to certain adjustments and is due on the closing date.

Alpek, S. A. B. de C. V. has agreed under the terms of the purchase agreement for the cogeneration asset sale to enter into a call option agreement in favor of CG Terra 3, whereby Alpek, S. A. B. de C. V. undertakes the obligation to sell all of its shares of the capital stock of Tereftalatos Mexicanos Gas, S. A. de C. V. (whose assets, among others, include gas pipelines that transport natural gas from the point of interconnection of the integrated national transport system to the point of consumption in Altamira and Cosoleacaque), to CG Terra 3. The call option agreement will have a term of 5 years from the date of the closing of the sale of the Cosoleacaque and Altamira cogeneration power plants. The option will be subject to compliance with certain precedent conditions established in the contract, and its price will be subject to working capital adjustments.

The transaction is subject to customary closing terms and conditions and has already received corporate approvals and authorization from the "Comisión Federal de Competencia Económica in Mexico", and is expected to close before the end of 2019.

The Company has presented the assets and liabilities of these cogeneration plants as held for sale in current assets and current liabilities as of June 30, 2019. As a result, the information presented in these unaudited condensed consolidated interim financial statements related to this matter differs from those previously presented by Alpek in its publicly disclosed information.

b. ***Acquisition of a PET recycling plant from Perpetual Recycling Solutions***

On January 9, 2019, the Company announced that one of its subsidiaries signed an agreement with Perpetual Recycling Solutions, LLC ("Perpetual"), to acquire a PET recycling plant in Richmond, Indiana. The Perpetual PET recycling plant has an installed capacity to produce approximately 45,000 tons per year of high quality recycled PET flakes. The acquisition was completed on January 31, 2019. This complements the Company's existing food-grade PET recycling operations in Argentina and its fiber-grade PET recycling joint venture facility in Fayetteville, North Carolina. The operation was closed for the amount of US$35.

The Company is in the process of finalizing the purchase price allocation for the acquisition of Perpetual.

c. Credit Agreement with Export Development Canada ("EDC")

On May 10, 2019, Alpek and certain of its subsidiaries entered into a credit agreement with Export Development Canada, as lender (the "EDC Loan Agreement"), in an aggregate principal amount of US$250. This facility matures in May 2025. The loan accrues interest at a variable rate of Libor plus a spread that depends on leverage levels, and can be prepaid at any time, in whole or in part, without penalty. As of June 30, 2019, US$250 were outstanding under this facility.

2018

d. Secured financing to M&G Mexico

On December 29, 2017, the Company signed an agreement to provide secured financing to one of its clients, M&G Polímeros México, S. A. de C. V. ("M&G Mexico") to help support its PET operation during its debt restructuring process. The US$60 credit facility is secured by a second lien on M&G Mexico's PET production plant in Altamira, Mexico, and has a two-year term. During the year ended December 31, 2018, M&G Mexico disposed of the total amount of the credit facility. This amount was disbursed in several intervals subject to certain conditions, including a restructuring plan that was presented by M&G Mexico and approved by its creditors. Additionally, Alpek acquired the credit rights to a US$100 loan made to M&G Mexico, which is secured by a first lien on this same PET production facility in Altamira.

e. Acquisition of Corpus Christi Project from Mossi & Ghisolfi Group ("M&G")

On March 21, 2018, Alpek announced that it had entered into a joint venture with Indorama Ventures Holdings LP ("Indorama") and Far Eastern Investment (Holding) Limited ("Far Eastern"), to create Corpus Christi Polymers LLC ("CCP"). CCP acquired the integrated PTA-PET site under construction and related assets in their current state in Corpus Christi, Texas, as well as certain intellectual property and a desalination/boiler plant that supplies water and steam to the place (the "Corpus Christi Project"), from M&G USA Corp. and its affiliated debtors ("M&G Corp.")

On December 28, 2018, the Company announced that CCP completed the acquisition of the Corpus Christi Project, for an aggregate amount of US$1,199 in cash and other capital contributions. For this purchase, Alpek contributed US$266 in cash and US$133 in other non-cash capital contributions, associated with a portion of its secured claim with M&G with respect to supply rights in connection with the M&G bankruptcy; furthermore, as of December 31, 2018, Alpek has contributed US$16 in cash that remain in CCP's cash account. In addition, the Company obtained from Indorama and Far Eastern (the "buyers") US$67 in cash-credit for the remaining portion of its secured claim, which will be payable in 3 years in equal parts from each of the buyers, subject to certain conditions. Alpek will recognize its investment in CCP as a joint venture through the equity method.

In accordance with the terms of CCP, the partners will provide resources to complete the Corpus Christi Project in the most efficient way. As of June 30, 2019, Alpek has invested US$416 and it is estimated that the project will be completed by the end of 2021.

Upon completion of the project, each partner will have the right to receive one third of the PTA and PET produced by the site, which is expected to have an annual production capacity of 1.1 million and 1.3 million metric tons of PET and PTA, respectively. Moreover, each one is responsible for acquiring their raw materials independently, as well as carrying out the sale and distribution of their corresponding PTA and PET.

In line with the foregoing, Alpek recognized the reversal of a portion of the impairment recorded in 2017 on intangible assets, for US$195, which correspond to the amount that the Company expects to recover from the Capacity Reservation Agreement, which is recognized as part of its investment in CCP for US$133, and as an account receivable from its joint venture partners for US$62 (recognized at present value).

f. Acquisition of Petroquímica SUAPE and CITEPE

On April 30, 2018, Alpek completed the acquisition of Companhia Petroquímica de Pernambuco ("Petroquímica Suape") and Companhia Integrada Têxtil de Pernambuco ("Citepe"), from Petróleo Brasileiro, S.A. ("Petrobras"). The Company acquired Petrobras' 100% stake in Petroquímica Suape and Citepe on a debt-free basis, through DAK Americas Exterior, S.L. and Grupo Petrotemex, S. A. de C. V., with stakes of 99.99% and 0.01%, respectively. The total consideration paid by the Company was US$435, which was paid in Brazilian reals at the closing date of the transaction.

As a result of this transaction, Alpek acquired an integrated PTA-PET site in Ipojuca, Pernambuco, Brazil, with an annual installed capacity of 640,000, 450,000 and 90,000 tons of PTA, PET, and texturized polyester filament, respectively. The operation was executed in accordance with Alpek's strategy of making continuous and selected investments in integration, efficiency and expansion projects, in order to achieve sustainable growth.

The acquisition of Petroquímica Suape and Citepe, which is included in the Polyester segment, met the criteria of a business combination in accordance with the requirements of IFRS 3 *Business Combinations*, for which the Company applied the acquisition method to measure the assets acquired and liabilities assumed in the transaction. The purchase price allocation was determined in 2018, and the adjustments derived from acquisition method accounting were recognized from the date of acquisition. The fair values of the assets acquired and liabilities assumed as a result of this acquisition are as follows:

	US$
Inventories	$ 101
Other current assets[(1)]	162
Recoverable taxes	115
Property, plant and equipment, net	353
Intangible assets[(2)]	21
Other non-current assets[(3)]	40
Current liabilities[(4)]	(87)
Provisions [(5)]	(50)
Net acquired assets	655
Bargain purchase gain	(220)
Consideration paid	$ 435

(6) Current assets consist of cash and cash equivalents for US$18, accounts receivable for US$98, recoverable taxes for US$45 and others for US$1.

(7) Intangible assets consist of customer relationships, which guarantee the existence and continuity of the business from the moment of acquisition.

(8) Other non-current assets consist of an indemnification asset for US$23 and others for US$17. The indemnification asset corresponds to the right of reimbursement in case of any disbursement that is made corresponding to labor and civil contingencies.

(9) Current liabilities consist of suppliers and accounts payable for US$77 and others for US$10.

(10) Provisions consist of provisions for labor contingencies for US$6, provisions for civil contingencies for US$18, provisions for tax contingencies for US$11 and provisions for reimbursement of taxes recovered for Petrobras for US$15.

As a result of this transaction, a gain associated with the business combination was recognized for an amount of US$220 ($4,597) as of the acquisition date, recorded in 2018. Under the terms of IFRS 3, the gain associated with the business combination is mainly the result of Petrobras divesting of these operations as part of its Strategic Plan, in order to optimize its business portfolio and cease its participation in the petrochemical industry; the aforementioned portfolio included the plan to sell Petroquímica Suape and Citepe.

The unaudited condensed consolidated interim statement of income for 2018 has been restated in accordance with IFRS 3 to reflect the purchase accounting adjustments and related impacts as of April 30, 2018 and for the two months ended June 30, 2018 that Petroquímica Suape and Citepe were consolidated by Alpek. As a result, the information presented in these unaudited condensed consolidated interim financial statements related to this matter differs from those previously presented by Alpek in its publicly disclosed information.

g. *Syndicated Credit Facility*

On March 28, 2018, Alpek entered into a senior unsecured credit agreement with MUFG Bank, Ltd. (formerly, The Bank of Tokyo-Mitsubishi UFJ, Ltd.), Citigroup Global Markets Inc., HSBC México S.A., Grupo Financiero HSBC and JPMorgan Chase Bank, N.A., which was later syndicated. The syndicated credit facility provides for a loan in an amount of up to US$710 and matures in March 2021 and has an availability period of 18 months from the closing date. The loan accrues interest at a variable rate of Libor plus a spread that depends on leverage levels, and can be prepaid at any time, in whole or in part, without penalty. As of June 30, 2019, Alpek had US$290 outstanding under this facility.

3. Summary of significant accounting policies

For the purpose of the unaudited condensed consolidated interim financial statements, certain information and disclosures normally included in the audited annual consolidated financial statements prepared in accordance with IFRS have been condensed in the consolidated interim financial statements. Additionally, the operating results of the interim periods presented are not necessarily indicative of the results that the Company would have had if they had been presented on an annual basis. Therefore, for a better understanding, the unaudited condensed consolidated interim financial statements should be read in conjunction with the audited annual consolidated financial statements for the year ended December 31, 2018. The accounting policies adopted are consistent with those of the previous financial year, except for those related to the application of new IFRS as described below:

Application of new and revised IFRS

The Company adopted all new standards and interpretations in effect as of January 1, 2019, including the annual improvements to IFRS, as described below:

IFRS 16, Leases

IFRS 16, *Leases*, supersedes IAS 17, Leases, and the related interpretations. This new standard brings most leases on balance sheet for lessees under a single model, eliminating the distinction between operating and financial leases, while the model for lessees remains without significant changes. IFRS 16 is effective beginning January 1, 2019, and the Company decided to adopt it with the recognition of all the effects as of that date, without changing prior years.

Under IFRS 16, lessees will recognize a right-of-use asset and the corresponding lease liability. The right of use will be depreciated based on the contractual term or, in some cases, on its economic useful life. On the other hand, the financial liability will be measured at initial recognition, discounting future minimum lease payments at present value according to a term, using the discount rate that represents the lease funding cost; subsequently, the liability will accrue interest through maturity.

The Company will apply the exemptions to not to recognize an asset and a liability as described above, for lease agreements with a term of less than 12 months (provided that they do not contain purchase or term renewal options) and for those agreements where the acquisition of an individual asset of the contract was less than USD$5,000 (five thousand dollars). Therefore, payments for such leases will continue to be recognized as expenses within operating income.

The Company adopted IFRS 16 on January 1, 2019; therefore, it recognized a right-of-use asset and a lease liability of $3,252 (see Note 10).

In addition, the Company adopted and applied the following practical expedients provided by IFRS 16:

- Account for as leases the payments made in conjunction with the rent, and that represent services (for example, maintenance and insurance).
- Create portfolios of contracts that are similar in terms, economic environment and characteristics of assets, and use a funding rate by portfolio to measure leases.
- Not to revisit the previously reached conclusions for service agreements which were analyzed to December 31, 2018 under the IFRIC 4, *Determining Whether a contract Contains a Lease*, and where it had been concluded that there was no implicit lease.

The Company has taken the required steps to implement the changes that the standard represents in terms of internal control, tax and systems affairs, from the adoption date.

IFRIC 23, Interpretation on uncertainty over income tax treatments

This new interpretation clarifies how to apply the recognition and measurement requirements in IAS 12, *Income Tax*, when there is uncertainty over income tax treatments. Uncertain tax treatments is a tax treatment for which there is uncertainty over whether the relevant taxation authority will accept the tax treatment under tax law. In such circumstances, the Company shall recognize and measure its current or deferred tax assets or liabilities by applying the requirements in IAS 12 based on taxable profit (tax loss), tax bases, unused tax losses, unused tax credits, and the tax rates determined by applying this interpretation.

The Company applied IFRIC 23 on January 1, 2019. As an initial adoption method, the Company chose to recognize an adjustment in the initial balance of retained earnings, without modifying comparative periods. However, the Company determined that the impacts of the implementation of this Interpretation as of January 1, 2019 are not material considering the prevailing conditions of the tax positions that it has taken at the date of adoption and the faculties of the competent authorities to assess tax positions held by the Company at the same date.

4. Financial instruments and risk management

The Company's activities expose it to various financial risks: market risk (including exchange rate risk, price risk and interest rate variation risk), credit risk and liquidity risk. There have not been changes in the risk management department and the risk management policies compared to those applied as of December 31, 2018.

Financial instruments by category

The following are the Company's financial instruments by category:

	As of June 30, 2019	As of December 31, 2018
Cash and cash equivalents	$ 5,493	$ 4,168
Restricted cash	3	3
Financial assets measured at amortized cost:		
Trade and other accounts receivable	15,120	17,287
Other non-current assets	5,295	5,372
Financial assets measured at fair value through profit or loss:		
Derivate financial instruments[(1)]	9	30
	$ 25,920	$ 26,860
Financial liabilities measured at amortized cost:		
Debt	$ 42,074	$ 40,130
Leases	3,286	-
Trade and other accounts payable	17,916	24,217
Financial liabilities measured at fair value:		
Derivative financial instruments[(1)]	1,694	1,330
	$ 64,970	$ 65,677

(1) The Company designated the derivative financial instruments that comprise this balance, as accounting hedges, according to what is described in Note 4.

Fair value of financial assets and liabilities valued at amortized cost

The amount of cash and cash equivalents, restricted cash, trade and other accounts receivable, other current assets, trade and other accounts payable, current debt and other current liabilities approximate their fair value, due to their short maturity. The net carrying amount of these accounts represents the expected cash flows to be received as of June 30, 2019 and December 31, 2018.

The carrying amount and estimated fair value of assets and liabilities valued at amortized cost is presented below:

	As of June 30, 2019		As of December 31, 2018	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets:				
Non-current accounts receivable	$ 4,666	$ 4,659	$ 4,756	$ 4,745
Financial liabilities:				
Non-current debt	30,828	31,465	30,317	30,211

The carrying amount of the debt, for purposes of computing its fair value, is presented gross of interest payable and issuance costs.

The estimated fair values were determined based on discounted cash flows and with reference to the yields at the closing of the debt securities. Measurement at fair value for non-current accounts receivable is deemed within Level 3 of the fair value hierarchy, while, for the financial debt, the measurement at fair value is deemed within Levels 1 and 2 of the hierarchy.

As of June 30, 2019, there were no transfers between Level 1 and 2 or between Level 2 and 3.

Market risks

(i) Exchange rate risk

The Company is exposed to foreign exchange risk, primarily derived from the transactions and balances that the subsidiaries conduct and have in foreign currency, respectively. A foreign currency is that which is different from the functional currency of an entity. In addition, the Company is exposed to changes in the value of foreign investments (subsidiary entities that have a

functional currency different from that of the ultimate holding company), which arise from changes in the exchange rates between the functional currency of the foreign operation and the functional currency of the holding company (pesos).

Based on the financial positions in foreign currency maintained by the Company, a hypothetical variation of 10% in the MXN/USD and MXN/EUR exchange rate and keeping all other variables constant, would result in an effect of $(1,706) on the unaudited condensed consolidated interim statement of income and stockholders' equity.

Financial instruments to hedge net investments in foreign transactions

The Company designated certain non-current debt instruments as hedging instruments to net investments in foreign transactions, in order to mitigate the variations in exchange rates arising between the functional currency for such transactions and the functional currency of the holding or sub-holding company that maintains these investments.

In the six-month period ended June 30, 2019 and from the date of designation until June 30, 2018, the Company's average hedging ratio amounted to 62% and 53%, respectively. Therefore, the exchange rate fluctuation generated by the hedging instruments until June 30, 2019 and 2018 amounted to a net income (loss) of $258 and $(414), respectively, which was recognized in other comprehensive income, offsetting the translation effect generated by each foreign investment.

Derivative financial instruments to hedge exchange rate risks

As of June 30, 2019 and December 31, 2018, the Company holds forwards (USD/MXN and EUR/USD) to hedge different needs. In the case of the USD/MXN ratio, the Company seeks to hedge short-term needs, which correspond to the sale of U.S. dollars for the purchase of raw materials in Mexican pesos. For its part, the EUR/USD ratio is used because part of Alpek's revenues are received in Euros, therefore, a highly probable forecasted transaction related to revenues budgeted in said foreign currency has been documented as a hedged item. The net position of these derivative financial instruments is as follows:

	Net position[1]	
	As of June 30, 2019	**As of December 31, 2018**
EUR/USD forwards	$ 2	$ 1
USD/MXN forwards	6	17

[1] Due to the high volume of operations, the net position of derivative financial instruments is presented; however, since these instruments do not meet the criteria for the offsetting of financial instruments, they are presented in their gross amounts in the consolidated statement of financial position.

(ii) Price risk

In carrying out its activities, the Company depends on the supply of raw materials provided by its suppliers, both in Mexico and abroad, among which are mainly intermediate petrochemicals. In recent years, the price of certain inputs has shown volatility, especially those related to oil and natural gas, thus exposing the Company to price uncertainty and negative impacts on operating cash flows.

The average price per MMBTU for the six-month periods ended June 30, 2019 and 2018 was 2.73 and 2.90 US dollars, respectively.

Derivative financial instruments to hedge adverse changes in commodity prices

The Company has entered into derivative financial instruments transactions to hedge purchases of certain raw materials, such as paraxylene, ethylene and monoethylene glycol (MEG), since these inputs have a direct or indirect relationship with the prices of its products. The objective of the hedge designated by the Company is to mitigate against the exposure in the price increase of the aforementioned commodities.

These derivative financial instruments have been classified as cash flow hedges and their net position as of June 30, 2019 and December 31, 2018, are as follows:

	Net position[1]	
	As of June 30, 2019	**As of December 31, 2018**
Natural gas swaps	$(421)	$ (478)
Paraxylene swaps	(973)	(710)
Nafta swaps	-	(3)
Ethylene swaps	(117)	(12)
MEG swaps	(61)	(70)
Ethane swaps	(13)	(2)

(1) Due to the high volume of operations, the net position of derivative financial instruments is presented; however, since these instruments do not meet the criteria for the offsetting of financial instruments, they are presented in their gross amounts in the consolidated statement of financial position.

(iii) Interest rate risk

The Company is exposed to interest rate risk mainly for long-term loans bearing interest at variable rates. Fixed-interest loans expose the Company to interest rate risk at fair value, which reflects that Alpek might be paying interest at rates significantly different from those of an observable market.

As of June 30, 2019, 44% of the financing is denominated at a fixed rate, and 56% at a variable rate.

As of June 30, 2019, if interest rates on variable rate loans are increased or decreased by 100 basis points in relation to the rate in effect, the income and equity of the Company would change by $233.

Derivative financial instruments to hedge interest rate risks

In order to mitigate the risk of the volatility associated with the reference interest rates (Libor) of the long-term liabilities described above, the Company contracted interest rate swaps ("IRS") and designated the interest payments derived from the debts it maintains as a covered item. As of June 30, 2019 and December 31, 2018, the fair value of these instruments amounts to $(108) and $(42), respectively.

Credit risk

Credit risk represents the potential loss due to non-compliance of counterparts in their payment obligations. Credit risk is generated from cash and cash equivalents, derivative financial instruments and deposits with banks and financial institutions as well as credit exposure to customers, including receivables and committed transactions.

The Company determines, from a business standpoint and credit risk profile, the significant customers with whom it maintains an account receivable, distinguishing those that require an individual credit risk assessment. For the rest of the customers, the company carries out its classification according to the type of market in which they operate (domestic or foreign), according with the business and internal risk administration. The maximum exposure to credit risk is given by the balances of these items as presented in the unaudited condensed consolidated interim statement of financial position.

The Company performs a qualitative evaluation of economic projections, with the purpose of determining the possible impact on probabilities of default and the rate of recovery that it assigns to its clients. As of June 30, 2019, there have been no changes in the techniques of estimation or assumption from those used as of December 31, 2018.

Liquidity risk

The finance department of the Company continuously monitors the cash flow projections and liquidity requirements of the Company ensuring that sufficient cash and highly liquid investments are maintained to meet operating needs. The following table analyzes the derivative and non-derivative, grouped according to their maturity, from the date of the unaudited condensed consolidated interim statement of financial position to the contractual maturity date. The amounts disclosed in the table are contractual undiscounted cash flows.

	Less than a year	**From 1 to 5 years**	**More than 5 years**
As of June 30, 2019			
Trade and other accounts payable	$ 19,258	$ -	$ -
Current and non-current debt (excluding debt issuance costs)	12,485	29,475	4,953
Lease liability	927	1,767	592
Derivative financial instruments	1,450	244	-
As of December 31, 2018			
Trade and other accounts payable	$ 26,051	$ -	$ -
Current and non-current debt (excluding debt issuance costs)	11,333	34,082	-
Derivative financial instruments	1,047	283	-

5. Critical accounting estimates and judgments

The preparation of the unaudited condensed consolidated interim financial statements requires the use of certain critical accounting estimates. Additionally, it requires the Company's management to use judgment in the process of applying the accounting policies of the Company and the reported amounts of assets and liabilities, income and expenses. Actual results may differ from the estimates.

In preparing these condensed consolidated interim financial statements, the significant judgments made by management in the process of applying the Company's accounting policies and the key sources of estimation uncertainty were the same as those that applied to the consolidated financial statements for the year ended December 31, 2018, except for those described below, related to the adoption of IFRS 16, as described in Note 3:

Critical accounting estimates

a. *Estimation of the discount rate to calculate the present value of future minimum lease payments*

The Company estimates the discount rate to use in the determination of the lease liability, based on the incremental borrowing rate ("IBR").

The Company uses a three-tier model, with which it determines the three elements that comprises the discount rate: (i) reference rate, (ii) credit risk component and (iii) adjustment for characteristics of the underlying asset. In this model, management also considers its policies and practices to obtain financing, distinguishing between the one obtained at the corporate level (that is, the holding company), or at the level of each subsidiary. Finally, for real estate leases, or in which there is significant and observable evidence of their residual value, the Company estimates and evaluates an adjustment for characteristics of the underlying asset, based on the possibility that said asset is granted as collateral or guarantee against the risk of default.

b. *Estimation of the lease term*

The Company defines the lease term as the period for which there is a contractual payment commitment, considering the non-cancelable period of the contract, as well as the renewal and early termination options that are probable to be exercised. The Company enters into certain lease contracts that do not have a defined non-cancellable term, a defined renewal period (in case it contains a renewal clause), or automatic annual renewals, so, to measure the lease liability, it estimates the contracts term considering their contractual rights and limitations, their business plan, as well as management's intentions for the use of the underlying asset.

Additionally, the Company considers the clauses of early termination of its contracts and the probability of exercising them, as part of its estimate of the lease term.

Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

6. Cash and cash equivalents and restricted cash

The cash and cash equivalents are comprised as follows:

	As of June 30, 2019	As of December 31, 2018
Cash on hand and in banks	$ 4,201	$ 1,559
Short-term bank deposits	1,292	2,609
Total cash and cash equivalents	$ 5,493	$ 4,168

Restricted cash

At June 30, 2019 and December 31, 2018, the Company has restricted cash of $3 and $3, respectively. These balances include amounts that are required to be held in escrow as deposits related to workers' compensation reserves. The restricted cash balance is classified as a current asset in the consolidated statement of financial position based on the maturity date of the restriction.

7. Trade and other receivables, net

Trade and other accounts receivable are comprised as follows:

	As of June 30, 2019	As of December 31, 2018
Trade accounts receivable	$ 16,021	$ 18,139
Trade and other accounts receivable from related parties (Note 16)	516	712
Recoverable taxes	4,401	4,647
Notes receivable	493	506
Interest receivable	85	16
Sundry debtors	556	473
Allowance for impairment of trade and other accounts receivable	(2,551)	(2,559)
Current portion	$ 19,521	$ 21,934

The movements of the impairment estimate of customers and other accounts receivable are analyzed as follows:

	As of June 30, 2019	As of December 31, 2018
Opening balance as of January 1	$ 2,559	$ 2,457
Allowance for impairment of trade and other accounts receivable	60	143
Write-off of unused impairment allowance	(8)	(43)
Foreign exchange variation	(60)	2
Ending balance	$ 2,551	$ 2,559

The net change in the allowance for impairment of trade and other receivables for $(8) in the six months ended June 30, 2019, was mainly due to the decrease in the probability of default assigned to certain customers with respect to the beginning of the year.

The Company has long-term receivables that are guaranteed with the properties described in Note 2d, which have been used by management to mitigate the exposure to credit risk of such financial assets, and therefore has not recognized an impairment in their carrying amount.

8. Inventories

	As of June 30, 2019	As of December 31, 2018
Finished good	$ 10,917	$ 13,632
Raw material and other consumables	5,806	8,916
Materials and tools	1,608	1,423
Production in progress	592	540
	$ 18,923	$ 24,511

For the six-month period ended June 30, 2019 and 2018, a provision amounting to $6 and $19, respectively, related to damaged, slow-moving and obsolete inventory was recognized in the unaudited condensed consolidated interim statement of income.

At June 30, 2019 and December 31, 2018, there were no inventories pledged as collateral.

9. Property, plant and equipment, net

Property, plant and equipment is comprised as follows:

	As of June 30, 2019	As of December 31, 2018
Non-depreciable assets		
Land	$ 3,781	$ 3,838
Construction in progress	3,044	8,669
Total non-depreciable assets	$ 6,825	$ 12,507
Depreciable assets		
Buildings and constructions	$ 17,171	$ 18,003
Machinery and equipment	71,110	73,914
Vehicles	329	328
Furniture, lab and information technology equipment	1,889	1,914
Other fixed assets	1,171	1,001
Accumulated depreciation	(60,275)	(60,634)
Total depreciable assets	$ 31,395	$ 34,526
Total	$ 38,220	$ 47,033

Opening balance as of December 31, 2018	$ 47,033
Exchange rate differences	(990)
Additions	1,496
Additions for business combinations	696
Disposals	(27)
Reclassifications to assets held for sale	(8,604)
Transfers to other assets	(17)
Impairment	(1)
Depreciation charge of the period	(1,366)
Balance as of June 30, 2019	$ 38,220

Depreciation expenses of $1,329 and $1,206 were recorded in cost of sales, $14 and $4, in selling expenses and $23 and $21, in administrative expenses in the six-month periods ended June 30, 2019 and 2018, respectively.

The Company has capitalized costs of loans on qualified assets for $162 for the six-month period ended June 30, 2019, and $314 for the year ended December 31, 2018, respectively. Costs from loans were capitalized at the weighted average borrowing rate of approximately 4.9% and 5.4%, respectively.

10. Right of use asset, net

The Company leases land, buildings, machinery, transportation equipment, furniture and office equipment.

The right of use asset recognized in the unaudited condensed consolidated interim statement of financial position as of January 1, 2019 and June 30, 2019, is as follows:

Effect of adoption	$ 3,252
Beginning balance as of January 1, 2019	3,252
Additions from new contracts	715
Disposals from contract terminations	(144)
Modifications	(158)
Translation effect	(27)
Depreciation charge of the period	(395)
Balance as of June 30, 2019	$ 3,243

	As of June 30, 2019
Land and buildings	$ 324
Machinery and equipment	765
Rail cars	2,526
Transportation equipment	23
Accumulated depreciation	(395)
Total right of use assets	$ 3,243

Lease expenses recognized in the unaudited condensed consolidated interim statement of income for the six-month period ended June 30, 2019 are as follows:

Lease expenses from low-value asset leases	$ 7
Lease expenses from short-term leases	70

Depreciation expenses of $384 were recorded in cost of sales, $5 in selling expenses and $6 in administrative expenses for the six-month period ended June 30, 2019.

11. Goodwill and intangible assets, net

Goodwill and intangible assets is comprised as follows:

	As of June 30, 2019	As of December 31, 2018
Non-amortizable assets		
Goodwill	$ 329	$ 338
Other	22	30
	351	368
Amortizable assets		
Development costs	902	918
Customer relationships	1,096	1,120
Software and licenses	614	555
Intellectual property, maquila rights and others	3,909	3,996
Non-compete agreements	86	88
Accumulated amortization	(2,792)	(2,677)
	3,815	4,000
Total	$ 4,166	$ 4,368

Opening balance as of December 31, 2018	$ 4,368
Exchange differences	(101)
Additions	71
Transfers	6
Amortization charge of the period	(178)
Balance as of June 30, 2019	$ 4,166

Of the total amortization expense, $172 and $158 have been recorded in cost of sales and $6 and $10 in administrative expenses in the six-month periods ended June 30, 2019 and 2018, respectively.

Research and development expenses that have been recorded in the unaudited condensed consolidated interim statements of income for the six-month periods ended June 30, 2019 and 2018 were $40 in each period.

12. Debt

The carrying amounts of debt are as follows:

	As of June 30, 2019	As of December 31, 2018
Current:		
Bank loans [1]	$ 11,000	$ 9,588
Current portion of non-current debt	235	472
Notes payable [1]	85	43
Interest payable	21	15
Current debt	$ 11,341	$ 10,118
Non-current:		
Senior Notes	$ 18,295	$ 18,777
Unsecured bank loans	12,673	11,707
Total	30,968	30,484
Less: current portion of non-current debt	(235)	(472)
Non-current debt [2]	$ 30,733	$ 30,012

(1) As of June 30, 2019 and December 31, 2018, short-term bank loans and notes payable incurred interest at an average rate of 3.37% and 3.55%, respectively.

(2) The fair value of bank loans and notes payable approximates their current carrying amount because of their short maturity.

The carrying amounts, terms and conditions of non-current debt are as follows:

Description	Currency	Value in MXN	Debt issuance costs	Interest payable	As of June 30, 2019	As of December 31, 2018 [1]	Maturity date	Interest rate
Senior Notes 144A/Reg. S / fixed rate	USD	$ 12,443	$ (55)	$ 62	$ 12,450	$ 12,778	Nov-20-22	4.50%
Senior Notes 144A/Reg. S / fixed rate	USD	5,750	(27)	122	5,845	5,999	Aug-08- 23	5.38%
Total Senior Notes		18,193	(82)	184	18,295	18,777		
Bank loan, BADLAR + 1.00%	ARS	11	-	1	12	20	Apr-01-20	50.56%
Bank loan, Fixed 19.00%	ARS	3	-	1	4	5	Dec-08-20	25.00%
Bank loan, Libor +1.25%	USD	660	-	5	665	-	Apr-12-22	3.65%
Bank loan, Libor +1.10%	USD	767	-	-	767	-	Oct-25-21	3.50%
Bank loan, Libor +1.10%	USD	-	-	-	-	1,982	Nov-30-20	3.62%
Bank loan, Libor +1.10%	USD	-	-	-	-	989	Nov-30-20	3.55%
Bank loan, Libor +3.25%	USD	-	-	-	-	1,989	Oct-25-22	5.75%
Bank loan, Libor +1.45%	USD	843	-	2	845	986	Dec-15-22	3.90%
Bank loan, Libor +1.25%	USD	2,875	-	2	2,877	-	May-10-25	3.59%
Bank loan, Libor +1.25%	USD	1,917	-	1	1,918	-	May-10-25	3.56%
Bank loan, Libor +1.25%	USD	2,109	-	3	2,112	2,169	Mar-28-21	3.70%
Bank loan, Libor +1.25%	USD	3,450	-	23	3,473	3,567	Mar-28-21	3.84%
Total unsecured bank loans		12,635	-	38	12,673	11,707		
Total		$ 30,828	$ (82)	$222	$ 30,968	$ 30,484		

(1) As of December 31, 2018, debt issuance costs were $92.

As of June 30, 2019, the annual maturities of non-current debt are as follows:

	2021	2022	2023	2024 and thereafter	Total
Bank loans	$5,684	$1,906	$ 240	$ 4,792	$12,622
Senior Notes	-	-	12,388	5,723	18,111
	$ 5,684	$ 1,906	$ 12,628	$ 10,515	$ 30,733

As of June 30, 2019 and December 31, 2018, the Company has committed unused lines of credit totaling US$846 and US$728, respectively.

As of June 30, 2019 and December 31, 2018, and the date of issuance of these unaudited condensed consolidated interim financial statements, the Company and its subsidiaries complied satisfactorily with all debt covenants and restrictions.

13. Income taxes

The Company is subject to income tax, whose rate is 30% in Mexico.

Income taxes recognized in the unaudited condensed consolidated interim statement of income are as follows:

	Six-month periods ended June 30,	
	2019	2018
Current income tax	$ (1,107)	$ (1,405)
True-up to prior years' income tax provision	91	15
Deferred income taxes	72	85
Income taxes	$ (944)	$ (1,305)

Interim period income tax expense is accrued using the tax rate that would be applicable to expected total annual earnings, that is, the estimated average annual effective income tax rate applied to the income before taxes of the interim period. The effective income tax rate for the six-month periods ended June 30, 2019 and 2018 was 31% and 12%, respectively.

14. Stockholders' equity

As of June 30, 2019, capital stock is variable, with a fixed minimum of $6,052 represented by 2,118,163,635 ordinary, nominative shares, "Class I" Series "A", with no par value, fully subscribed and paid in. The variable capital entitled to withdrawal will be represented, if issued, by registered "Class II" Series "A" shares without par value.

As of June 30, 2019, the Company holds 508,000 treasury shares. As of such date, the market value per share was $24.11 Mexican pesos.

From May to June 30, 2019, the Company bought a net amount of 508,000 shares for a net disbursement of $10, in connection to a repurchase program that was approved by the Company's stockholders and exercised discretionally by Management. During 2018, the Company sold 1,485,884 shares in the amount of $39, in connection with the abovementioned repurchase program.

At the ordinary stockholders' meeting of Alpek on February 27, 2019, the stockholders agreed to declare dividends in cash in the aggregate amount of $2,778 (US$143), which were paid on March 8 of the same year.

15. Other income, net

Other income for the six-month periods ended June 30, 2019 and 2018, is comprised as follows:

	Six-month periods ended June 30, 2019	2018
Gain on business combination	$ -	$ 4,597
Gain on sale of property, plant and equipment	69	62
Tax incentives	94	43
Income from loss recovery[1]	113	-
Impairment of property, plant and equipment	(1)	(14)
Other	51	85
Total	$ 326	$ 4,773

[1] This item relates to the recovery of a plant insurance of Grupo Petrotemex.

16. Related party transactions

Transactions with related parties during the six-month periods ended June 30, 2019 and 2018, were as follows:

	Six-month periods ended June 30, 2019	2018
Income		
Income from sale of goods	$ 760	$ 708
Income from services	233	220
Income from financial interest	13	13
Other income	2	2
Costs / expenses		
Purchase of finished goods and raw materials	$ (504)	$ (442)
Expenses from services	(209)	(204)
Financial interest expenses	(1)	(1)
Other expenses	(49)	(22)
Dividends paid by Alpek, S. A. B. de C. V.	(2,778)	-
Dividends of subsidiaries paid to non-controlling interest	(697)	(521)

For the six-month periods ended June 30, 2019 and 2018, the remunerations and benefits received by the top officers of the Company amounted to $245 and $172, respectively, comprising base salary and social security benefits, and supplemented by a variable consideration program based on the Company's results and the market value of the shares thereof and of its holding company.

The balances with related parties are as follows:

	As of June 30, 2019	As of December 31, 2018
Short-term accounts receivable:		
Services	$ 313	$ 322
Sale of goods	203	187
Sale of business	-	203
	$ 516	$ 712
Long-term accounts receivable [1]:		
Financing and interest	$ 792	$ 761
Short-term accounts payable:		
Services	$ 54	$ 52
Sale of goods	235	259
Financing and interest	67	69
Other	-	12
	$ 356	$ 392
Long-term accounts payable:		
Services	$ -	$ 4

(1) As of June 30, 2019 and December 31, 2018, the loans granted bore interest at average fixed interest rate of 4.90% and 5.34%, respectively.

17. Segment reporting

Segment reporting is presented consistently with the financial information provided to the Chief Executive Officer, who is the highest authority in operational decision making, allocation of resources and performance assessment of operating segments.

An operating segment is defined as a component of an entity on which separate financial information is regularly evaluated.

Management controls and assesses its operations through two business segments: the Polyester business and the Plastics and Chemicals business. These segments are managed separately since its products vary and targeted markets are different. Their activities are performed through various subsidiaries.

The Company has defined Adjusted EBITDA as the calculation of adding operating income, depreciation, amortization, and impairment of long lived assets.

The Company evaluates the performance of each of the operating segments based on Adjusted EBITDA, considering that this indicator is a good metric to evaluate operating performance and the ability to meet principal and interest obligations with respect to indebtedness, and the ability to fund capital expenditures and working capital requirements. Nevertheless, Adjusted EBITDA is not a measure of financial performance under IFRS and should not be considered as an alternative to net income as a measure of operating performance or cash flows as a measure of liquidity.

Following is the condensed financial information of the Company's operating segments:

	Polyester	Plastics and Chemicals	Other	Total
For the six-month period ended June 30, 2019:				
Statement of income:				
Income by segment	$ 47,630	$ 14,471	$ 891	$ 62,992
Inter-segment income	(57)	(74)	131	-
Income from external customers	$ 47,573	$ 14,397	$ 1,022	$ 62,992
Operating income	$ 1,831	$ 1,806	$ 184	$ 3,821
Depreciation, amortization and impairment of long-lived assets	1,539	400	1	1,940
Adjusted EBITDA	$ 3,370	$ 2,206	$ 185	$ 5,761
Investments in fixed and intangible assets	$ 1,076	$ 258	$ -	$ 1,334
For the six-month period ended June 30, 2018:				
Statement of income:				
Income by segment	$ 46,475	$ 16,602	$ (189)	$ 62,888
Inter-segment income	(49)	(146)	195	-
Income from external customers	$ 46,426	$ 16,456	$ 6	$ 62,888
Operating income (loss)	$ 8,632	$ 2,548	$ (25)	$ 11,155
Depreciation, amortization and impairment of long-lived assets	1,134	280	-	1,414
Adjusted EBITDA	$ 9,766	$ 2,828	$ (25)	$ 12,569
Investments in fixed and intangible assets	$ 696	$ 194	$ -	$ 890

The reconciliation between adjusted EBITDA and income before taxes is as follows:

	Six-month periods ended June 30,	
	2019	2018
Adjusted EBITDA	$ 5,761	$ 12,569
Depreciation and amortization and impairment of long-lived assets	(1,940)	(1,414)
Operating income	3,821	11,155
Financial result, net	(784)	(290)
Equity in loss of associates and joint ventures	(4)	(9)
Income before income taxes	$ 3,033	$ 10,856

Following is a summary of revenues per country of origin:

	Six-month periods ended June 30,	
	2019	2018
Mexico	$ 25,043	$ 26,680
United States	25,549	28,104
Argentina	2,707	3,174
Brazil	7,832	2,851
Chile	505	545
Canada	1,356	1,534
Total revenues	$ 62,992	$ 62,888

The Company's main customer generated revenue amounting to $6,023 and $5,721 for the six-month periods ended June 30, 2019 and 2018, respectively. This revenue is obtained from the polyester reporting segment and represents 10% and 9% of the consolidated revenue with external costumers for the six-month periods ended June 30, 2019 and 2018, respectively.

The following table shows the intangible assets and property, plant and equipment by country:

	June 30, 2019	December 31, 2018
Mexico	$ 2,171	$ 2,243
United States	1,603	1,712
Canada	26	29
Brazil	366	384
Total intangible assets	$ 4,166	$ 4,368
Mexico	$ 23,463	$ 32,520
United States	7,191	6,773
Canada	981	1,068
Argentina	143	140
Chile	273	273
Brazil	6,169	6,259
Total property, plant and equipment	$ 38,220	$ 47,033

18. Commitments and contingencies

At June 30, 2019, the Company has the following commitments:

a. At June 30, 2019 and December 31, 2018, the Company's subsidiaries had entered into various agreements with suppliers and customers for purchases of raw materials used for production and sale of finished goods, respectively. The term of these agreements varies between one and five years and generally contain price adjustment clauses.

b. In January 2019, Indelpro entered into an agreement with Enterprise Products Operating LLC to cover its supply of propylene and which establishes an agreement to purchase the product at a referenced market price. Purchases of propylene during the six-month periods ended June 30, 2019 and 2018 amounted to $5,535 and $5,551, respectively. The purchase commitment for the period from July 2019 through June 2020 amounts to approximately $5,748 and is based on estimates and assumptions considered for the same period.

c. In June 2019, Indelpro entered into an extension agreement with PEMEX Transformación Industrial ("PTRI", previously PEMEX Refinación) to cover its supply of propylene and which establishes an agreement to purchase the product at a referenced market price. Purchases of propylene during the six-month periods ended June 30, 2019 and 2018, amounted to $1,702 and $2,106, respectively. The purchase commitment for the period from July 2019 through June 2020, amounts to approximately $1,331 and is based on the estimates and assumptions considered for the same period.

As of June 30, 2019, the Company has the following contingencies:

a. During the normal course of the business, the Company may be involved in disputes and litigations. While the results of these matters can't be predicted, the Company does not believe that there are actions pending to apply, claims or legal proceedings against or affecting the Company which, if it will result in an adverse resolution to the Company, would negatively impact the results of its operations or its financial position.

b. Some of the Company's subsidiaries use hazardous materials to manufacture polyester filaments and staple fibers, polyethylene terephthalate (PET) resin, and terephthalic acid (PTA), polypropylene (PP) resin, expandable polystyrene (EPS), caprolactam (CPL), chemical specialties and they generate and dispose of waste, such as catalysts and glycols. These and other activities of the subsidiaries are subject to various federal, state and local laws and regulations governing the generation, handling, storage, treatment and disposal of hazardous substances and wastes. According to such laws, the owner or lessor of real estate property may be liable for, among other things, (i) the costs of removal or remediation of certain hazardous or toxic substances located on, in, or emanating from, such property, as well as the related cost of investigation and property damage and substantial penalties for violations of such law, and (ii) environmental contamination of facilities where its waste is or has been disposed of. Such laws impose such liability without regard to whether the owner or lessee knew of, or was responsible for, the presence of such hazardous or toxic substances.

   Although the subsidiaries estimate that there are no existing material liabilities relating to noncompliance with environmental laws and regulations, there can be no assurance that there are no undiscovered potential liabilities related to historic or current operations that will require investigation and/or remediation under environmental laws, or that future uses or conditions will not result in the imposition of an environmental liability or expose them to third-party or related parties actions, such as tort suits. Furthermore, there can be no assurance that changes in environmental regulations in the future will not require the subsidiaries to make significant capital expenditures to change methods of disposal of hazardous materials or otherwise alter aspects of their operations.

c. As of June 30. 2019, the Company is in the process of tax litigation with one of its subsidiaries in Brazil, in relation to the demand for payment of the Tax on the Circulation of Goods and Services ("ICMS") that the Ministry of Finance of the State of Sao Paulo ("SFSP", for its initials in Portuguese) has raised against the Company, due to differences in the criteria for the calculation and crediting of said tax. Considering all the circumstances and precedents of jurisprudence available, management and its advisors have determined that it is probable that the Superior Court of Justice of Brazil will issue a judgment in favor of the Company for the amount related to differences in the calculation, which would exempt it from paying $395 in taxes, fines and interest that the SFSP demands; therefore, as of June 30, 2019, the Company has not recognized any provision related to this concept.

   Additionally, management and its advisors consider that it is not probable that the authorities will issue an unfavorable resolution for the Company on the amount of $79 related to the ICMS litigation; thus, it has not recognized any provision related to this matter as of June 30, 2019.

19. Subsequent events

In preparing the financial statements, the Company has evaluated the events and transactions for their recognition or disclosure subsequent to June 30, 2019 and through September 3, 2019 (date of issuance of the unaudited condensed consolidated interim financial statements), and has determined that it has no relevant subsequent events.

20. Authorization to issue the consolidated financial statements

On September 3, 2019, the issuance of the accompanying consolidated financial statements was authorized by José de Jesús Valdez Simancas, Chief Executive Officer and José Carlos Pons de la Garza, Chief Financial Officer.

ISSUER

Alpek, S.A.B. de C.V.
Ave. Gómez Morín 1111 Sur
Col. Carrizalejo, San Pedro Garza García
66254 Nuevo León
México

LEGAL ADVISORS

To the Issuer

As to U.S. law
Paul Hastings LLP
200 Park Avenue
New York, New York 10166
United States of America

To the Initial Purchasers

As to U.S. law
Cleary Gottlieb Steen & Hamilton LLP
One Liberty Plaza
New York, New York 10006
United States of America

As to Mexican law
Ritch, Mueller, Heather y Nicolau, S.C.
Torre Virreyes
Avenida Pedregal 24
Piso 10
Colonia Molino del Rey
11040 Ciudad de México
México

INDEPENDENT AUDITORS

Galaz, Yamazaki, Ruiz Urquiza, S.C.
(Member of Deloitte Touche Tohmatsu Limited)
Ave. Juárez 1102, Floor 40
Centro 64000 Monterrey, Nuevo León
México

PricewaterhouseCoopers, S.C.
Ave. Rufino Tamayo No. 100
Col. Valle Oriente
66269 Garza García, Nuevo León
México

TRUSTEE, REGISTRAR, PAYING AGENT AND TRANSFER AGENT

The Bank of New York Mellon
240 Greenwich Street, Floor 7E
New York, New York 10286
United States

IRISH LISTING AGENT

The Bank of New York Mellon SA/NV, Dublin Branch
Hanover Building
Windmill Lane
Dublin 2
Ireland

US$500,000,000

Alpek, S.A.B. de C.V.

4.250% Senior Notes due 2029

OFFERING MEMORANDUM

Joint Book-Running Managers

Citigroup **HSBC** **J.P. Morgan**

MUFG

November 21, 2019