

**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 and 2017, and Independent Auditors'  
Report Dated January 31, 2019



**Alpek, S. A. B. de C. V. and Subsidiaries**  
**(Subsidiary of Alfa, S. A. B. de C. V.)**

# **Independent Auditors' Report and Consolidated Financial Statements as of and for the Years Ended December 31, 2018 and 2017**

<b>Table of Contents</b>	<b>Page</b>
Independent Auditors' Report	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



## 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.

### **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.

### **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 reais 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 S. A. B. de C. V. ("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 (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 Auditor's 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 IFRSs, 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 auditor's 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 auditor's 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 auditor's 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 and 2017**

**In millions of Mexican pesos**

<b>Assets</b>	<b>Note</b>	<b>2018</b>	<b>2017</b>
Current assets:			
Cash and cash equivalents	6	\$ 4,168	\$ 8,795
Restricted cash	6	3	763
Trade and other accounts receivable, net	7	21,934	15,817
Inventories	8	24,511	16,364
Derivative financial instruments	4	30	148
Prepayments	9	469	305
Total current assets		<u>51,115</u>	<u>42,192</u>
Non-current assets:			
Property, plant and equipment, net	10	47,033	41,535
Goodwill and intangible assets, net	11	4,368	4,065
Deferred income taxes	18	1,384	2,424
Prepayments	9	38	31
Other non-current assets	12	15,959	3,531
Total non-current assets		<u>68,782</u>	<u>51,586</u>
Total assets		<u>\$ 119,897</u>	<u>\$ 93,778</u>
<b>Liabilities and Stockholders' Equity</b>			
Current liabilities:			
Debt	15	\$ 10,118	\$ 7,408
Trade and other accounts payable	14	26,051	19,783
Income taxes payable	18	1,279	573
Derivative financial instruments	4	1,047	230
Provisions	16	81	25
Total current liabilities		<u>38,576</u>	<u>28,019</u>
Non-current liabilities:			
Debt	15	30,012	26,958
Derivative financial instruments	4	283	473
Provisions	16	1,107	155
Deferred income taxes	18	4,752	4,403
Income taxes payable	18	469	623
Employee benefits	17	1,099	1,061
Other non-current liabilities	19	436	422
Total non-current liabilities		<u>38,158</u>	<u>34,095</u>
Total liabilities		<u>76,734</u>	<u>62,114</u>
Stockholders' equity			
Controlling interest:			
Capital stock	20	6,052	6,048
Share premium		9,106	9,071
Retained earnings		17,235	3,671
Other reserves		5,734	8,126
Total controlling interest		<u>38,127</u>	<u>26,916</u>
Non-controlling interest	13	5,036	4,748
Total stockholders' equity		<u>43,163</u>	<u>31,664</u>
Total liabilities and stockholders' equity		<u>\$ 119,897</u>	<u>\$ 93,778</u>

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 and 2017**

**In millions of Mexican pesos, except for earnings per share amounts**

	<b>Note</b>	<b>2018</b>	<b>2017</b>
Revenues		\$ 134,523	\$ 98,998
Cost of sales		<u>(116,519)</u>	<u>(88,598)</u>
Gross profit		18,004	10,400
Selling expenses		(2,136)	(1,747)
Administrative expenses		(3,166)	(2,080)
Other income, net	23	<u>4,564</u>	<u>335</u>
Income before impairment of intangible assets and trade receivables		17,266	6,908
Reversal of impairment of intangible assets (impairment) of intangible assets and trade receivables	2b	<u>3,936</u>	<u>(9,762)</u>
Operating income (loss)		21,202	(2,854)
Financial income	24	442	198
Financial expenses	24	(2,183)	(1,482)
Loss due to exchange fluctuation, net	24	(1,042)	(432)
Impairment of financial assets	2a	<u>-</u>	<u>(1,694)</u>
Financial result, net		(2,783)	(3,410)
Equity in income of associates and joint ventures recognized using the equity method		<u>(30)</u>	<u>(4)</u>
Income (loss) before taxes		18,389	(6,268)
Income taxes	18	<u>(3,455)</u>	<u>1,713</u>
Net consolidated income (loss)		<u>\$ 14,934</u>	<u>\$ (4,555)</u>
Income (loss) attributable to:			
Controlling interest		\$ 13,633	\$ (5,487)
Non-controlling interest		<u>1,301</u>	<u>932</u>
		<u>\$ 14,934</u>	<u>\$ (4,555)</u>
Earnings (losses) per basic and diluted share, in Mexican pesos		<u>\$ 6.44</u>	<u>\$ (2.59)</u>
Weighted average outstanding shares (millions of shares)		<u>2,118</u>	<u>2,117</u>

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 and 2017**

**In millions of Mexican pesos**

	<b>Note</b>	<b>2018</b>	<b>2017</b>
Net consolidated income (loss)		\$ 14,934	\$ (4,555)
Other comprehensive income (loss) for the year:			
<i>Items that will not be reclassified to the statement of income:</i>			
Remeasurement of employee benefit obligations, net of taxes	17, 18	(55)	50
<i>Items that will be reclassified to the statement of income:</i>			
Effect of derivative financial instruments designated as cash flow hedges, net of taxes	4, 18	(560)	123
Translation effect of foreign entities	18	(1,814)	(2,461)
Total other comprehensive income (loss) for the year		<u>(2,429)</u>	<u>(2,288)</u>
Consolidated comprehensive income (loss)		<u>\$ 12,505</u>	<u>\$ (6,843)</u>
Attributable to:			
Controlling interest		\$ 11,241	\$ (7,570)
Non-controlling interest		<u>1,264</u>	<u>727</u>
Comprehensive income (loss) for the year		<u>\$ 12,505</u>	<u>\$ (6,843)</u>

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 and 2017**

**In millions of Mexican pesos**

	<b>Capital stock</b>	<b>Share premium</b>	<b>Retained earnings</b>	<b>Other reserves</b>	<b>Total controlling interest</b>	<b>Non- controlling interest</b>	<b>Total stockholders' equity</b>
Balance as of January 1, 2017	\$ 6,048	\$ 9,071	\$ 11,745	\$ 10,209	\$ 37,073	\$ 4,649	\$ 41,722
Net (loss) income	-	-	(5,487)	-	(5,487)	932	(4,555)
Total other comprehensive loss for the year	-	-	-	(2,083)	(2,083)	(205)	(2,288)
Comprehensive (loss) income	-	-	(5,487)	(2,083)	(7,570)	727	(6,843)
Dividends declared	-	-	(2,667)	-	(2,667)	(618)	(3,285)
Changes in the non-controlling interest	-	-	-	-	-	(40)	(40)
Effect of assumption of non-controlling interest	-	-	(30)	-	(30)	30	-
Other	-	-	110	-	110	-	110
Balance as of December 31, 2017	<u>6,048</u>	<u>9,071</u>	<u>3,671</u>	<u>8,126</u>	<u>26,916</u>	<u>4,748</u>	<u>31,664</u>
Net income	-	-	13,633	-	13,633	1,301	14,934
Total other comprehensive income for the year	-	-	-	(2,392)	(2,392)	(37)	(2,429)
Comprehensive income	-	-	13,633	(2,392)	11,241	1,264	12,505
Dividends declared	-	-	-	-	-	(981)	(981)
Reissuance of shares	4	35	-	-	39	-	39
Effect of initial adoption of IFRS	-	-	(14)	-	(14)	-	(14)
Other	-	-	(55)	-	(55)	5	(50)
Balance as of December 31, 2018	<u>\$ 6,052</u>	<u>\$ 9,106</u>	<u>\$ 17,235</u>	<u>\$ 5,734</u>	<u>\$ 38,127</u>	<u>\$ 5,036</u>	<u>\$ 43,163</u>

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 and 2017**

**In millions of Mexican pesos**

	<b>2018</b>	<b>2017</b>
Cash flows from operating activities		
Income (loss) before income taxes	\$ 18,389	\$ (6,268)
Depreciation and amortization	2,885	2,635
(Reversal of impairment) and impairment of long-lived assets	(3,480)	7,702
Allowance for doubtful accounts	102	2,011
Financial result, net	2,359	3,069
Gain on business combination	(4,597)	(238)
Statutory employee profit sharing, provisions and other items	(60)	(157)
Subtotal	15,598	8,754
Movements in working capital		
Increase in trade receivables and other assets	(4,373)	(2,861)
Increase in inventories	(6,977)	(1,874)
Increase in trade and other accounts payable	5,772	4,860
Income taxes paid	(1,759)	(1,654)
Net cash flows generated from operating activities	8,261	7,225
Cash flows from investing activities		
Interest collected	353	99
Cash flows in acquisition of property, plant and equipment	(1,979)	(4,416)
Cash flows in acquisition of intangible assets	(26)	(15)
Cash flows in business acquisition, net of cash acquired	(7,120)	-
Investment in joint ventures and associates	(5,805)	(39)
Loans collected from related parties	195	16
Notes receivable	(1,124)	(2,522)
Collection of notes	17	15
Restricted cash	-	(739)
Net cash flows used in investing activities	(15,489)	(7,601)
Cash flows from financing activities		
Proceeds from debt	9,137	15,041
Payments of debt	(3,153)	(4,647)
Interest paid	(2,038)	(1,292)
Derivative financial instruments	(12)	(17)
Dividends paid by Alpek, S. A. B. de C. V.	-	(2,667)
Dividends paid to non-controlling interest	(981)	(618)
Reissuance of shares	39	1
Loan payments to related parties	(2)	(2)
Net cash flows generated from financing activities	2,990	5,799
Net (decrease) increase in cash and cash equivalents	(4,238)	5,423
Effect of changes in exchange rates	(389)	437
Cash and cash equivalents at the beginning of the year	8,795	2,935
Cash and cash equivalents at the end of the year	\$ 4,168	\$ 8,795

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 and 2017**

**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 and the second largest in Latin America, is the main integrated producer of polyester in North America. It 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 has Alfa, S. A. B. de C. V. (“Alfa”) as its main holding company. As of December 31, 2018, the percentage of 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 Petrotex, 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 reais 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 <sup>(1)</sup>	162
Recoverable taxes	115
Property, plant and equipment, net	353
Intangible assets <sup>(2)</sup>	21
Other non-current assets <sup>(3)</sup>	40
Current liabilities <sup>(4)</sup>	(87)
Provisions <sup>(5)</sup>	(50)
Net acquired assets	655
Bargain purchase gain	(220)
Consideration paid	<u>\$ 435</u>

- (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. Credit Agreement with JP Morgan**

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.



2017

**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:

	<b>Impairment amount</b>		<b>Effect on deferred tax</b>	<b>Recognized in net income</b>
Intangible assets and prepayments	US\$435	\$7,745	\$1,658	\$6,087
Trade and other accounts receivable <sup>(1)</sup>	113	2,017	560	1,457
Long-term notes receivable <sup>(1)</sup>	95	1,694	517	1,177

<sup>(1)</sup> 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.

### 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 assumed. 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 and 2017, the main companies that comprise the consolidated financial statements of the Company are as follows:

	Country <sup>(1)</sup>	Shareholding (%) <sup>(2)</sup>		Functional currency
		2018	2017	
Alpek, S. A. B. de C. V. (Holding Company)				Mexican peso
Grupo Petrotex, S. A. de C. V. (Holding Company)		100	100	US dollar
DAK Americas, LLC	USA	100	100	US dollar
Dak Resinas Americas México, S. A. de C. V.		100	100	US dollar
DAK Americas Exterior, S. L. (Holding Company)	Spain	100	100	Euro
DAK Americas Argentina, S. A.	Argentina	100	100	Argentine peso
Compagnie Selenis Canada <sup>(3)</sup>	Canada	50	50	US dollar
Tereftalatos Mexicanos, S. A. de C. V.		91	91	US dollar
Akra Polyester, S. A. de C. V.		93	93	US dollar
Cogeneración de Energía Limpia de Cosoleacaque, S. A. de C. V.		100	100	Mexican peso
Cogeneración de Altamira, S. A. de C. V.		100	100	Mexican peso
Companhia Petroquímica de Pernambuco <sup>(4)</sup>	Brazil	100	-	Brazilian real
Companhia Integrada Textil de Pernambuco <sup>(4)</sup>	Brazil	100	-	Brazilian real
Indelpro, S. A. de C. V. (Indelpro)		51	51	US dollar
Polioles, S. A. de C. V. (Polioles)		50	50	US dollar
Grupo Styropek, S. A. de C. V. (Holding Company)		100	100	Mexican peso
Styropek México, S. A. de C. V.		100	100	US dollar
Styropek, S. A.	Argentina	100	100	Argentine peso
Aislapol, S. A.	Chile	100	100	Chilean peso
Styropek do Brasil, LTD	Brazil	100	100	Brazilian real
Unimor, S. A. de C. V. (Holding Company)		100	100	Mexican peso
Univex, S. A.		100	100	Mexican peso

<sup>(1)</sup> Companies incorporated in Mexico, except those indicated.

<sup>(2)</sup> 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.

<sup>(3)</sup> 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.

<sup>(4)</sup> Entities acquired in 2018. See note 2.c.

As of December 31, 2018 and 2017, 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 presentation 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:

Country	Local Currency	Local currency to Mexican pesos			
		Closing exchange rate at December 31,		Average annual exchange rate	
		2018	2017	2018	2017
United States	U.S. dollar	19.68	19.74	20.15	18.94
Argentina	Argentine peso	0.52	1.06	0.53	1.14
Brazil	Brazilian real	5.07	5.96	5.18	5.91
Chile	Chilean peso	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 restated 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 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 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 restatement 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, 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, 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, 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 and 2017, 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 and 2017, 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 year ended December 31, 2017.

**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 and 2017, 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 \$2,256.



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 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.

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:

	<b>Maximum possible loss US\$</b>	
	<b>Individual transaction</b>	<b>Annual cumulative transactions</b>
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:

	<b>Maximum coverage (as a percentage of the projected exposure)</b>
	<b>Current year</b>
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 and 1.96 as of December 31, 2018 and 2017, 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 and 2017, financial assets and liabilities consist of the following:

	<b>As of December 31,</b>	
	<b>2018</b>	<b>2017</b>
Cash and cash equivalents	\$ 4,168	\$ 8,795
Restricted cash	3	763
Financial assets measured at amortized cost <sup>(1)</sup> :		
Trade and other accounts receivable	17,287	15,817
Other non-current assets	5,372	2,880
Financial assets measured at fair value through profit or loss <sup>(1)</sup> :		
Derivate financial instruments <sup>(2)</sup>	30	148
	<u>\$26,860</u>	<u>\$28,403</u>
Financial liabilities measured at amortized cost:		
Debt	\$40,130	\$34,366
Trade and other accounts payable	24,217	19,783
Financial liabilities measured at fair value:		
Derivative financial instruments <sup>(2)</sup>	1,330	703
	<u>\$65,677</u>	<u>\$54,852</u>

- (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, 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 and 2017.

The carrying amount and estimated fair value of assets and liabilities valued at amortized cost is presented below:

	<b>As of December 31,</b>		<b>As of December 31,</b>	
	<b>2018</b>		<b>2017</b>	
	<b>Carrying amount</b>	<b>Fair value</b>	<b>Carrying amount</b>	<b>Fair value</b>
Financial assets:				
Non-current accounts receivable	\$ 4,756	\$4,745	\$ 2,880	\$ 2,880
Financial liabilities:				
Non-current debt	30,317	30,211	27,096	27,997

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 and 2017 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’s 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:

	<b>MXN</b>	<b>USD</b>	<b>EUR</b>
Financial assets	\$19,897	\$ 22,788	\$1,034
Financial liabilities	22,545	36,185	25
Foreign exchange financial position	<u>\$(2,648)</u>	<u>\$(13,397)</u>	<u>\$1,009</u>

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 <sup>(1)</sup>	150	Dak Americas Ms	179
		Bank loan, Libor +1.25	180	Dak Resinas Americas	91
		Bank loan, Libor +1.25	110	Akra Polyester	261
			<u>US\$ 502</u>		<u>US\$ 874</u>

(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, 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:

<b>Characteristics</b>	<b>Forwards EUR/USD</b>	<b>Forwards USD/MXN</b>
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%

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 and 2017 was 3.2 and 3.0 US dollars, respectively.

As of December 31, 2018 and 2017, 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:

<b>Characteristics</b>	<b>Swaps Gas Natural</b>	<b>Swaps Paraxileno</b>	<b>Swaps Nafta</b>	<b>Swaps Etileno</b>	<b>Swaps MEG</b>	<b>Swaps Etano</b>
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 4.35	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value
Price paid (average)	USD/MMBtu December	\$1,057/MT December	\$459/MT September	\$0.21/lb December	\$741/MT December	\$0.32/gal December
Maturity (monthly)	2024	2019	2019	2019	2019	2019
Net position of the swap <sup>(1)(2)</sup>	(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	-	-

<sup>(1)</sup> 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.

<sup>(2)</sup> 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 and 2017, 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 is denominated 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 and 2017, 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			
Suppliers 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			
Suppliers 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	-

#### *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 and 2017, 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:

	<b>As of December 31,</b>	
	<b>2018</b>	<b>2017</b>
Cash on hand and in banks	\$ 1,559	\$ 3,429
Short-term bank deposits	2,609	5,366
Total cash and cash equivalents	<u>\$ 4,168</u>	<u>\$ 8,795</u>
Restricted cash		

At December 31, 2018 and 2017, the Company has restricted cash of approximately \$3 and \$763, 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 Petroquímica 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:

	<b>As of December 31,</b>	
	<b>2018</b>	<b>2017</b>
Trade accounts receivable	\$ 18,139	\$ 13,175
Trade and other accounts receivable from related parties (Note 26)	712	926
Recoverable taxes	4,647	3,714
Notes receivable	506	-
Interest receivable	16	-
Sundry debtors	473	469
Allowance for impairment of trade and other accounts receivable	<u>(2,559)</u>	<u>(2,467)</u>
Current portion	<u>\$ 21,934</u>	<u>\$ 15,817</u>

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:

	<b>2017</b>
Opening balance as of January 1	\$ (186)
Allowance for impairment of trade and other accounts receivable <sup>(1)</sup>	(2,073)
Receivables written off during the year	5
Write-off of unused impairment allowance	26
Foreign exchange variation	<u>(239)</u>
Ending balance as of December 31	<u>\$ (2,467)</u>

<sup>(1)</sup> 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 used by the Company, are as 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	Cancellations in the allowance	Ending balance – Impairment allowance
Grupo Petromex									
National trade receivables	\$ 4,568	\$ -	\$ 4,568	0% - 0.24%	10.30% - 35.00%	\$ (39)	\$ (33)	\$ 31	\$ (41)
Foreign trade receivables	3,383	-	3,383	0% - 0.14%	34.00%	(1)	(37)	1	(37)
DAK Americas	3,523	-	3,523	0.12%	34.00%	(53)	(46)	8	(91)
M&G	2,254	-	2,254	100.00%	100.00%	(2,260)	-	6	(2,254)
Grupo Unimor	246	-	246	3.15%	50.00%	-	-	-	-
Grupo Styropek									-
National trade receivables	226	-	226	0% - 100%	0% - 10.0%	(18)	(16)	-	(34)
Foreign trade receivables	393	-	393	0% - 100%	0% - 10.0%	-	-	-	-
Foreign entities	353	-	353	0.13% - 100%	0% - 92.05%	(1)	(2)	-	(3)
Polioles									-
National trade receivables	413	-	413	0.01% - 0.14%	0% - 10.00%	(1)	(1)	-	(2)
National trade receivables	117	-	117	0.00%	0% - 10.00%	(21)	(2)	-	(23)
Indelpro	2,200	2,158	42	1.68%	1.92%	(49)	(14)	1	(62)
Other	463	-	463	0% - 100%	100.00%	(14)	-	2	(12)
<b>Total</b>	<b>\$ 18,139</b>	<b>\$ 2,158</b>	<b>\$ 15,981</b>			<b>\$ (2,457)</b>	<b>\$ (151)</b>	<b>\$ 49</b>	<b>\$ (2,559)</b>
Secured notes receivable	3,149	3,149	-	0%	0%	-	-	-	-
Notes receivable <sup>(1)</sup>	1,352	-	1,352	0% - 100%	100%	-	-	-	-
<b>Total</b>	<b>\$ 4,501</b>	<b>\$ 3,149</b>	<b>\$ 1,352</b>			<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

- (1) The opening balance of the estimate of impairment of receivables includes \$30 of the current portion of long-term notes receivables, which were considered in the balance of 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

	<b>As of December 31,</b>	
	<b>2018</b>	<b>2017</b>
Finished good	\$ 13,632	\$ 8,844
Raw material and other consumables	8,916	5,891
Materials and tools	1,423	1,049
Production in progress	540	580
	<u>\$ 24,511</u>	<u>\$ 16,364</u>

For the years ended December 31, 2018 and 2017, a provision amounting to \$15 and \$17, respectively, related to damaged, slow-moving and obsolete inventory was recognized in the consolidated statement of profit (loss).

At December 31, 2018 and 2017, there were no inventories pledged as collateral.

## 9. Prepayments

The current portion and non-current portion of prepaid expenses is summarized as follows:

	<b>As of December 31,</b>	
	<b>2018</b>	<b>2017</b>
Current portion <sup>(1)</sup>	\$ 469	\$ 305
Non-current portion	38	31
Total prepayments	<u>\$ 507</u>	<u>\$ 336</u>

(1) This item mainly consists of advertising and prepaid insurance.





## 10. Property, plant and equipment, net

	<u>Land</u>	<u>Buildings and constructions</u>	<u>Machinery and equipment</u>	<u>Vehicles</u>	<u>Furniture, lab and information technology equipment</u>	<u>Construction in progress</u>	<u>Other fixed assets</u>	<u>Total</u>
For the year ended December 31, 2017								
Opening balance	\$ 3,724	\$ 4,849	\$ 25,271	\$ 70	\$ 327	\$ 5,554	\$ 904	\$ 40,699
Additions	-	13	100	1	5	4,452	102	4,673
Additions for business acquisitions	-	59	655	2	1	(31)	-	686
Disposals	-	-	(2)	-	-	(409)	(14)	(425)
Impairment	(123)	(3)	(14)	(1)	-	(17)	-	(158)
Impairment reversal	-	-	201	-	-	-	-	201
Translation effect	(107)	(209)	(1,335)	(5)	(9)	(144)	(37)	(1,846)
Depreciation charges recognized in the year	-	(251)	(1,948)	(14)	(82)	-	-	(2,295)
Transfers	-	158	1,070	9	31	(1,291)	23	-
Ending balance as of December 31, 2017	<u>3,494</u>	<u>4,616</u>	<u>23,998</u>	<u>62</u>	<u>273</u>	<u>8,114</u>	<u>978</u>	<u>41,535</u>
As of December 31, 2017								
Cost	3,494	13,867	67,714	320	1,739	8,114	978	96,226
Accumulated depreciation	-	(9,251)	(43,716)	(258)	(1,466)	-	-	(54,691)
Net carrying amount as of December 31, 2017	<u>\$ 3,494</u>	<u>\$ 4,616</u>	<u>\$ 23,998</u>	<u>\$ 62</u>	<u>\$ 273</u>	<u>\$ 8,114</u>	<u>\$ 978</u>	<u>\$ 41,535</u>
For the year ended December 31, 2018								
Opening balance	\$ 3,494	\$ 4,616	\$ 23,998	\$ 62	\$ 273	\$ 8,114	\$ 978	\$ 41,535
Additions	-	2	71	2	4	2,584	26	2,689
Additions for business acquisitions	369	2,592	3,249	-	64	386	-	6,660
Disposals	(11)	-	(35)	(3)	-	(339)	(4)	(392)
Impairment	-	(1)	(16)	-	-	(318)	-	(335)
Translation effect	(14)	(203)	(160)	(3)	1	(50)	1	(428)
Depreciation charges recognized in the year	-	(390)	(2,052)	(15)	(85)	-	-	(2,542)
Transfers	-	268	1,177	16	93	(1,708)	-	(154)
Ending balance as of December 31, 2018	<u>3,838</u>	<u>6,884</u>	<u>26,232</u>	<u>59</u>	<u>350</u>	<u>8,669</u>	<u>1,001</u>	<u>47,033</u>
As of December 31, 2018								
Cost	3,838	18,003	73,914	328	1,914	8,669	1,001	107,667
Accumulated depreciation	-	(11,119)	(47,682)	(269)	(1,564)	-	-	(60,634)
Net carrying amount as of December 31, 2018	<u>\$ 3,838</u>	<u>\$ 6,884</u>	<u>\$ 26,232</u>	<u>\$ 59</u>	<u>\$ 350</u>	<u>\$ 8,669</u>	<u>\$ 1,001</u>	<u>\$ 47,033</u>

Depreciation expenses of \$2,483 and \$2,253 were recorded in cost of sales, \$13 and \$3, in selling expenses and \$46 and \$39, in administrative expenses in 2018 and 2017, respectively.

The Company has capitalized costs of loans on qualified assets for \$314 and \$233 for the years ended December 31, 2018 and 2017, respectively. Costs from loans were capitalized at the weighted average borrowing rate of approximately 5.4% and 5.2%, respectively.



## 11. Goodwill and intangible assets, net

Cost	<u>Definite life</u>					<u>Indefinite life</u>			
	<u>Development costs</u>	<u>Supply rights</u>	<u>Non-competence agreements</u>	<u>Customer relationships</u>	<u>Software and licenses</u>	<u>Intellectual property, maquila rights and others</u>	<u>Goodwill</u>	<u>Other</u>	<u>Total</u>
As of January 1, 2017	\$ 945	\$ 7,439	\$ 211	\$ 753	\$ 128	\$ 3,937	\$ 362	\$ 10	\$ 13,785
Additions	7	-	-	30	140	-	-	4	181
Disposals	-	-	(90)	-	-	-	(7)	-	(97)
Impairment	-	(6,410)	-	-	-	-	-	-	(6,410)
Translation effect	(42)	(1,029)	(15)	(32)	(5)	(172)	(16)	-	(1,311)
As of December 31, 2017	910	-	106	751	263	3,765	339	14	6,148
Additions	11	-	-	-	19	239	-	14	283
Additions for business acquisitions	-	-	-	384	289	-	-	-	673
Translation effect	(3)	-	(18)	(15)	(16)	(8)	(1)	2	(59)
As of December 31, 2018	\$ 918	\$ -	\$ 88	\$ 1,120	\$ 555	\$ 3,996	\$ 338	\$ 30	\$ 7,045
<b>Amortization</b>									
As of January 1, 2017	(486)	-	(177)	(344)	(88)	(815)	-	-	(1,910)
Amortization	(42)	-	(14)	(53)	(27)	(204)	-	-	(340)
Disposals	-	-	90	-	-	-	-	-	90
Translation effect	20	-	15	13	4	25	-	-	77
As of December 31, 2017	(508)	-	(86)	(384)	(111)	(994)	-	-	(2,083)
Amortization	(24)	-	(12)	(62)	(38)	(207)	-	-	(343)
Additions for business acquisitions	-	-	-	-	(285)	-	-	-	(285)
Disposals	-	-	-	-	-	(1)	-	-	(1)
Translation effect	1	-	16	2	16	-	-	-	35
As of December 31, 2018	\$ (531)	\$ -	\$ (82)	\$ (444)	\$ (418)	\$ (1,202)	\$ -	\$ -	\$ (2,677)
<b>Net carrying amount</b>									
Cost	910	-	106	751	263	3,765	339	14	6,148
Amortization	(508)	-	(86)	(384)	(111)	(994)	-	-	(2,083)
As of December 31, 2017	\$ 402	\$ -	\$ 20	\$ 367	\$ 152	\$ 2,771	\$ 339	\$ 14	\$ 4,065
Cost	918	-	88	1,120	555	3,996	338	30	7,045
Amortization	(531)	-	(82)	(444)	(418)	(1,202)	-	-	(2,677)
As of December 31, 2018	\$ 387	\$ -	\$ 6	\$ 676	\$ 137	\$ 2,794	\$ 338	\$ 30	\$ 4,368



Of the total amortization expense, \$326 and \$326 have been recorded in cost of sales and \$17 and \$14 in administrative expenses in 2018 and 2017, respectively.

Incurred research and development expenses that have been recorded in the 2018 and 2017 consolidated statements of income were \$53 and \$65, 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 and 2017, goodwill of \$338 and \$339, 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 and 2017, were as follows:

	<b>2018</b>	<b>2017</b>
Estimated gross margin	5.7%	6.3%
Growth rate	1.0%	0.0%
Discount rate	8.9%	9.0%

## **12. Other non-current assets**

	<b>As of December 31,</b>	
	<b>2018</b>	<b>2017</b>
Notes receivable <sup>(1)</sup>	\$ 3,995	\$ 2,143
Due from related parties (Note 26)	761	738
Trade receivables related with business acquisitions	616	-
Total other non-current financial assets	<u>5,372</u>	<u>2,881</u>
Investment in associates and joint ventures <sup>(2)</sup>	8,746	483
Recoverable taxes	1,736	-
Other	<u>105</u>	<u>167</u>
Total other assets	<u><u>\$ 15,959</u></u>	<u><u>\$ 3,531</u></u>

<sup>(1)</sup> 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.

<sup>(2)</sup> Investment in associates and joint ventures

The Company's account of investments in associates and joint ventures consists of the following:

	<b>Shareholding %</b>	<b>2018</b>	<b>2017</b>
Clear Path Recycling, LLC	49.90%	\$ 305	\$ 317
Terminal Petroquímica Altamira, S.A. de C.V.	42.00%	35	34
Agua Industrial del Poniente, S.A. de C.V.	47.60%	66	61
Galpek, LDA	50.00%	236	71
Corpus Christi Polymers LLC	33.30%	<u>8,104</u>	<u>-</u>
Investment in associates and joint ventures as of December 31		<u><u>\$ 8,746</u></u>	<u><u>\$ 483</u></u>



Below is summarized the net income of investments in associates and joint ventures, which are accounted for by the equity method:

	2018	2017
Net (loss) income	\$ (61)	\$ 22
Investment in associates and joint ventures as of December 31	<u>\$8,746</u>	<u>\$ 483</u>

There are neither commitments nor contingencies liabilities regarding the Company's investment in associates and joint ventures as of December 31, 2018 or 2017.

### 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	2018	2017
Indelpro, S. A. de C. V. and subsidiary	49%	\$ 1,138	\$ 823	\$4,135	\$ 3,941
Polioles, S. A. de C. V. and subsidiary	50%	38	75	294	341
Other		125	34	607	466
		<u>\$ 1,301</u>	<u>\$ 932</u>	<u>\$5,036</u>	<u>\$ 4,748</u>

The summarized consolidated financial information as of December 31, 2018 and 2017, 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	2018	2017
Statement of financial position				
Current assets	\$ 5,076	\$ 4,456	\$ 1,775	\$ 1,940
Non-current assets	7,458	7,451	1,005	1,046
Current liabilities	2,230	1,555	824	880
Non-current liabilities	1,865	2,310	1,369	1,424
Stockholders' equity	8,439	8,042	587	682
Statements of income				
Revenues	14,494	12,322	3,736	3,525
Consolidated net income	2,323	1,679	76	150
Total comprehensive income of the year	2,239	1,392	63	77
Comprehensive income attributable to non-controlling interest	1,097	682	32	39
Dividends paid to non-controlling interest	902	379	79	165
Statements of cash flows				
Net cash flows generated by operating activities	3,232	1,895	129	260
Net cash flows (used in) generated by investing activities	(286)	(343)	363	174
Net cash flows used in financing activities	(2,273)	(936)	(418)	(394)
Increase in cash and cash equivalents	611	597	89	48



#### 14. Trade and other accounts payable

	As of December 31,	
	2018	2017
Trade accounts payable	\$ 22,330	\$ 17,255
Short-term employee benefits	889	416
Advances from customers	18	69
Taxes other than income taxes	927	746
Due to related parties (Note 26)	392	326
Other accrued accounts and expenses payable	1,495	971
	<u>\$ 26,051</u>	<u>\$ 19,783</u>

#### 15. Debt

	As of December 31,	
	2018	2017
Current:		
Bank loans <sup>(1)</sup>	\$ 9,588	\$ 7,119
Current portion of non-current debt	472	276
Notes payable <sup>(1)</sup>	43	1
Interest payable	15	12
Current debt	<u>\$ 10,118</u>	<u>\$ 7,408</u>
Non-current:		
Senior Notes	\$ 18,777	\$ 18,810
Unsecured bank loans	11,707	8,424
Total	30,484	27,234
Less: current portion of non-current debt	(472)	(276)
Non-current debt <sup>(2)</sup>	<u>\$ 30,012</u>	<u>\$ 26,958</u>

<sup>(1)</sup> As of December 31, 2018 and 2017, short-term bank loans and notes payable incurred interest at an average rate of 3.55%, and 2.42 %, respectively.

<sup>(2)</sup> 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 <sup>(1)</sup>	Maturity date MM/DD/YY	Interest rate
Senior Notes 144A/Reg. S / fixed rate	USD	\$12,775	\$ (61)	\$ 64	\$12,778	\$ 12,800	Nov-20-22	4.50%
Senior Notes 144A/Reg. S / fixed rate	USD	5,905	(31)	125	5,999	6,010	Aug-08- 23	5.38%
Total Senior Notes		18,680	(92)	189	18,777	18,810		
Bank loan, BADLAR + 1.00%	ARS	19	-	1	20	64	Apr-01-20	51.75%
Bank loan, Fixed 19.00%	ARS	5	-	0	5	16	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		
Total		<u>\$30,317</u>	<u>\$ (92)</u>	<u>\$ 259</u>	<u>\$30,484</u>	<u>\$27,234</u>		

<sup>(1)</sup> As of December 31, 2017, debt issuance costs were \$108.



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
	<u>\$ 3,354</u>	<u>\$ 6,791</u>	<u>\$ 13,993</u>	<u>\$ 5,874</u>	<u>\$ 30,012</u>

As of December 31, 2018 and 2017, the Company has committed unused lines of credit totaling US\$728 and US\$166, respectively.

Covenants:

Loan contracts and debt agreements contain restrictions, primarily relating to compliance with financial ratios, which include the following:

- 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.
- 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 and 2017, 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, 2017	\$ 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	<u>\$ 9</u>	<u>\$ -</u>	<u>620</u>	<u>\$ 559</u>	<u>\$ 1,188</u>

	2018	2017
Short-term provisions	\$ 81	\$ 25
Long-term provisions	1,107	155
As of December 31	<u>\$ 1,188</u>	<u>\$ 180</u>



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. During 2017, the Company continued the works of dismantling and demolition of the plant in Cape Fear. 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:

	<b>As of December 31,</b>	
	<b>2018</b>	<b>2017</b>
Employee benefit obligations:		
Pension benefits	\$ 797	\$ 753
Post-employment medical benefits	120	148
	<u>917</u>	<u>901</u>
Defined contribution plans	182	160
	<u>\$ 1,099</u>	<u>\$ 1,061</u>
Employee benefits in the consolidated statement of financial position		
Charge to the consolidated statement of profit (loss) for:		
Pension benefits	\$ (64)	\$ (67)
Post-employment medical benefits	(6)	(7)
	<u>(70)</u>	<u>(74)</u>
Remeasurements of employee benefit obligations recognized in other comprehensive income of the year	\$ (73)	\$ 100
	<u>\$ (88)</u>	<u>\$ (31)</u>

### *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:

	<b>As of December 31,</b>	
	<b>2018</b>	<b>2017</b>
Present value of defined benefit obligations	\$ 3,672	\$ 3,998
Fair value of plan assets	(2,755)	(3,097)
	<u>\$ 917</u>	<u>\$ 901</u>
Liability in the statement of financial position		



The movements of defined benefit obligations are as follows:

	<b>2018</b>	<b>2017</b>
As of January 1,	\$3,998	\$4,141
Service cost	45	44
Interest cost	145	155
Contributions from plan participants	11	16
Remeasurements:		
(Losses) gains from changes in financial assumptions	(191)	174
Losses from changes in demographic assumptions and experience adjustments	(7)	(20)
Translation effect	-	(172)
Benefits paid	(328)	(337)
Plan curtailments	(1)	-
Settlements	-	(3)
	<u>\$3,672</u>	<u>\$3,998</u>
As of December 31,		

The movement in the fair value of plan assets for the year is as follows:

	<b>2018</b>	<b>2017</b>
As of January 1	\$(3,097)	\$(3,024)
Interest income	(119)	(122)
Remeasurements – return on plan assets, excluding interest income	261	(254)
Translation effect	7	112
Contributions	(47)	(57)
Benefits paid	240	248
	<u>\$(2,755)</u>	<u>\$(3,097)</u>
As of December 31		

The amounts recorded in the consolidated statement of profit (loss) for the years ended December 31 are the following:

	<b>2018</b>	<b>2017</b>
Service cost	\$ (45)	\$ (44)
Interest cost, net	(26)	(33)
Effect of plan curtailments and/or settlements	1	3
	<u>\$ (70)</u>	<u>\$ (74)</u>
Total included in personnel cost		

The principal actuarial assumptions are as follows:

	<b>As of December 31,</b>	
	<b>2018</b>	<b>2017</b>
Discount rate Mexico	9.50%	7.25%
Discount rate United States	3.89%-4.03%	3.30%-3.49%
Inflation rate	3.50%	3.50%
Wage increase rate	4.50%	4.50%
Medical inflation rate Mexico	6.50%	6.50%

The sensitivity analysis of the discount rate for defined benefit obligations is as follows:

	<b>Effect in defined benefit obligations</b>		
	<b>Change in assumption</b>	<b>Increase in assumption</b>	<b>Decrease in assumption</b>
Discount rate	MX 1%	Decrease by \$18	Increase by \$20

Sensitivity 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:

	<b>As of December 31,</b>	
	<b>2018</b>	<b>2017</b>
Equity instruments	\$ 1,797	\$ 2,043
Fixed income	958	1,054
Fair value of plan assets	<u>\$ 2,755</u>	<u>\$ 3,097</u>

**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:

	<b>2018</b>	<b>2017</b>
United States <sup>(1)</sup>	21.0%	35.0%
Brazil	34.0%	34.0%
Argentina <sup>(1)</sup>	30.0%	35.0%
Chile <sup>(1)</sup>	27.0%	25.5%
Canada	25.0%	25.0%
Spain	25.0%	25.0%

<sup>(1)</sup> 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:

	<b>2018</b>	<b>2017</b>
Current income tax	\$(2,549)	\$(1,511)
True-up to prior years' income tax provision	474	188
Deferred income taxes	<u>(1,380)</u>	<u>3,036</u>
Income taxes	<u>\$(3,455)</u>	<u>\$ 1,713</u>

b. The reconciliation between the statutory and effective income tax rates is as follows:

	<b>2018</b>	<b>2017</b>
Income (loss) before income taxes	\$18,389	\$(6,268)
Income tax rate	30%	30%
Statutory income tax rate (expense) benefit	<u>(5,517)</u>	<u>1,881</u>
(Less) add income tax effect on:		
Annual adjustment for inflation	(388)	(323)
Non-deductible expenses	(12)	(11)
Non-taxable income	1,362	71
Effect of different tax rates of other countries other than Mexico	504	385
True up with respect to prior years' current income tax	474	188
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	<u>(9)</u>	<u>(1)</u>
Total income taxes	<u>\$(3,455)</u>	<u>\$ 1,713</u>
Effective tax rate	19%	27%



c. The breakdown of the deferred tax asset and deferred tax liability is as follows:

	<b>Asset (liability) December 31,</b>	
	<b>2018</b>	<b>2017</b>
Property, plant and equipment	\$ (1,221)	\$ 44
Intangible assets	(246)	1,907
Debt issuance costs	(17)	(18)
Provisions	123	41
Derivative financial instruments	334	-
Tax loss carryforwards	1,019	354
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	<u>\$ 1,384</u>	<u>\$ 2,424</u>
Inventories	(106)	(95)
Property, plant and equipment, net	(5,757)	(5,884)
Intangible assets	(48)	(41)
Tax loss carryforwards	177	637
Other items	981	855
Effect of tax rates of other countries and changes in tax rates	<u>1</u>	<u>125</u>
Deferred tax liability	<u>\$ (4,752)</u>	<u>\$ (4,403)</u>

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 and \$3,303 in 2018 and 2017, respectively.

Tax losses as of December 31, 2018 expire in the following years:

<b>Loss for the year incurred</b>	<b>Tax-loss carryforwards</b>	<b>Expiration year</b>
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	<u>5,340</u>	No expiration
	<u>\$ 9,328</u>	

As of December 31, 2018, the Company holds tax losses to be amortized 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:

	Before taxes	2018 Tax charged	After taxes	Before taxes	2017 Tax charged	After taxes
Foreign currency translation effect	\$(1,814)	\$ -	\$(1,814)	\$(2,461)	\$ -	\$(2,461)
Remeasurement of employee benefit obligations	(73)	18	(55)	100	(50)	50
Effect of derivative financial instruments designated as cash flow hedges	(721)	161	(560)	209	(86)	123
Other comprehensive loss	<u>\$(2,608)</u>	<u>\$ 179</u>	<u>\$(2,429)</u>	<u>\$(2,152)</u>	<u>\$(136)</u>	<u>\$(2,288)</u>

e. Income tax payable consists of the following:

	As of December 31,	
	2018	2017
Current portion	\$ 1,279	\$ 573
Non-current portion	469	623
Total income tax payable	<u>\$ 1,748</u>	<u>\$ 1,196</u>

## 19. Other non-current liabilities

	As of December 31,	
	2018	2017
Advances from customers <sup>(1)</sup>	\$ 361	\$ 419
Other	75	3
Total other liabilities	<u>\$ 436</u>	<u>\$ 422</u>

<sup>(1)</sup> 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.

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 and 2017, the legal reserve amounts to \$804 and \$696, 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.

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
Alfa, S. A. B. de C. V.	22.11	21.12
Alpek, S. A. B. de C. V.	24.13	22.95

The short-term and long-term liabilities are comprised as follows:

	As of December 31,	
	2018	2017
Short term	\$ 8	\$ 7
Long term	20	15
Total carrying amount	<u>\$ 28</u>	<u>\$ 22</u>

## 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
Raw material and other	\$ (95,750)	\$ (70,121)
Employee benefit expenses (Note 25)	(5,128)	(4,363)
Human resource expenses	(48)	(32)
Maintenance	(1,746)	(1,517)
Depreciation and amortization	(2,887)	(2,635)
Advertising expenses	(3)	(3)
Freight expenses	(5,305)	(5,319)
Consumption of energy and fuel (gas, electricity, etc.)	(5,380)	(4,228)
Travel expenses	(171)	(146)
Operating lease expenses	(966)	(888)
Technical assistance, professional fees and administrative services	(1,481)	(1,015)
Other (insurance and bonds, water, containers and packing, etc.)	(2,956)	(2,158)
Total	<u>\$(121,821)</u>	<u>\$ (92,425)</u>



**23. Other income, net**

Other income for the years ended December 31, are comprised as follows:

	<b>2018</b>	<b>2017</b>
Gain on business combination	\$ 4,597	\$ 238
Other income	423	147
Impairment of property, plant and equipment and other	(456)	(43)
Other expenses	-	(7)
Total	<u>\$ 4,564</u>	<u>\$ 335</u>

**24. Finance income and costs**

Financial result, net for the years ended December 31, are comprised as follows:

	<b>2018</b>	<b>2017</b>
Financial income:		
Interest income on short-term bank deposits	\$ 98	\$ 65
Interest income on loans from related parties	27	27
Other financial income	317	106
Total financial income	<u>\$ 442</u>	<u>\$ 198</u>
Financial expenses:		
Interest expense on loans to related parties	\$ (2)	\$ (2)
Interest expense on bank loans	(893)	(295)
Non-bank interest expense	(966)	(941)
Net interest cost on employee benefits	(21)	(40)
Other financial expenses	(301)	(198)
Valuation effect of derivative financial instruments	-	(6)
Total financial expense	<u>\$ (2,183)</u>	<u>\$ (1,482)</u>
Loss in exchange fluctuation, net		
Foreign exchange gain	3,302	3,125
Foreign exchange loss	(4,344)	(3,557)
Loss in exchange fluctuation, net	<u>\$ (1,042)</u>	<u>\$ (432)</u>
Impairment of financial assets	-	(1,694)
Financial result, net	<u>\$ (2,783)</u>	<u>\$ (3,410)</u>

**25. Employee benefit expenses**

Employee benefits expenses for the years ended December 31, are as follows:

	<b>2018</b>	<b>2017</b>
Salaries, wages and benefits	\$(3,869)	\$(3,188)
Social security fees	(351)	(318)
Employee benefits	(44)	(41)
Other fees	(864)	(816)
Total	<u>\$(5,128)</u>	<u>\$(4,363)</u>

**26. Related party transactions**

Transactions with related parties during the years ended December 31, 2018 and 2017, were as follows:

	<b>2018</b>	<b>2017</b>
Income		
Income from sale of goods:		
Stockholders with significant influence over subsidiaries	\$1,486	\$1,438



Income from services:		
Affiliates	263	198
Stockholders with significant influence over subsidiaries	220	206
Income from financial interest:		
Alfa	25	24
Affiliates	-	-
Stockholders with significant influence over subsidiaries	2	3
Other income:		
Affiliates	-	-
Associates and joint ventures	3	10
Costs / expenses		
Purchase of finished goods and raw materials:		
Affiliates	-	\$ -
Stockholders with significant influence over subsidiaries	(992)	(853)
Expenses from services:		
Affiliates	(394)	(348)
Associates and joint ventures	-	(21)
Stockholders with significant influence over subsidiaries	(24)	(18)
Financial interest expenses:		
Associates and joint ventures	(2)	(2)
Other expenses:		
Affiliates	(18)	(31)
Associates and joint ventures	(38)	(8)
Stockholders with significant influence over subsidiaries	-	(2)
Dividends declared:		
Alfa	-	(2,191)
Other stockholders	-	(476)
Dividends of subsidiaries to non-controlling interest:		
Stockholders with significant influence over subsidiaries	(981)	(544)
Other stockholders	-	(74)

For the year ended December 31, 2018, the remunerations and benefits received by the top officers of the Company amounted to \$281 (\$309 in 2017), 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:

	Nature of the transaction	As of December 31, 2018	As of December 31, 2017
<u>Short-term accounts receivable:</u>			
<u>Holding company</u>			
Alfa, S. A. B. de C. V.	Administrative services	\$ 190	\$ 190
<u>Affiliates</u>			
Innovación y Desarrollo de Energía			
Alfa Sustentable, S. A. de C. V.	Administrative services	115	115
Newpek, LLC	Administrative services	4	14
Nemak México, S. A. B. de C. V.	Administrative services	9	4
Terza, S. A. de C. V.	Sale of goods	1	-
Sigma Alimentos Lácteos		4	-
<u>Shares with significant influence on subsidiaries</u>			
BASF	Sale of goods	132	155
BASF	Sale of business	203	405
	Lease and administrative services	-	-
BASF		-	-
Basell	Sale of goods	54	43
Basell	Administrative services	-	-
		<u>\$ 712</u>	<u>\$ 926</u>



Long-term accounts receivable:

Holding company

Alfa, S. A. B. de C. V. <sup>(1)</sup>

Financing and interest \$ 761 \$ 738

Short-term accounts payable:

Affiliates

Alliax, S. A. de C. V.

Administrative services \$ 21 \$ 16

Nemak Exterior, LTD

Administrative services 2 1

Alfa Corporativo, S. A. de C. V.

Administrative services 23 10

Sensa

2 -

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

3 -

Other

Administrative services - 4

Associates

Clear Path Recycling, LLC

Financing and interest 69 79

Stockholders with significant influence over subsidiaries

BASF

Sale of goods 259 -

BASF

Sale of raw material - 195

BASF

Commissions and other - 4

Basell

Other 12 17

Tepeal

1 -

\$ 392 \$ 326

Long-term accounts payable:

Affiliates

Alfa Corporativo, S. A. de C. V.

Administrative services \$ 4 \$ 3

<sup>(1)</sup> As of December 31, 2018 and 2017, 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:

	<b>Polyester</b>	<b>Plastics and Chemicals</b>	<b>Other</b>	<b>Total</b>
For the year ended December 31, 2018:				
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	<u>\$ 99,559</u>	<u>\$ 32,925</u>	<u>\$ 2,039</u>	<u>\$ 134,523</u>
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	<u>\$ 15,318</u>	<u>\$ 5,292</u>	<u>\$ (3)</u>	<u>\$ 20,607</u>
Investments in fixed and intangible assets	<u>\$ 1,509</u>	<u>\$ 491</u>	<u>\$ 5</u>	<u>\$ 2,005</u>

	<b>Polyester</b>	<b>Plastics and Chemicals</b>	<b>Other</b>	<b>Total</b>
For the year ended December 31, 2017:				
Statement of profit (loss):				
Income by segment	\$70,589	\$ 28,724	\$(315)	\$98,998
Inter-segment income	(113)	(202)	315	-
Income from external customers	<u>\$70,476</u>	<u>\$ 28,522</u>	<u>\$ -</u>	<u>\$98,998</u>
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	<u>\$ 2,970</u>	<u>\$ 4,519</u>	<u>\$ (6)</u>	<u>\$ 7,483</u>
Investments in fixed and intangible assets	<u>\$ 3,420</u>	<u>\$ 1,011</u>	<u>\$ -</u>	<u>\$ 4,431</u>

The reconciliation between adjusted EBITDA and income before taxes for the years ended December 31, is as follows:

	<b>2018</b>	<b>2017</b>
Adjusted EBITDA	\$20,607	\$ 7,483
Depreciation and amortization	(2,885)	(2,635)
Impairment of long-lived assets	3,480	(7,702)
Operating income	<u>21,202</u>	<u>(2,854)</u>
Financial result, net	(2,783)	(3,410)
Equity in loss of associates and joint ventures	<u>(30)</u>	<u>(4)</u>
Income (loss) before income taxes	<u>\$18,389</u>	<u>\$ (6,268)</u>

Following is a summary of revenues per country of origin for the years ended December 31:

	<b>2018</b>	<b>2017</b>
Mexico	\$ 54,282	\$47,516
United States	57,894	41,438
Argentina	6,784	5,341
Brazil	11,291	1,462
Chile	1,094	921
Canada	<u>3,178</u>	<u>2,320</u>
Total revenues	<u>\$134,523</u>	<u>\$98,998</u>





The following table shows the intangible assets and property, plant and equipment by country:

	<b>As of December 31,</b>	
	<b>2018</b>	<b>2017</b>
Mexico	\$ 2,243	\$ 2,188
United States	1,712	1,848
Canada	29	1
Brazil	384	28
Total intangible assets	<u>\$ 4,368</u>	<u>\$ 4,065</u>
Mexico	\$32,520	\$ 32,029
United States	6,773	7,546
Canada	1,068	1,229
Argentina	140	271
Chile	273	323
Brazil	6,259	137
Total property, plant and equipment	<u>\$47,033</u>	<u>\$ 41,535</u>

## 28. Commitments and contingencies

At December 31, 2018, the Company has the following commitments:

- At December 31, 2018 and 2017, 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.
- 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 and 2017 amounted to \$2,229 and \$2,732, 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:

- 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.
- Some of the Company's subsidiaries use hazardous materials to manufacture polyester filaments and staple fibers, polyethylene terephthalate (PET) and terephthalic 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 in a process of fiscal litigation in 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: Cogeneración 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.

