

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549
FORM 20-F

- REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934
OR
- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED DECEMBER 31, 2018
OR
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
OR
- SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
Commission file number: 001-14862

BRASKEM S.A.

(Exact Name of Registrant as Specified in its Charter)

N/A The Federative Republic of Brazil
(Translation of Registrant's Name into English) (Jurisdiction of Incorporation or Organization)
Rua Lemos Monteiro, 120 – 24º andar
Butantã—São Paulo—SP, CEP 05501-050, Brazil
(Address of Principal Executive Offices)

Pedro van Langendonck Teixeira de Freitas
Braskem S.A.
Rua Lemos Monteiro, 120 – 24º andar
Butantã—São Paulo—SP, CEP 05501-050, Brazil
Telephone: + (55 11) 3576-9000
Fax: + (55 11) 3576-9532
(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on which Registered
Preferred Shares, Class A, without par value per share, each represented by American Depositary Receipts*	New York Stock Exchange

*On May 13, 2019, the New York Stock Exchange suspended trading of the Registrant's American Depositary Shares and commenced proceedings to delist the Registrant. The Registrant has appealed the decision, which is pending.

Securities registered or to be registered pursuant to Section 12(g) of the Act: None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

TITLE OF EACH CLASS:

6.450% Notes due 2024, issued by Braskem Finance Limited

The total number of issued shares of each class of stock of Braskem S.A. as of December 31, 2018 was:

451,668,652 Common Shares, without par value
345,049,672 Preferred Shares, Class A, without par value
500,230 Preferred Shares, Class B, without par value

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act. † The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP

International Financial Reporting
Standards as issued by the International
Accounting Standards Board

Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

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PRESENTATION OF FINANCIAL AND OTHER INFORMATION

All references herein to the “*real*,” “*reais*” or “RS” are to the Brazilian *real*, the official currency of the Federative Republic of Brazil, or Brazil. All references to “U.S. dollars,” “dollars” or “US\$” are to U.S. dollars, the official currency of the United States. All references to “CHF” are to Swiss francs, the official currency of Switzerland.

All references herein (1) to “we,” “us,” or “our company” are references to Braskem S.A., its consolidated subsidiaries and jointly controlled entities, and (2) to “Braskem” are references solely to Braskem S.A. All references herein to “Braskem Europe” mean Braskem Europe GmbH and its consolidated subsidiaries, including Braskem America, Inc., or Braskem America.

Financial Statements

We maintain our books and records in *reais*. Our consolidated financial statements as of December 31, 2018 and 2017 and for the three years ended December 31, 2018 have been audited, as stated in the report appearing herein, and are included in this annual report. These financial statements and related notes included elsewhere in this annual report are collectively referred to as our audited consolidated financial statements herein and throughout this annual report.

We have prepared our audited consolidated financial statements included in this annual report in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board, or IFRS.

Market Share and Other Information

We make statements in this annual report about our market share in the petrochemical industry in Brazil and our production capacity relative to that of other petrochemical producers in Brazil, other countries in Latin America, the United States and the world. We have made these statements on the basis of information obtained from third-party sources that we believe are reliable. We have calculated our Brazilian market share with respect to specific products by dividing our domestic net sales volumes of these products by the total Brazilian domestic consumption of these products. We derive information regarding the production capacity of other companies in the Brazilian petrochemical industry and the estimated total Brazilian domestic consumption of petrochemical products principally from reports published by the Brazilian Chemical Industry Association (*Associação Brasileira da Indústria Química*), or ABIQUIM. We derive information regarding the production capacity of other companies in the global petrochemical industry, international market prices for petrochemicals products and per capita consumption in certain geographic regions, principally from reports published by IHS, Inc., or IHS. We derive information relating to Brazilian imports and exports from the *ComexStat* (<http://comexstat.mdic.gov.br>), produced by the Brazilian Ministry of the Economy (*Ministério da Economia*). We also include information and statistics regarding economic growth in emerging economies obtained from the International Monetary Fund, or IMF, and statistics regarding gross domestic product, or GDP, growth in Brazil, the United States, Europe and Mexico obtained from independent public sources such as the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*), or the IBGE; the U.S. Department of Commerce; the statistical office of the European Union, or Eurostat; and the Mexican Institute of Statistics and Geography (*Instituto Nacional de Estadística y Geografía*).

We have no reason to believe that any of this information is inaccurate in any material respect. However, we have not independently verified the production capacity, market share, market size or similar data provided by third parties or derived from industry or general publications.

We provide information regarding domestic apparent consumption of some of our products, based on information available from the Brazilian government, Institute of Applied Economic Research (*Instituto de Pesquisa Econômica Aplicada*) and ABIQUIM. Domestic apparent consumption is equal to domestic production plus imports minus exports. Domestic apparent consumption for any period may differ from actual consumption because this measure does not give effect to variations of inventory levels in the petrochemical supply chain.

Certain Industry Terms

Glossary of Selected Terms in the Petrochemical Industry and in the Context of Our Business

Term	Meaning	Main uses	In the context of our business
Aliphatics	Aliphatics are open-chain hydrocarbons that contain no stable rings connecting their atoms, in contrast to aromatics.	Used as fuels, solvents and as basic chemicals in the petrochemical industry.	We produce aliphatics, such as ethylene and propylene, in our Chemicals Unit.
Aromatics	Aromatics are cyclic hydrocarbons with stable bonds connecting their carbon atoms.	Used as fuel additives, solvents, and basic chemicals in the petrochemical industry.	We produce aromatics, such as benzene, toluene and xylenes, as co-products in our Chemicals Unit.
Benzene	An aromatic hydrocarbon. It is a natural constituent of crude oil.	Used primarily for the manufacture of chemicals with more complex structure, such as ethylbenzene and cumene.	We produce benzene as a by-product in our Chemicals Unit.
BTX products	A mixture of benzene, toluene and the three xylene isomers (ortho, meta and para), all of which are aromatic hydrocarbons.	Used as fuel additives, solvents, and basic chemicals in the petrochemical industry.	We produce benzene, toluene and xylenes as by-products (BTX) products in our Chemicals Unit.
Butadiene	An organic compound and a colorless gas.	Used industrially as a monomer in the production of synthetic rubber.	We produce butadiene as a by-product in our Chemicals Unit.
Butene	A colorless gas present in crude oil.	Used as a monomer in the production of polymers, as well as a petrochemical intermediate.	We use butene for the production of HDPE and LLDPE in our Polyolefins Unit. Butene is supplied by our Chemicals Unit.
Caustic soda	Caustic soda, or sodium hydroxide, is an inorganic compound. A colorless crystalline solid, caustic soda is toxic, corrosive and highly soluble in water.	Used in the manufacture of pulp and paper, textiles, drinking water, soaps and detergents, and as a drain cleaner.	We produce caustic soda in our Vinyls Unit. Caustic soda is a by-product of chlorine production required to produce PVC.
Chlor-alkali	Electrolysis process used in the manufacture of chlorine, hydrogen and sodium hydroxide (caustic soda).	Main industrial process for the production of caustic soda.	We operate chlor-alkali plants in Brazil.

Term	Meaning	Main uses	In the context of our business
Chlorine	Chlorine is a chemical element (Cl), a toxic, greenish yellow gas at room temperature. It has a pungent suffocating odor.	Used in the production of paper products, antiseptics, plastics, dyes, textiles, medicines, insecticides, solvents and to treat swimming pools.	We use salt to produce chlorine in our Vinyls Unit.
Condensate	Condensate, or natural gas condensate, is a low-density mixture of hydrocarbon liquids that are present as gaseous components in the raw natural gas.	Condensate is used as an input for petrochemical plants, burned for heat and cooking, and blended into vehicle fuel.	We use condensate as a raw material in our Chemicals Unit.
Cumene	An organic compound based on an aromatic hydrocarbon with an aliphatic substitution, cumene is a colorless liquid constituent of crude oil and refined fuels.	Used for the production of phenol and acetone.	We produce cumene as a by-product in our Chemicals Unit.
Dicyclopentadiene	Dicyclopentadiene, or DCPD, is a yellow liquid with an acrid odor.	Used in polyester resins, inks, adhesives and paint.	We produce DCPD in our Chemicals Unit.
Ethane	A type of natural gas liquid (NGL), ethane is a colorless, odorless gas in standard temperature and pressure, extracted from natural gas in liquid form.	Used as a feedstock for ethylene production.	Ethane is one of the main raw materials that we use to produce ethylene in our Chemicals Unit.
Ethanol	A simple alcohol, produced by the fermentation of sugars by yeasts or via petrochemical processes.	Used as a fuel for vehicles, as a disinfectant and as a chemical intermediate.	We use ethanol as a raw material to produce green polyethylene in our Chemical Unit located in Triunfo, Brazil.
Ethyl tertiary-butyl ether	Ethyl tertiary-butyl ether, or ETBE, is a colorless liquid manufactured by the acid etherification of isobutylene with ethanol.	Used commonly as an additive in the production of gasoline.	We produce ETBE in our Chemicals Unit.

Term	Meaning	Main uses	In the context of our business
Ethylene	A hydrocarbon, colorless gas and the most widely used organic compound in the chemical industry. Produced mainly via steam cracking of raw materials such as naphtha and NGLs.	Used mainly for the production of polyolefins, primarily polyethylene, the most used thermoplastic resin in the world.	We produce ethylene in our Chemicals Unit, as a main product of the steam cracking of raw materials.
EVA	Ethylene-vinyl acetate, or EVA, is a co-polymer of ethylene and vinyl acetate.	Used to produce rubber-like materials, with applications in adhesives, packaging, molding, and membranes for electronic devices.	We produce EVA in our Polyolefins Unit.
Gasoline	A flammable liquid obtained by refining crude oil.	Used primarily as a fuel in combustion engines.	We produce gasoline as a by-product in our Chemicals Unit.
HDPE	High-density polyethylene, or HDPE, is a thermoplastic resin produced by the polymerization of ethylene.	Used in a variety of industries, to produce plastic bottles, toys, chemical containers, pipe systems, and other plastic products.	We produce HDPE in our Polyolefins Unit.
Hexene	An aliphatic, hexane is a clear, colorless liquid with a petroleum-like odor.	Used as a solvent, paint thinner, and chemical reaction medium. Also used as a co-monomer for the production of HDPE.	We use hexene in our Mexico Unit as a raw material to produce HDPE.
Hydrocarbon resins	Also called petroleum resins, they are produced from the polymerization of aromatic hydrocarbons.	Generally used together with other kinds of resins, in the paint, ink, adhesive and rubber industry.	We produce hydrocarbon resins in our Chemicals Unit.
Hydrogen	A chemical element, hydrogen is a colorless, odorless gas.	Used to make ammonia in the production of fertilizers and as an intermediate chemical in the production of plastics and pharmaceuticals.	We produce hydrogen in our Vinyls Unit.
Hydrogenated solvents	Odorless, colorless solvents treated with hydrogen.	Used in the manufacture of paints.	We produce hydrogenated solvents in our Chemicals Unit.

Term	Meaning	Main uses	In the context of our business
Isoprene	A common organic compound that is a component of natural rubber. Also a by-product of oil refining.	Used to produce synthetic rubber.	We produce isoprene in our Chemicals Unit.
LDPE	Low-density polyethylene, or LDPE, is a thermoplastic resin made from the polymerization of ethylene.	Used for manufacturing containers, dispensing bottles, wash bottles, tubing, plastic bags and molded laboratory equipment.	We produce LDPE in our Polyolefins Unit.
Liquefied petroleum gas (LPG)	Liquefied petroleum gas, or LPG, is a mixture of propane and butane, which are two natural gas liquids.	Used in fuel heating appliances, cooking equipment, vehicle fuel, aerosol propellant, and as a refrigerant.	We produce LPG in our Chemicals Unit.
LLDPE	Linear low-density polyethylene, or LLDPE, is a linear polymer made by the copolymerization of ethylene with longer-chain olefins.	Used in plastic bags and sheets, plastic wrap, stretch wrap, pouches, toys, covers, lids, pipes, buckets and containers, covering of cables and flexible tubing, among others.	We produce LLDPE in our Polyolefins Unit.
Methanol	Methanol is the simplest alcohol, a liquid produced industrially by hydrogenation of carbon monoxide.	Used as a precursor to other commodity chemicals, including formaldehyde, acetic acid and MTBE.	We use methanol as a raw material to produce MTBE in our Chemicals Unit.
Methyl tertiary-butyl ether (MTBE)	An intermediate hydrocarbon liquid stream derived mainly from the refining of crude oil	Used almost exclusively as a fuel additive in gasoline to raise the oxygen content.	We produce MTBE in our Chemicals Unit.
Naphtha	An intermediate hydrocarbon liquid stream derived mainly from the refining of crude oil.	Used as a solvent, fuel additive and as a raw material in the petrochemical industry.	We use naphtha as a raw material for the production of petrochemical products in our Chemicals Unit.
Natural gas	A naturally occurring hydrocarbon gas mixture, consisting primarily of methane.	Used as a source of energy for heating, cooking and electricity generation, as a fuel for vehicles and as a chemical feedstock.	We use natural gas for electricity generation in our production processes.

Term	Meaning	Main uses	In the context of our business
Natural gas liquids (NGL)	A mixture of hydrocarbon components of natural gas, primarily ethane, propane and butane, which are separated from the raw natural gas in the form of liquids.	Used as raw materials in the petrochemical industry, as fuel and in applications for heating and cooking.	We use NGLs such as ethane and propane as raw materials at our plants in Rio de Janeiro and Mexico.
N-hexane	A hydrocarbon, obtained by refining crude oil.	Used mixed with other solvents, to extract vegetable oils from crops, and as a cleaning agent in the printing, textile, furniture, and shoemaking industries.	We use n-hexane in our Polyolefins Unit as a raw material in the production of HDPE and LLDPE.
Nonene	A hydrocarbon, nonene is a colorless liquid with an odor reminiscent of gasoline.	Used as a plasticizer to make rigid plastics flexible, and to produce chemical intermediates.	We produce nonene in our Chemicals Unit.
Olefins	Unsaturated hydrocarbons that contain at least one carbon-carbon double bond, such as ethylene, propylene and butene. Obtained from steam cracking of raw materials.	Used as chemical intermediates for the production of other chemicals and resins.	We produce olefins in our Chemicals Unit.
Para-xylene	An aromatic hydrocarbon, para-xylene is produced mainly in refineries and during the steam cracking of naphtha.	Used as a chemical feedstock in the production of polymers, especially PET.	We produce para-xylene as a by-product in our Chemicals Unit.
PDH	Propane dehydrogenation, or PDH, is an on-purpose technology used for conversion of propane into propylene.	Industrial process for the production of propylene.	We use propylene from PDH units as a raw material in our plants in the United States.
Piperylene	A volatile, flammable hydrocarbon in liquid form, obtained as a by-product of ethylene production.	Used as a monomer in the manufacture of plastics, adhesives and resins.	We produce piperylene in our Chemicals Unit.

Term	Meaning	Main uses	In the context of our business
Polyethylene (PE)	PE is the most common type of thermoplastic resin. It is lightweight and durable, and is obtained from the polymerization of ethylene.	PE has a large number of applications, such as: packaging, consumer goods, fibers, textiles, pipes, automotive, wiring, cables, construction, among others.	We produce PE in our Polyolefins Unit.
Polyisobutylene (PIB)	PIB is a gas-permeable synthetic rubber produced by the polymerization of isobutylene with isoprene.	Used as a fuel and lubricant additive, in explosives, as the base for chewing gum, and to improve the environmental stress-cracking resistance of polyethylene.	We produce PIB in our Chemicals Unit.
Polyolefins	Macromolecules formed by the polymerization of olefin monomer units. The most common are polypropylene (PP) and polyethylene (PE).	Used in a broad range of consumer and industrial applications.	We produce polyolefins in our Polyolefins Unit.
Polypropylene (PP)	PP is a thermoplastic resin and the second most widely produced commodity plastic, after PE. Obtained by the polymerization of propylene, PP is generally harder and more heat resistant than PE.	Widely used in the automotive and furniture industry, in consumer goods, for packaging and labeling, and in other industrial applications.	We produce PP in our Polyolefins Unit.
Polyvinyl chloride (PVC)	PVC is the world's third-most widely produced synthetic plastic polymer, after PE and PP, obtained by the polymerization of vinyl chloride monomer (VCM), a monomer generally made of ethylene and chlorine.	Used mainly in infrastructure and construction for pipes and profile applications, such as doors and windows, and also in plumbing, electrical cables, flooring, and as a replacement for rubber.	We produce PVC in our Vinyls Unit.
Propane	A type of natural gas liquid (NGL), propane is a gas in standard temperature and pressure, and is extracted from natural gas in liquid form.	Commonly used together with butane in heating and cooking applications, and also as a raw material in the petrochemical industry.	We use propane together with ethane as a raw materials to produce petrochemical products in our Chemicals Unit.

Term	Meaning	Main uses	In the context of our business
Propylene	A hydrocarbon, propylene is a colorless gas, and the second most widely used olefin in the chemical industry, after ethylene. It can be obtained as a co-product of steam cracking or refining, and from on-purpose production.	Used mainly to produce polypropylene resins and a wide variety of other chemicals, such as propylene oxide and acrylonitrile.	We produce propylene in our Chemicals Unit as a by-product of steam cracking. Propylene is also the main raw material that we use to produce polypropylene in our Polyolefins and United States and Europe Units.
Refinery off gas	Gas that is produced as a by-product of the refining of crude oil. It is a mixture of methane, ethane, hydrogen and other gases.	Used as a feedstock in the petrochemical industry.	We use refinery off gas as a raw material in our Chemicals Unit to produce ethylene
Salt	Salt is a mineral composed primarily of sodium chloride.	Used in a wide variety of industries, mainly in the chlor-alkali process to produce caustic soda and chlorine, and as a food additive.	We use salt to produce chlorine and caustic soda in our Vinyls unit.
Sodium hypochlorite	Sodium hypochlorite is a chlorine compound.	Used as a disinfectant or a bleaching agent and to produce other chemicals.	We produce sodium hypochlorite in our Vinyls Unit.
Tetramer	Tetramer, or propylene tetramer, is an olefin.		We produce propylene tetramer in our Chemicals Unit.
Thermoplastic resins	Raw, unshaped polymers, such as PE, PP and PVC.	Used as a plasticizer, surfactant, lubricating oil additive and polymerization agent. Used in the plastic industry and other industries.	We produce thermoplastic resins in our Chemicals Unit.
Toluene	An aromatic hydrocarbon.	Used predominantly as an industrial feedstock and a solvent.	We produce toluene in our Chemicals Unit.
UHMWPE	Ultra-high molecular weight polyethylene, or UHMWPE, is a special type of thermoplastic polyethylene.	Used in industrial applications that require durability, low friction, and chemical resistance, including wear strips, chain guides, and marine dock fender pads, among others.	We produce UHMWPE in our United States and Europe Units.
Vinyls	Vinyls, or vinyl polymers, are a group of polymers derived from vinyl monomers. The most common type of vinyl is PVC.	Used in the plastic industry and other industries.	We produce vinyls in our Vinyls Unit.

Certain Other Selected Terms Used in This Annual Report

As used in this annual report:

- “first generation products” means basic petrochemical products such as ethylene and propylene produced from naphtha, natural gas, and ethane. The basic petrochemical products are used as feedstocks for the production of second generation products. We also sell certain first generation products to our customers;
- “second generation products” means thermoplastics resins, such as PE, PP and PVC;
- “third generation” means plastics converters;
- “third generation products” means finished plastic products produced by molding thermoplastic resins into end-use applications;
- “annual production capacity” means the annual nominal capacity for a particular facility, calculated based on operations during the 24 hours of the day for an entire year;
- “kton” means a kiloton, which is equal to 1,000 tons, or 2,204,622.62 pounds;
- “ton” means a metric ton, which is equal to 1,000 kilograms or 2,204.62 pounds.

Rounding

We have made rounding adjustments to some of the amounts included in this annual report. As a result, numerical figures shown as totals in some tables may not be arithmetic aggregations of the amounts that precede them.

CAUTIONARY STATEMENT WITH RESPECT TO FORWARD-LOOKING STATEMENTS

This annual report contains forward-looking statements. Some of the matters discussed concerning our business operations and financial performance include forward-looking statements within the meaning of the U.S. Securities Act of 1933, as amended, or the Securities Act, or the U.S. Securities Exchange Act of 1934, as amended, or the Exchange Act.

Statements that are predictive in nature, that depend upon or refer to future events or conditions or that include words such as “aim,” “anticipate,” “believe,” “can,” “continue,” “estimate,” “expect,” “intend,” “likely,” “may,” “might,” “plan,” “potential,” “project,” “seek,” “should,” “target,” “would,” or the opposite of these terms or other similar expressions are forward-looking statements. Although we believe that these forward-looking statements are based upon reasonable assumptions, these statements are subject to several risks and uncertainties and are made in light of information currently available to us.

Our forward-looking statements may be influenced by numerous factors, including the following:

- general economic, political and business conditions in the markets or jurisdictions in which we operate, including demand and prices for petrochemical products;
- interest rate fluctuations, inflation and exchange rate movements of the *real* in relation to the U.S. dollar and other currencies;
- the cyclical nature of the global petrochemical industry;
- competition in the global petrochemical industry;
- prices of naphtha, ethane, propane, propylene and other raw materials and the terms and conditions of the supply agreements related thereto;
- international prices of petrochemical products;
- actions taken by our major shareholders;
- inherent risks related to any change of our corporate control;
- our ability to successfully appeal the suspension of trading and eventual delisting of our American depository shares (“ADSs”) on the New York Stock Exchange (“NYSE”);
- our ability to implement our financing strategy and to obtain financing on satisfactory terms;
- our progress in integrating the operations of companies or assets that we may acquire in the future, so as to achieve the anticipated benefits of these acquisitions;
- changes in laws and regulations, including, among others, laws and regulations affecting tax and environmental matters and import tariffs in other markets or jurisdictions in which we operate or to which we export our products;
- future changes in Brazilian, Mexican, American and European policies and related actions undertaken by those governments;
- a deterioration in the world economy that could negatively impact demand for petrochemicals;
- decisions rendered in major pending or future tax, labor, environmental and other legal proceedings; and
- other factors identified or discussed under “Item 3. Key Information—Risk Factors.”

Our forward-looking statements are not guarantees of future performance, and our actual results or other developments may differ materially from the expectations expressed in the forward-looking statements. As for forward-looking statements that relate to future financial results and other projections, actual results will be different due to the inherent uncertainty of estimates, forecasts and projections. Because of these uncertainties, potential investors should not rely on these forward-looking statements.

Forward-looking statements speak only as of the date they are made, and we do not undertake any obligation to update them in light of new information or future developments or to release publicly any revisions to these statements in order to reflect later events or circumstances or to reflect the occurrence of unanticipated events.

PART I

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

Selected Financial and Other Information

The following selected information should be read in conjunction with “Presentation of Financial and Other Information,” “Item 5. Operating and Financial Review and Prospects” and our audited consolidated financial statements and the related notes thereto, which are included in this annual report.

The selected financial data as of December 31, 2018 and 2017 and for the three years ended December 31, 2018 have been derived from our audited consolidated financial statements, prepared in accordance with IFRS, and included in this annual report.

In 2018, except for the changes that occurred following the adoption of the new accounting standards described in “Item 5. Operating and Financial Review and Prospects Changes in key accounting policies” below, accounting practices were applied prospectively in the preparation of our financial statements.

In 2017, Braskem’s management commenced classifying interest payments as interest paid in cash flow from operations rather than interest paid under cash used in investment activities. This change allows: (i) the direct identification of the total amount paid as interest; and (ii) greater accuracy in determining the net cash provided by operating activities. As a result of this change, we reclassified interest paid during the period ended December 31, 2016 and 2015 of R\$288.4 million and R\$786.1 million, respectively.

In 2017, we standardized the classification of provision for profit sharing across all of our subsidiaries, regardless of whether such subsidiaries were productive. We carried out this standardization because we deemed the current classification more appropriate, since this provision does not present recurring elements or, even when recurring, the amounts differ from year to year.

In this context, during the year ended December 31, 2016, we reclassified costs of goods sold of R\$163.1 million, selling and distribution expenses of R\$7.2 million, and general and administrative expenses of R\$191.6 million to the “participation of members in profits and results” line item under other income (expenses), net.

We have included information with respect to the dividends and/or interest attributable to shareholders’ equity paid to holders of our common shares and preferred shares since January 1, 2016 in *reais* and in U.S. dollars translated from *reais* at the commercial market selling rate in effect as of the payment date under the caption “Item 8. Financial Information—Dividends and Dividend Policy—Payment of Dividends.”

For the Year Ended December 31,

	2018 ⁽¹⁾	2018	2017	2016 Adjusted ⁽²⁾	2015 Adjusted ⁽²⁾	2014 Adjusted ⁽²⁾
	(in millions of US\$, except per share data)			(in millions of reais, except per share data)		
Statement of Operations Data:						
Net sales revenue	14,968.5	57,999.9	49,260.6	47,664.0	46,880.0	45,135.9
Cost of products sold	(11,982.9)	(46,431.2)	(36,177.4)	(34,985.6)	(36,697.8)	(39,205.3)
Gross profit	2,985.6	11,568.6	13,083.2	12,678.4	10,182.2	5,930.6
Income (expenses):						
Selling and Distribution	(398.9)	(1,545.6)	(1,459.6)	(1,403.7)	(1,077.3)	(1,035.2)
General and administrative	(421.4)	(1,633.0)	(1,434.3)	(1,285.6)	(1,095.4)	(1,038.4)
Research and development	(51.6)	(199.8)	(167.5)	(162.0)	(169.6)	(128.1)
Results from equity investments	(0.2)	(0.9)	40.0	30.1	2.2	3.9
Other operating income (expenses), net	23.4	90.9	(854.9)	(3,906.0)	(952.3)	(262.9)
Operating profit	2,136.9	8,280.2	9,206.9	5,951.2	6,889.8	3,469.9
Financial results:						
Financial expenses	(776.2)	(3,007.6)	(3,747.2)	(3,571.0)	(3,163.4)	(2,716.4)
Financial income	152.0	589.1	603.6	690.1	584.9	399.9
Exchange rate variations, net	(582.5)	(2,257.0)	(798.8)	(3,210.4)	102.9	(84.1)
Financial expenses, net	(1,206.6)	(4,675.5)	(3,942.3)	(6,091.3)	(2,475.6)	(2,400.6)
Profit (loss) before income tax and social contribution	930.3	3,604.7	5,264.6	(140.1)	4,414.2	1,069.3
Current and deferred income tax and social contribution	(190.1)	(736.6)	(1,357.7)	(616.0)	(1,660.4)	(491.0)
Profit (loss) from continuing operations	740.2	2,868.2	3,906.9	(756.1)	2,753.8	578.4
Discontinued operations results	—	—	8.9	26.9	6.4	0.1
Profit (loss) for the year	740.2	2,868.2	3,915.8	(729.2)	2,760.2	578.2
Profit (loss) for the year attributable to Company's shareholders	729.8	2,827.7	3,865.4	(411.5)	3,001.7	716.0
Loss attributable to non-controlling interest in subsidiaries	10.5	40.5	50.3	(317.7)	(241.5)	(137.8)
Profit (loss) per share:						
Basic:						
Common shares	0.9173	3.5543	4.8479	(0.5511)	3.7651	1.0857
Preferred class "A" shares	0.9173	3.5543	4.8479	(0.5511)	3.7651	1.0857
Preferred class "B" shares	0.1525	0.5910	0.6069	—	0.6065	0.6062
Diluted:						
Common shares	0.9173	3.5543	4.8590	(0.5173)	3.7732	1.0857
Preferred class "A" shares	0.9173	3.5543	4.8590	(0.5173)	3.7731	1.0857
Preferred class "B" shares	0.1525	0.5910	0.6069	—	0.6065	0.6062
ADS ⁽³⁾	1.8346	7.1086	9.7180	(1.0346)	7.5464	1.7992

(1) Translated for convenience only using the selling rate as reported by the Central Bank as of December 31, 2018 for reais into U.S. dollars of R\$3.8748=US\$1.00.

(2) (i) For comparability purposes, the Company changed the classification of provision for profit sharing to standardize such classification among all companies, whether or not productive, and because it deemed the current classification more appropriate, since this provision does not present recurring elements or, even when recurring, the amounts differ from year to year. In the fiscal year ended December 31, 2016, 2015 and 2014, the amounts related to this item were reclassified from "costs of goods sold" (2016 – R\$163,056, 2015 – R\$165,522 and 2014 – R\$146,388), "selling and distribution expenses" (2016 - R\$7,155, 2015 – R\$5,848 and 2014 – R\$2,201) and "general and administrative expenses" (2016 - R\$191,586, 2015 – R\$185,067 and 2014 – R\$157,135) to the item "other income (expenses), net"; and (ii) for comparability purposes, the Company is presenting the amount of "Costs of idle industrial plants" for the year 2016 and 2015, reclassified from "Other income (expenses), net". The amounts reclassified in the period ended December 31, 2016 and 2015 were R\$208,006 and R\$135,341, respectively.

(3) American depositary shares, or ADS, are U.S. dollar-denominated equity shares of a foreign-based company on an American stock exchange. In our case, for the each of the periods presented, each ADS represented two of our class A preferred shares.

At and For the Year Ended December 31,

	2018 ⁽¹⁾	2018	2017	2016	2015	2014
	(in millions of US\$, except as indicated)	(in millions of reais, except as indicated)				
Balance Sheet Data:						
Cash and cash equivalents and financial investments ⁽²⁾	2,040.2	7,905.3	6,077.8	7,892.3	7,458.2	3,085.7
Current trade accounts receivable	793.6	3,075.2	3,281.2	1,634.1	2,755.7	2,409.1
Inventories ⁽³⁾	2,190.2	8,486.6	6,460.0	5,238.0	6,243.7	5,688.3
Property, plant and equipment	8,196.5	31,759.9	29,761.6	29,336.7	34,100.3	29,071.0
Total assets	15,176.9	58,807.5	52,731.8	51,821.9	60,626.9	49,501.9
Current borrowings	190.3	737.4	1,184.8	2,594.5	1,970.0	1,419.5
Non-current borrowings	6,235.3	24,160.7	22,176.6	20,736.6	25,380.5	18,926.7
Capital	2,075.8	8,043.2	8,043.2	8,043.2	8,043.2	8,043.2
Shareholders' equity (including non-controlling interest in subsidiaries)	1,459.3	5,654.7	5,472.8	1,720.7	945.5	5,597.1
Other Financial and Operating Information:						
Cash Flow Information:						
Net cash generated by (used in):						
Operating activities	2,387.3	9,250.4	2,461.6	4,457.9	7,091.7	3,813.1
Investing activities	(642.2)	(2,488.3)	(2,406.4)	(2,552.5)	(3,334.2)	(5,054.1)
Financing activities	(1,188.0)	(4,603.4)	(2,988.5)	(2,757.3)	(97.5)	894.4
Other Information:						
Capital expenditures:						
Property, plant and equipment and Intangible assets	(698.4)	(2,706.3)	(2,273.2)	(2,586.5)	(3,337.9)	(5,378.8)
Investments in subsidiaries	—	—	(608.2)	—	—	0.1
Total Sales Volume Data (in thousands of tons):						
Ethylene ⁽⁴⁾		623.6	624.6	576.1	548.6	511.4
Propylene ⁽⁴⁾		355.4	403.5	370.6	416.5	445.7
Polyethylene (PE)		2,608.3	2,711.6	2,729.7	2,626.9	2,386.5
Polypropylene (PP)		1,580.7	1,687.2	1,671.9	1,513.1	1,591.9
Polyvinyl chloride (PVC)		535.7	607.7	645.2	594.9	659.6

(1) Translated for convenience only using the selling rate as reported by the Central Bank as of December 31, 2018 for reais into U.S. dollars of R\$3.8748=US\$1.00.

(2) Includes current financial investments.

(3) Includes non-current advances to suppliers.

(4) Includes only third-party sales.

Exchange Rates

The current laws and regulations governing the Brazilian foreign exchange system allow the purchase and sale of foreign currency and the international transfer of reais by any person or legal entity, regardless of the amount, subject to certain regulatory procedures. Since 1999, the Central Bank has allowed the U.S. dollar-real exchange rate to float freely, and, since then, the U.S. dollar-real exchange rate has fluctuated considerably.

In the past, the Central Bank has intervened occasionally to control unstable movements in foreign exchange rates. We cannot predict whether the Central Bank or the Brazilian government will continue to permit the real to float freely or will intervene in the exchange rate market through the return of a currency band system or otherwise. The real may depreciate or appreciate against the U.S. dollar substantially. Furthermore, Brazilian law provides that, whenever there is a serious imbalance in Brazil's balance of payments or there are serious reasons to foresee a serious imbalance, temporary restrictions may be imposed on remittances of foreign capital abroad. We cannot assure you that such measures will not be taken by the Brazilian government in the future. See "—Risk Factors—Risks Relating to Brazil—Brazilian government exchange control policies could increase the cost of servicing our foreign currency-denominated debt, adversely affect our ability to make payments under our foreign currency-denominated debt obligations and impair our liquidity" and "—Risk Factors—Risks Relating to Our Equity and Debt Securities— If holders of the ADSs exchange them for class A preferred shares, they may risk temporarily losing, or being limited in, the ability to remit foreign currency abroad and certain Brazilian tax advantages."

Risk Factors

Risks Relating to Us and the Petrochemical Industry

The cyclical nature of the petrochemical industry may reduce our net sales revenue and gross margin.

The petrochemical industry, including the global markets in which we compete, is cyclical and sensitive to changes in global supply and demand. This cyclicity may reduce our net sales revenue, increase our costs and decrease our gross margin, including as follows:

- downturns in general business and economic activity may cause demand for our products to decline;
- when global demand falls, we may face competitive pressures to lower our prices;
- increases in prices of the main raw materials we use, principally naphtha, ethane and propylene; and
- if we decide to expand our plants or construct new plants, we may do so based on an estimate of future demand that may never materialize or materializes at levels lower than we predicted.

Historically, the international petrochemical markets have experienced alternating periods of limited supply, which have caused prices and profit margins to increase, followed by expansion of production capacity, which has resulted in oversupply and reduced prices and profit margins. Prices in the petrochemical industry follow the global petrochemical industry, and we establish the prices for the products we sell in Brazil, other countries in Latin America, the United States and the world with reference to international market prices. Therefore, our net sales revenue and gross margin are increasingly linked to global industry conditions that we cannot control, and which may adversely affect our results of operations and financial position.

Our revenue from customers is significant, and the credit risks associated with certain of these customers could adversely affect our results of operations.

We engage in a number of transactions where counterparty credit risk is a relevant factor, including transactions with customers and those businesses we work with to provide services, among others. These risks are dependent upon market conditions and also the real and perceived viability of the counterparty. The failure or perceived weakness of any of our counterparties has the potential to expose us to risk of loss in certain situations. Our revenue from our customers is significant, and the credit risks associated with certain of these customers could adversely affect our results of operations. Certain contracts and arrangements that we enter into with counterparties may provide us with indemnification clauses to protect us from financial loss. To the extent the credit quality of these customers deteriorates or these customers seek bankruptcy protection, our ability to collect our receivables, and ultimately our results of operations, may be adversely affected.

Our results may be adversely affected by increases in expected credit losses.

We have a large balance of accounts receivable and have established a reserve for the portion of such accounts receivable that we estimate will not be collected because of our customers' non-payment.

If the business viability of certain of our customers deteriorates or our credit policies are ineffective in reducing our exposure to credit risk, additional increases in expected credit losses accounts may be necessary, which could have a material adverse effect on our cash flows and results of operations. We record expected credit losses in an amount we consider sufficient to cover estimated losses on the realization of our trade accounts receivable, taking into account our loss experience and the aging of our accounts receivable, but we cannot assure you that these amounts will be sufficient to cover eventual losses.

As of December 31, 2018, our total trade accounts receivable was R\$3,093.0 million and the expected credit losses were R\$233.6 million.

Global macroeconomic factors have had, and may continue to have, adverse effects on the margins that we realize on our products.

Our results of operations may be materially affected by adverse conditions in the financial markets and depressed economic conditions generally. Economic downturns in geographic areas or jurisdictions in which we sell our products may substantially reduce demand for our products and result in decreased sales volumes. Recessionary environments adversely affect our business because demand for our products is reduced.

According to the IMF, the global economy grew 3.3% in 2018, an increase of 0.7 p.p. as compared to global economic growth during 2017. In 2018, Brazil's GDP grew 1.1%, compared to a 1.0% growth in 2017 and contractions of 3.5% and 3.8% in 2016 and 2015, respectively.

For the United States, the IMF reported GDP growth of 2.9% in 2018 compared to growth of 2.3%, 1.5% and 2.6% in 2017, 2016 and 2015, respectively. In addition, the IMF reported GDP growth of 2.2% in 2018 for Europe and growth of 2.2% in Mexico in 2018.

Our ability to export to other countries depends on the level of economic growth in those countries and other economic conditions, including prevailing inflation and interest rates. In addition, disruptions in the global balance between supply and demand may impair our ability to export our products in response to a decline in domestic demand for these products. Prolonged volatility in economic activity in our key export markets, such as South America, Europe and Asia, could continue to reduce demand for some of our products and lead to increased margin pressure by importers into Brazil, which would adversely affect our results of operations.

We face competition from producers of polyethylene, polypropylene, PVC and other petrochemical products.

We face strong competition across all of our petrochemical products. Our U.S. operations face competition in the United States from other U.S. producers of polypropylene and the other foreign producers of polypropylene that serve the United States. Our German operations face competition in Europe and the other export markets that it serves from European and other foreign producers of polypropylene. Our Mexico operations face competition from Mexican and U.S. producers of polyethylene producers. Competitors from South America are able to export to Brazil with reduced or no import duties. In addition, producers of almost all continents have regular or spot sales to trading companies and direct customers in Brazil for petrochemicals and resins.

We generally set the prices for our second generation products sold in Brazil with reference to the prices charged for these products by foreign producers in international markets. We generally set the prices for our second generation products exported from Brazil based on international spot market prices. We set the prices for polypropylene sold in the United States and Europe based on regional market pricing. The price for polyethylene in Mexico is based on prices for the polymer in the U.S. Gulf Coast region.

As a result of the recently commissioned gas-based ethylene capacity in the United States, coupled with the competitive pricing of the ethane as feedstock for petrochemicals production, we anticipate that we may experience increased competition from producers of thermoplastic resins, especially from North American producers, in the markets in which we sell these products. In addition, the appreciation of the *real* against the U.S. dollar may increase the competitiveness of prices of imported products in *reais*, which may increase the competition in Brazil from other producers of second generation products. Some of our foreign competitors are substantially larger and have greater financial, manufacturing, technological and/or marketing resources than us.

We may face competition from producers of substitutes for our products as a result of evolving technology, consumer and industry trends and preferences, and regulatory changes.

We compete in a market that relies on technological innovation and the ability to adapt to evolving consumer and industry trends and preferences. Petrochemical products and other products produced with our petrochemical products, such as consumer plastic items, are subject to changing consumer and industry trends, demands and preferences, as well as stringent regulatory and environmental requirements. Therefore, products once favored may, over time, become disfavored by consumers or industries or no longer be perceived as the best option.

In addition, plastic waste management, disposal and recycling have become a growing global environmental concern and have been receiving as much attention as other environmental topics, such as global warming, from the population at large, national and local governments, private companies, trend setters, and consumers worldwide. There has been a growing trend to attempt to move away from the usage of plastic products, which has been backed by governmental and lawmaking initiatives, as well as investments in plastic recycling systems by private companies, public entities and national and local governments. In November 2018, we issued a statement in support of the development of certain initiatives to foster a "circular economy" (reusing and repurposing resources within the economy), including: (i) partnerships to develop new products and applications to improve efficiency and promote recycling and reuse (circular design), especially for single-use packaging; (ii) investing in the development of new renewable products to support the circular economy at the beginning of the value chain; (iii) supporting and developing new technologies, business models and systems for collecting, recycling and recovering materials, considering the best balance of economic, social and environmental impacts; (iv) engaging consumers in recycling and recovery programs, especially through educational programs in connection with responsible consumerism to further knowledge on the value of plastic waste to the economy; (v) supporting and using life cycle assessment tools to select the most sustainable option, considering the economic, social and environmental impacts of plastic; (vi) supporting the measurement and communication of recycling and recovery indicators for plastic packaging materials; (vii) building partnerships to understand, prevent and solve the problem of debris in the oceans, with support from the scientific community and researchers; and (viii) supporting comprehensive science-based policies to understand the origins of and prevent debris in the oceans and to improve the management of solid waste, especially plastics. Despite these initiatives and other initiatives carried out within our industry, we may be unable to increase post-consumer plastic waste recycling rates, which may lead to decreased interest in our products by our customers and consumers, and impact our results of operations and financial condition.

Our continued success depends on our ability to continue to differentiate ourselves and our products and also to react to changes in these trends. Factors that may affect consumer perception of our products, or of consumer goods produced with our products, may include health trends and attention to substitute products perceived as more environmentally friendly. For example, in recent years, we have witnessed a shift in consumer preference moving away from plastic straws and in favor of straws made from other materials, such as paper or other compounds. A failure to react to similar trends in the future could enable our competitors to grow or secure their market share before we have a chance to respond.

In addition, regulations may be amended or enacted in the future that would make it more difficult to appeal to our customers, end consumers, or to leverage the products that we produce. Even if we are able to continue to distinguish our products, there can be no assurance that our competitors (including producers of substitutes) will not be successful in persuading consumers of our products to switch to their products. Some of our competitors may have greater access to resources than we do, which may better position them to react and adapt to evolving trends, preferences, and regulatory changes. Any loss of interest in our products, or consumer products produced with our products, may have a material adverse effect on our business, results of operations and financial condition.

Higher raw materials costs would increase our cost of products sold and may reduce our gross margin and negatively affect our overall financial performance.

Naphtha, a crude oil derivative, is the principal raw material used by our Chemicals Unit (formerly our Basic Petrochemicals Unit) and, indirectly, in our other business units in Brazil. Naphtha accounted, directly and indirectly, for 41.8% of our consolidated cost of products sold in 2018 and 40.0% in 2017, respectively.

Ethane and propane are the principal raw materials that we use to produce our basic petrochemical products in our petrochemical complex located in Duque de Caxias in the State of Rio de Janeiro, or the Rio de Janeiro Complex, and represent the principal production and operating cost of our Chemicals Unit. Ethane and propane accounted, directly and indirectly, for 0.6% and 1.2%, respectively, of our consolidated cost of products sold in 2018 and for 0.6% and 0.9%, respectively, of our consolidated cost of products sold in 2017.

Propylene is the principal raw material that we use to produce polypropylene in the United States and Europe and represents the principal production and operating cost of our USA and Europe Unit. We also purchase propylene in the Brazilian market for our Brazilian polypropylene plants. Propylene accounted, directly and indirectly, for 21.7% and 19.4% of our consolidated costs of products sold in 2018 and 2017, respectively.

Ethane is the principal raw material that we use to produce ethylene in the Mexico Complex and represents the principal production and operating cost of the Mexico Complex. Ethane accounted, directly and indirectly, for 1.0% and 1.4% of our consolidated costs of products sold in 2018 and 2017, respectively.

In Brazil, we purchase the naphtha used by our Chemicals Unit at prices based on the Amsterdam-Rotterdam-Antwerp naphtha price, or the ARA price, and the ethane and propane at Mont Belvieu market prices. We purchase ethane used by our Mexico Unit at prices based on the Mont Belvieu purity ethane. We purchase the propylene used in Brazil and USA plants at prices based on U.S. Gulf reference price, or the USG price. We purchase the propylene used in our Europe plants as reported by ICIS-LOR based on monthly contract price for propylene for Europe. We purchase refinery off gas at a price related to imported natural gas price.

The ARA price of naphtha fluctuates primarily based on changes in the U.S. dollar-based price of Brent crude oil on the Intercontinental Exchange based in London. The ARA price of naphtha averaged US\$602 per ton in 2018, up 24% from 2017, in line with the 31% increase in oil prices explained primarily by sanctions against Iran and the cut in production by the Organization of the Petroleum Exporting Countries, or OPEC.

In 2018, the Mont Belvieu prices of ethane averaged 33 cents per gallon, or US\$243 per ton, increasing 33% from 2017, driven by stronger demand from recently inaugurated crackers, combined with the lack of pipelines to transport gas and of crackers to extract ethane.

In 2018, the USG price for propylene averaged US\$1,189 per ton, 21% higher than 2017, which followed the upward trend in oil prices and higher demand from PP producers.

The European price reference for propylene averaged US\$1,170 per ton in 2018, or 24% higher than the previous year, explained by higher oil prices.

The price of naphtha, ethane, propane and propylene in U.S. dollars has been, and may continue to be, volatile. In addition, fluctuations of the U.S. dollar in the future may effectively increase our naphtha or natural gas costs in *reais*. Any increase in naphtha, ethane, propane or propylene costs would reduce our gross margin and negatively affect our overall financial performance to the extent we are unable to pass on these increased costs to our customers and could result in reduced sales volumes of our products.

We do not hedge against changes in the price of our principal raw materials, so we are exposed to fluctuations in the price of these primary raw materials.

Currently, we do not hedge our feedstock's price exposure. We believe the petrochemical industry has a natural hedge, mainly due to the historical correlation between its feedstock (most notably, naphtha) and its final products (polyethylene, polypropylene, PVC and others). Historically, fluctuations in the price of naphtha were followed by corresponding variations in first and second generation petrochemical products. Any hedge solely in naphtha's price would break this natural protection, most likely making our results more volatile. However, in light of our ongoing process of feedstock diversification, and with ethane and propane representing a more significant portion of our variable costs, the natural hedge described above has weakened. This occurs because ethane and propane have a significantly lower correlation to the prices of our final products, when compared to naphtha and propylene. As result, and more so than in the past, when the price of naphtha or propylene fluctuate we may not be able to pass on to our end-consumers all of the corresponding increases in our feedstocks costs.

We depend on Petrobras to supply us with a substantial portion of our naphtha, ethane, propane and propylene needs.

Petróleo Brasileiro S.A. – Petrobras, or Petrobras, is the only Brazilian supplier of naphtha and has historically supplied up to 70% of the naphtha consumed by our Chemicals Unit. In 2018, Petrobras supplied 50% of the naphtha consumed by our Chemicals Unit. Currently, Petrobras is also our primary supplier of ethane, propane and refinery off gas and has historically supplied the ethane, propane and refinery off gas consumed at our petrochemical complex located in the Rio de Janeiro Complex and our chemical complex located in Capuava in the State of São Paulo, or the São Paulo Complex.

We are party to several propylene contracts with Petrobras refineries, which have historically supplied 40% of our propylene need to produce polypropylene in Brazil. As a result of limited infrastructure in Brazil to allow the importation of propylene in large quantities and substantial costs associated with the storage and transportation of the product, we are highly dependent on the propylene supplied by Petrobras.

Our Petrobras ethane and propane supply agreements expire in January 2021, and our Petrobras naphtha purchase agreement expires in December 2020. Certain of our propylene agreements with Petrobras expire in 2021, while the remainder expire between 2028 and 2029. As of the date of this annual report, we cannot assure you that these agreements will be renewed and, if renewed, whether we will be able to keep the same terms and conditions currently in force, including with respect to pricing, volume, pipeline and other infrastructure access.

Petrobras controls a substantial portion of the pipeline infrastructure used to transport naphtha across Brazil and is our primary supplier of naphtha, ethane, propane and propylene. A failure to renew or extend our existing agreements for the supply of raw materials or pipeline infrastructure use, or a termination of such agreements with Petrobras could lead to difficulties in accessing Petrobras' pipeline infrastructure. The alternative would be to access pipeline infrastructure through the National Petroleum Agency, or the ANP, which would grant access to the pipeline infrastructure at a cost defined by the ANP.

Therefore, our production volumes and net sales revenue would likely decrease, while our costs would likely increase, and adversely affect our overall financial performance in the event of the following:

- significant damage to Petrobras' supply infrastructure through which Petrobras and Braskem import naphtha, or to any of the pipelines connecting our plants to Petrobras' facilities, whether as a result of an accident, natural disaster, fire or otherwise; or
- any termination by Petrobras of the naphtha, ethane, propane or propylene supply contracts with us, which provide that Petrobras may terminate the contracts for certain reasons described in "Item 4. Information on the Company"; or
- Furthermore considering that Petrobras (and/or its subsidiaries) controls a substantial portion of the logistics infrastructure of our raw material across Brazil and our existing agreements for using its assets and their operation over certain Braskem's assets, we could also assume that we would face difficulties to import and ensure access of raw material to our crackers in a scenario that these agreements are terminated by Petrobras (and/or its subsidiaries) and therefore with a substantial impact on the infrastructure that we currently access.

In addition, although regulatory changes have ended Petrobras' monopoly in the Brazilian naphtha market and have allowed us to import naphtha, any restrictions imposed on the importation of naphtha into Brazil could increase our production costs. For a discussion of additional risks related to sole-source suppliers, see "—We rely on limited or sole-source suppliers for our raw materials."

We depend on propylene supplied by third parties in the United States and Europe.

Our reliance on third party suppliers poses significant risks to our results of operations, business and prospects. We rely upon third parties to supply our plants with propylene. We acquire propylene for our polypropylene plants in the United States under several long-term supply agreements and through the spot market. As of December 31, 2018, we had long-term supply agreements with multiple suppliers. The pricing formulas for propylene under these supply agreements are generally based on market prices. As of the date of this annual report, we cannot assure you that these agreements will be renewed and, if renewed, whether we will be able to keep the same terms and conditions currently in force, including with respect to pricing, volume, pipeline and other infrastructure access.

We acquire propylene for our polypropylene plants in Germany under long-term supply agreements that provide for the supply of 88% of the propylene requirements of these plants. We have two main supply agreements in Germany. One will expire in September 2021 and is automatically renewable for consecutive one-year terms, unless terminated by one of the parties, and the other expires in December 2021. We have entered into a third contract that will expire at the end of 2020, increasing the supply of our plants to 94% of the propylene required. The pricing formula for propylene under these supply agreements is based on market prices. As of the date of this annual report, we cannot assure you that these agreements will be renewed and, if renewed, whether we will be able to keep the same terms and conditions currently in force, including with respect to pricing, volume, pipeline and other infrastructure access.

Delays in the availability of propylene of acceptable quality, or our inability to obtain such acceptable propylene in the quantities we need over what has been contracted, or at all, may adversely affect our revenue and results of operations.

We depend on ethane supplied by Pemex TRI in Mexico.

In Mexico, Braskem Idesa S.A.P.I., or Braskem Idesa, our joint venture with Grupo Idesa, S.A. de C.V., or Idesa, has entered into a long-term delivery or pay under competitive commercial conditions supply contract (the “ethane supply agreement”) to purchase an agreed-upon volume of ethane from Pemex Transformación Industrial (successor of Pemex Gas y Petroquímica Básica), or Pemex TRI, a state-owned Mexican company, that is a subsidiary of Petróleos Mexicanos, or Pemex, the state-owned Mexican oil and gas company. This agreement’s initial expiration date is in 2035. Termination of the ethane supply agreement by Pemex TRI or any prolonged interruption, discontinuation or other disruption in the supply of ethane to Braskem Idesa could significantly impact the operations of our Mexico Complex and have a material adverse effect on our overall financial performance. The provisions for early termination by Pemex TRI include, but are not limited to, (i) a failure of Braskem Idesa to pay that continues for more than 180 days after notice, or (ii) an emergency stoppage in operations or force majeure event that continues for more than 48 months. The loss of Pemex TRI as a supplier of ethane could lead to the interruption of operations in our Mexico Complex and require us to find a suitable alternative source. There can be no assurance that in the event of termination of this agreement or other disruption in the supply of ethane to Braskem Idesa by Pemex TRI, we will be able to replace such supplier in a timely manner and on favorable terms, and prevent any unscheduled interruption of our operations.

Additionally, our production volumes and net sales revenue would likely decrease and adversely affect our overall financial performance in the event of (i) a significant damage to Pemex TRI’s refineries or to the port facilities that Pemex TRI uses to import ethane, or to any of the pipelines connecting our plants to Pemex TRI’s facilities, whether as a consequence of an accident, natural disaster, fire, stoppage, force majeure event, or otherwise, or (ii) a failure by Pemex TRI to supply to us the agreed-upon volume of ethane, or at least the minimum volume of ethane, under the ethane supply agreement (as further discussed below).

The ethane supply agreement contains a volume delivery long-term performance covenant that requires Pemex TRI to meet a volume delivery of ethane over a six-month period averaging 70% of the agreed-upon volume under the ethane supply agreement (the “Long-Term Performance Test”). As of January 2019, Pemex TRI volume deliveries under the Long-Term Performance Test remained close to the 70% threshold. In the event that Pemex TRI fails to meet the Long-Term Performance Test, in addition to the direct negative impact on the production volumes of our Mexico Complex, it may (i) render us unable to generate sufficient cash to service our indebtedness with creditors under the Braskem Idesa Financing, (ii) cause such creditors to accelerate this indebtedness, and/or (iii) require Braskem Idesa to exercise a termination and put option against Pemex TRI that would force Pemex TRI to purchase the Mexico Complex from us. See “Item 4. Information on the Company—Mexico Unit—Supply Contracts of the Mexico Unit—Ethane” and “Item 5. Operating and Financial Review and Prospects—Capital Expenditures—Joint Venture—Mexico Complex.”

For a discussion of additional risks related to sole-source suppliers, see “—We rely on limited or sole-source suppliers for our raw materials.”

We rely on limited or sole-source suppliers for our raw materials.

We rely on Petrobras for most or all of our supply of naphtha, ethane, propane, refinery off gas and propylene in Brazil, a few companies for a large portion of our supply of propylene in our USA and Europe Units, and Pemex TRI for our supply of ethane in Mexico. As a result, we are subject to substantial risks because of our reliance on these and other limited or sole-source suppliers, including the following risks:

- if a supplier does not provide naphtha, ethane, propane, refinery off gas or propylene, as the case may be, that meet our or their specifications in sufficient quantities and with acceptable performance or quality on time or deliver when required, then sales, production, delivery of our products to our customers on a timely manner and revenue from our plants could be adversely affected;
- if our relationship with a key supplier changes or is adversely affected, for example, due to competitive pressures (or conflicting interests), we may be unable to obtain naphtha, ethane, propane or propylene, as the case may be, on satisfactory financial terms;
- if an interruption of supply of naphtha, ethane, propane, refinery off gas or propylene, as the case may be, occurs because a supplier changes its technology roadmap, suffers damage to its manufacturing facilities, decides to no longer provide those products or services, increases the price of those products or services significantly or imposes reduced delivery allocations on its customers, it could take us a considerable period of time to identify and qualify alternative suppliers;
- some of our key suppliers are small companies with limited financial and other resources, and as a result, they may be more likely to experience financial and operational difficulties than larger, well-established companies, which increases the risk that they will be unable to deliver products as needed; and
- if a key supplier is acquired or has a significant change in business, the production and sales of our systems and services may be delayed or adversely affected, or our development programs may be delayed or may be impossible to complete.

Delays in the availability of naphtha, ethane, propane, refinery off gas or propylene of acceptable quality, or our inability to obtain such acceptable naphtha, ethane, propane or propylene in the quantities we need or at all, may adversely affect our revenue and results of operations.

Our Polyolefins Unit and Vinyls Unit depend on our Chemicals Unit to supply them with their ethylene and propylene requirements. In addition, our plants located at the Camaçari Complex in the Brazilian state of Bahia depend on certain providers of environmental services for the treatment of effluents, industrial waste and water supply for industrial use.

Our Chemicals Unit is the only supplier of ethylene to our Vinyls Unit, the only supplier of ethylene to the polyethylene plants and the principal supplier of propylene to the polypropylene plants of our Polyolefins Unit. Because the cost of storing and transporting ethylene is substantial and there is inadequate infrastructure in Brazil to permit the importing of large quantities of ethylene and propylene, our Polyolefins Unit in Brazil and our Vinyls Unit are highly dependent on the supply of these products by our Chemicals Unit. Consequently, our production volumes of, and net sales revenue from, Polyolefins and Vinyls products would decrease, and our overall financial performance would be negatively affected, in the event of the following:

- any significant damage to the facilities of our Chemicals Unit through which ethylene or propylene is produced, or to the pipeline or other facilities that connect our polyolefins plants or vinyls plants to our Chemicals Unit, whether as a consequence of an accident, natural disaster, fire or otherwise;
- any significant reduction in the supply of naphtha to our Chemicals Unit, as naphtha is the principal raw material used by our Chemicals Unit in the production of ethylene and propylene; or
- any significant reduction in the supply of ethane or propane to our basic petrochemical plant in Rio de Janeiro, as ethane and propane are the principal raw materials used in the production of ethylene and propylene.

Our plants located at the Camaçari Complex in the Brazilian state of Bahia depend on our subsidiaries Cetrel S.A. (“Cetrel”) and Água de Camaçari (“DAC”) for the: (i) treatment of effluents and industrial waste; (ii) supply of reuse water; (iii) supply of demineralized, clarified and potable water; and (iv) management of water reservoirs. An interruption in the operations of Cetrel or DAC may result in the shutdown of all of our plants at the Camaçari Complex, in addition to increased environmental risks, which could lead to the shutdown of our entire petrochemical complex. If such a shutdown were to happen, our production volumes and net sales revenue from sales from our plants at the Camaçari Complex would decrease, and our financial performance and results of operations would be adversely affected.

See also “—Our business is inherently subject to environmental, health and safety hazards. As a result, our business is also subject to stringent environmental and other regulations.” below.

We may be materially adversely affected if our transportation, storage and distribution operations are interrupted or are more costly than anticipated.

Our operations are dependent upon uninterrupted transportation, storage and distribution of our products. Transportation, storage or distribution of our products could be partially or completely, temporarily or permanently shut down as the result of any number of circumstances that are not within our control, such as:

- catastrophic events;
- strikes or other labor difficulties; and
- other disruptions in means of transportation.

For example, in May 2018, Brazil experienced a national truck drivers' strike that severely impacted the logistics operations of many companies throughout Brazil, including the delivery of our raw materials, our products, and other goods. In response to such strike, we gradually reduced the utilization rate of our petrochemical complexes in Brazil, which operated at 50% of their nominal capacity in May 2018. Following the strike, Brazil introduced a national freight cost schedule that set forth minimum prices for freight services provided by truck drivers and freight companies countrywide, which may have a lasting impact on freight prices in Brazil and lead to sustained increased transportation costs in the future in connection with our operations.

Any significant interruption at our distribution facilities, an inability to transport our products to or from these facilities, or to or from our domestic or foreign customers or suppliers, or an increase in transportation costs, for any reason, would materially adversely affect us.

We rely on access to third-party licensed technology and related intellectual property, particularly in the context of the manufacturing process of certain of our products. If the licensed third-party technology and intellectual property that we use cease to be available to us on commercially reasonable terms, or at all, or if any such third party ceases to provide us with technical support under license or technical services agreements that we have entered into with them to allow us to satisfactorily operate, certain of our production facilities, our operating results and financial condition could be adversely affected.

We use technology and intellectual property licensed from third parties in the regular operation of our business, particularly in the operation of certain machinery and equipment required for the production of certain of our products such as our first and second generation products, and we may continue to rely on access to third-party technology and intellectual property in the future.

There can be no assurance that we will be able to continue to obtain or renew any such necessary technology and licenses on acceptable terms, or at all. Failure to obtain or renew the right to use third-party technology or intellectual property on commercially reasonable terms, or to maintain access to satisfactory technical support, could ultimately lead to stoppages in our production processes and preclude us from selling certain products, which could have a material adverse impact on our operating results and financing condition.

Additionally, our inability to maintain existing access to third-party technology, licenses and technical support on commercially reasonable terms, or at all, or to obtain additional technology, licenses or technical support necessary to manufacture current products or develop new ones, could require us to obtain substitute technology or licenses at a greater cost or of lower quality or performance standards, or require us to carry out unscheduled interruptions of our production facilities. Any of these circumstances could harm our business, financial condition and results of operations. There can be no assurance that we will be able to replace any such third-party technology, intellectual property or technical support service for any adequate substitute technology, intellectual property or technical support in a timely manner to avoid any unscheduled interruption of our production processes or facilities, or in a cost-efficient manner.

Any downgrade in the ratings of Brazil, us or our debt securities would likely result in increased interest and other financial expenses related to our borrowings and debt securities and could reduce our liquidity.

Currently, Standard & Poor's Ratings Group, a division of McGraw Hill, Inc., or Standard & Poor's, and Fitch Ratings Ltd., or Fitch, maintain our ratings on a global and national basis. Moody's Investors Service, Inc., or Moody's, only maintains our ratings on a global basis. On a global basis, we maintain an investment grade rating at: (i) Standard & Poor's of BBB- with a stable outlook and (ii) Fitch Ratings of BBB- with a stable outlook. At Moody's, our rating is Ba1 with a stable outlook. Our ratings are higher than the Brazilian sovereign rating by all these three main rating agencies. On a national basis, we maintain investment grade rating at: (i) Standard & Poor's of brAAA with a stable outlook and (ii) Fitch Ratings of AAA with a stable outlook. Our credit rating is sensitive to any change in the Brazilian sovereign credit rating. The credit rating of the Brazilian federal government was downgraded as recently as January 2018 and has not been investment grade by all the main rating agencies for several years. Any decision by these agencies to downgrade our ratings or of our debt securities in the future would likely result in increased interest and other financial expenses relating to our borrowings and debt securities and the inclusion of financial covenants in the instruments governing new indebtedness, and could significantly reduce our ability to obtain such financing, on satisfactory terms or in amounts required by us, and our liquidity and would require us to post cash collateral pursuant to our obligations or to contract letters of credit to backstop guarantees provided by us in the context of the Mexican Complex.

We may be subject to attempts to acquire our control, which may lead to significant changes in management, the strategies that we are currently pursuing, or in our current corporate governance practices.

We may be subject to attempts to acquire our control. In the event there is a change in our corporate control, there might be significant changes in management, the strategies that we are currently pursuing, or in our current corporate governance practices.

For example, in June 2018, we were informed by Odebrecht S.A., or Odebrecht, about discussions that were being held between Odebrecht and LyondellBasell Industries N.V., or LyondellBasell, regarding a potential transaction involving the transfer to LyondellBasell of all of Odebrecht's interest in us. In June 2019, we were informed by Odebrecht that such discussions for a change-of-control transaction with LyondellBasell had been terminated. We cannot assure you that such negotiations will not be resumed, or that Odebrecht will not initiate discussions with other parties regarding a change-of-control transaction in the future.

Some of our shareholders may have the ability to determine the outcome of corporate actions or decisions, which could affect the holders of our class A preferred shares and the ADSs.

Odebrecht, directly or through its wholly-owned subsidiary OSP Investimentos S.A., or OSP Inv., owns 38.3% of our outstanding share capital, including 50.1% of our voting share capital and Petrobras holds 36.1% of our outstanding share capital, including 47.0% of our voting share capital. Nominees of Odebrecht constitute a majority of the members of our board of directors. Under a shareholders' agreement to which Odebrecht and Petrobras are parties, which we refer to as the Braskem S.A. Shareholders' Agreement, we may only undertake certain actions after Odebrecht and Petrobras have reached a consensus with respect to those actions. However, Odebrecht will have the sole power to approve our business plan, through the board of directors, as described under "Item 7. Major Shareholders and Related Party Transactions—Major Shareholders—Shareholders' Agreements." As a result, Odebrecht has the ability to determine the outcome of most corporate actions or decisions requiring the approval of our shareholders or our board of directors—in certain instances, with the consent of Petrobras—which could affect the holders of our class A preferred shares and of our American Depositary Shares, or ADSs.

Furthermore, on June 17, 2019, Odebrecht, together with certain of its controlling and controlled entities, filed a petition for judicial restructuring before the First Judicial Bankruptcy Court of the State of São Paulo, Brazil, seeking a voluntary judicial restructuring and emergency relief staying certain foreclosure actions by their creditors (the "Odebrecht Judicial Restructuring Proceedings"). The Odebrecht Judicial Restructuring Proceedings does not include us.

Although we are not currently a party to any pending bankruptcy or other judicial restructuring proceedings in Brazil or elsewhere, we are exposed to certain risks related to the Odebrecht Judicial Restructuring Proceedings, such as risks related to the change of our corporate control resulting from decisions taken and/or agreed under such proceedings and the consequences derived thereto, including but not limited to significant changes in our management and our strategy that may be undertaken by any new controlling shareholder(s) that may arise from the conclusion of these proceedings. We have no control over the Odebrecht Judicial Restructuring Proceedings, and no assurance can be given on the outcome of the Odebrecht Judicial Restructuring Proceedings or their effect on us.

We may face conflicts of interest in transactions with related parties.

We maintain trade accounts receivable and current and long-term payables with some of our affiliates and other related parties, including Petrobras, which is our domestic supplier of naphtha and other raw materials such as propylene, ethane, propane and refinery off gas, and Atvos (formerly Odebrecht Agroindustrial), which is one of our suppliers of ethanol. These trade accounts receivable and trade accounts payable balances result mainly from purchases and sales of goods, which are at prices and on terms equivalent to the average terms and prices of transactions that we enter into with third parties. These and other transactions between us and our affiliates could result in conflicting interests between us and our shareholders.

We may pursue strategic acquisitions or investments. The failure of an acquisition or investment to produce the anticipated results, or the inability to integrate an acquired company fully, could adversely affect our business.

We may from time to time acquire or invest in complementary companies or businesses. The success of an acquisition or investment will depend on our ability to make accurate assumptions regarding the valuation, operations, growth potential, integration and other factors related to that business. We cannot assure you that our acquisitions or investments will produce the results that we expect at the time we enter into or complete a given transaction. Furthermore, acquisitions may result in difficulties integrating the acquired companies, and may result in the diversion of our capital and our management's attention from other business issues and opportunities. We may not be able to integrate successfully the operations that we acquire, including their personnel, financial systems, distribution or operating procedures. If we fail to integrate acquisitions successfully, our business could suffer. In addition, the expense of integrating any acquired business and their results of operations may adversely affect our operating results.

Certain acquisitions, partnerships and joint ventures we make may prevent us from competing for certain clients or in certain lines of business, and may lead to a loss of clients. We may spend time and money on projects that do not increase our revenue. To the extent we pay the purchase price of any acquisition in cash, it would reduce our cash reserves, and to the extent the purchase price is paid with any of our shares, it could be dilutive to our shareholders. To the extent, we pay the purchase price with proceeds from the incurrence of debt, it would increase our level of indebtedness and could negatively affect our liquidity and restrict our operations. Our competitors may be willing or able to pay more than us for acquisitions, which may cause us to lose certain acquisitions that we would otherwise desire to complete. We cannot ensure that any acquisition, partnership or joint venture we make will not have a material adverse effect on our business, financial condition and results of operations.

We may face unforeseen challenges in the operation of our Mexico Complex, which could result in this business unit failing to provide expected benefits to us.

During the first half of 2016, we concluded the construction phase of an olefins complex, or the Mexico Complex, located in the Mexican state of Veracruz. For more information about this, which we refer to as the Mexico Complex, see “Item 5. Operating and Financial Review and Prospects—Capital Expenditures—Joint Venture—Mexico Complex.”

To develop our Mexico Complex, Braskem Idesa required significant capital expenditure. Our ability to achieve the strategic objectives of this business unit will depend largely on its successful operation. Factors that could affect the operation of this business unit include:

- general economic, political and business conditions in Mexico and global demand for polyethylene;
- the occurrence of unforeseen technical and mechanical difficulties that may interrupt production or lead to unexpected downtime of the Mexico Complex’s plants;
- a stable and continuous supply of ethane and natural gas in the long term; and
- increased competition from domestic or foreign competitors and/or the emergence of new domestic or foreign competitors.

We cannot assure you that the Mexico Complex will provide the expected benefits to us, even after having completed a two full calendar year of operations. Any significant interruption could hinder or prevent the implementation of our business plan as originally conceived, and result in revenue and net income below what is expected. See also “—We depend on ethane supplied by Pemex TRI in Mexico.”

Adjustments in tariffs on imports that compete with our products could cause us to lower our prices.

We currently benefit from imports tariffs imposed by Mercosur countries members that allow us to charge prices for our polyolefin and vinyl products in the domestic market that include a factor based on the tariffs levied on comparable imports of those products. However, the Brazilian government has in the past used import and export tariffs to implement economic policies, resulting in varying tariff levels. For example, in September 2012, the Brazilian government increased import duties on 100 products related to various industries, including an increase in the import tariff on polyethylene. In October 2012, it increased the import tariff on polyethylene from 14% to 20%, and in October 2013, it reduced the import tariff on polyethylene to the previous level of 14%. Currently, the tariff remains at 14%. Adjustments of tariffs could lead to increased competition from imports and cause us to lower our domestic prices, which would likely result in lower net sales revenue and could negatively affect our overall financial performance. Additionally, the products we export to the United States and Europe are subject to tariffs in the amount of 6.5% in each jurisdiction, subject to certain preferences. These tariffs generally favor our products produced locally and any future adjustments to these tariff structures could negatively impact our sales in these jurisdictions. Future trade agreements entered into by Brazil, the Mercosur, the United States or the European Union could also lead to increased competition from imports and lower domestic prices. Recently, the Trump administration imposed 25% tariffs on a variety of imports from China and subsequently implemented tariffs on additional goods from China.

Changes in U.S. and global trade policies and other factors beyond our control may adversely impact our business, financial condition and results of operations.

The international environment in which we operate is affected from inter-country trade agreements and tariffs. As a result of recent revisions in the U.S. administrative policy, there are, and there may be additional changes to existing trade agreements, greater restrictions on free trade and significant increases in tariffs on goods imported into the United States, particularly those manufactured in China, Mexico and Canada. Future actions of the U.S. administration and that of foreign governments, including China, with respect to tariffs or international trade agreements and policies remains currently unclear.

The escalation of a trade war, tariffs, retaliatory tariffs or other trade restrictions on products and materials either exported by us to China or raw materials imported by us from China, or other countries, may significantly hinder our ability to provide our products to customers in China or other affected locations. Such developments may result in a decrease in demand for our products as well as delays in payments from our customers. Furthermore, other governmental action related to tariffs or international trade agreements, changes in U.S. social, political, regulatory and economic conditions, or in laws and policies governing foreign trade, manufacturing, development and investment in the territories and countries where our customers are located, could lead to a rebalancing of global export flows and an increase in global competition, which in turn could adversely affect our business, financial condition, results of operations and cash flows.

We may be affected by instability in the global economy and by financial turmoil.

Instability in the global markets and in the geopolitical environment in many parts of the world as well as other disruptions may continue to put pressure on global economic conditions. In the event global economic and market conditions, or economic conditions in key markets, remain uncertain or deteriorate, we may experience material impacts on our business, results of operations and financial condition.

We may not be able to specify in details technical specifications required by our customers' or updated mechanisms to promptly attend regulatory requirements, and we could be subject to damages based on claims brought against us or our customers as a result of the failure of our products specification.

Our products specification may not meet certain technical or regulatory requirements, specifications or standards. In addition, our customers may impose stricter requirements on our products or governments may enact stricter regulations for the distribution, sale or use of our products. Failure to meet such standards could materially adversely affect our business, financial condition and results of operations if we are unable to sell our products in one or more markets or to important customers in such markets.

As with all quality control systems, any failure or deterioration of our quality control systems could result in defects in our products, which in turn may subject us to contractual, regulatory, product liability and other claims, which could have a material adverse effect on our reputation, business, financial condition and results of operations.

Our business and operations are inherently subject to environmental, health and safety hazards. As a result, our business is also subject to stringent environmental and other regulations.

As a company operating in the petrochemical industry, our operations involve the generation, use, handling, storage, transportation, treatment, discharge and disposal of hazardous substances and waste into the environment. Notwithstanding our environmental, health and safety standards, policies and controls, our operations remain subject to incidents or accidents that could adversely affect our business or reputation. Our industry is generally subject to significant risks and hazards, including fire, explosions, toxic gas leaks, spilling of polluting substances or other hazardous materials, failure of operational structures and incidents involving mobile equipment, vehicles or machinery, associated or not with the manufacture of petrochemicals and the storage and transportation of feedstock and petrochemical products. These events may occur due to technical failures, human errors or natural events, among other factors, and could result in significant environmental and social impacts, damage to or destruction of production facilities and communities, personal injury, illness or death of employees, contractors or community members close to our operations, environmental damage, delays in production, and, in certain circumstances, liability in civil, labor, criminal and administrative lawsuits.

In addition, our production and logistics processes are subject to inherent safety risks, which may lead to death or disability of our employees or individuals participating in such processes. Such risks cannot be entirely eliminated or mitigated despite full compliance with all safety measures applicable to us or required by laws or regulations. Despite all monitoring efforts, we may have a negative impact on our image and reputation, and on our business, financial condition and results of operations.

A sufficiently large accident at one of our plants or storage facilities could force us to suspend our operations temporarily and result in significant remediation costs and lost net sales revenue. Although we maintain insurance coverage for losses due to fire damage and for losses of income resulting from shutdowns due to fire, explosion or electrical damage, insurance proceeds from such insurance policies may not be available on a timely basis and may be insufficient to cover all losses, which could have a material adverse effect on our financial performance.

The operation of our salt mining activities in the state of Alagoas, Brazil, which is a raw material necessary for production of certain products in our Vinyls Unit, is also subject to similar risks and hazards, and any significant incident relating to our salt mining activities may also result in material adverse environmental and social impacts. For instance, in certain neighborhoods of the city of Maceió that are located near the geological area of our salt mine, there have been recent allegations that the ground gave way as a result of the activities carried out by us at this mine, which allegedly may have affected certain nearby private and public properties. On April 4, 2019, in response to a request of the Alagoas State Attorney's Office (*Ministério Público do Estado de Alagoas*) and the State Public Defender's Office (*Defensoria Pública do Estado de Alagoas*) seeking to freeze our assets in an amount of up to R\$6.7 billion to secure funds allegedly required to ensure remediation and compensation for environmental, property and personal damages potentially resulting from this incident, a lower-court judge of the Alagoas state court ordered the freezing of R\$100 million in our bank accounts. In addition, the Alagoas state court of appeals (*Tribunal de Justiça do Estado de Alagoas*) ordered the suspension of the distribution of dividends for the fiscal year 2018 that had been proposed in the amount of R\$2.7 billion, or, alternatively, the freezing of assets in the same amount of the proposed dividend distribution. This decision was subsequently reversed by a decision of the Superior Court of Justice (Superior Tribunal de Justiça, or STJ), which authorized the distribution of dividends upon posting of a judicial bond in the same amount. The Alagoas State Attorney's Office and the Alagoas State Public Defender's Office amended their claim to exclude the request for indemnification for the alleged environmental damages and reduce the amount of assets to be frozen to R\$3.7 billion, which according to their allegations would be equivalent to the alleged damages caused to the residents of the districts affected by the geological event. Immediately thereafter, on June 26, 2019, the presiding judge of the Alagoas state court of appeals (*Tribunal de Justiça do Estado de Alagoas*) issued a decision ordering an amount of R\$3.7 billion to be frozen. This decision was also subsequently reversed by the Superior Court of Justice (STJ), which ordered the frozen amount of R\$3.7 billion to be returned to our bank accounts after posting another judicial bond in an equivalent amount. On July 25, 2019, we were informed of another civil lawsuit filed against us by the Labor Prosecutor's Office of the State of Alagoas, or MPT-AL, requesting injunctive relief to freeze the amount of R\$2.5 billion to guarantee payment of any potential damages that workers affected by the geological event may suffer. In that lawsuit, MPT-AL further requested the payment of compensation to workers for pain and suffering. On October 10, 2019, the trial court denied the injunctive relief request. On August 19, 2019, we became aware of the filing of another civil lawsuit by the Federal Prosecutor's Office (*Ministério Público Federal*) against us and other parties, requesting the following injunctive reliefs: (i) the set-up of a fund of R\$3.1 billion for the benefit of social and environmental programs and emergency measures to be carried out, and the maintenance in said fund of working capital in the amount of at least R\$2.0 billion or, after a financial schedule is approved for such fund, an amount equivalent to 100% of the expenses projected for the subsequent 12 months; (ii) the posting of bonds in the amount of R\$20.5 billion; (iii) prohibition on us to encumber or dispose of any of our fixed assets and to distribute profits, in the form of dividends, interest on shareholders' equity or any other form; (iv) freezing of any profits not yet distributed; and (v) suspension of receipt of government financings from BNDES (a federal development bank) and government incentives, as well as acceleration of existing indebtedness with BNDES. As of the date of this annual report, the plaintiff's requests for injunctive relief have not yet been ruled upon. We are taking all relevant measures to defend against these lawsuits.

On May 8, 2019, we became aware of the Report No. 1, prepared by the Mineral Resources Research Company (*Companhia de Pesquisa de Recursos Minerais*), or CPRM, an entity of the Brazilian Energy and Mining Ministry (*Ministério de Minas e Energia*), on the geological events that occurred in the city of Maceió. Such report indicated the occurrence of (i) destabilization of caverns resulting from sodium chloride, or salt, extraction, which created a dynamic situation that reactivated pre-existing geological structures and deformations in the districts of Pinheiro, Mutange and Bebedouro; and (ii) instability in the Pinheiro district, which was aggravated by the erosive effects caused by an increase in the infiltration of stormwater runoff in pre-existing fractures in extremely erodible soil and accelerated due to the lack of an effective stormwater runoff drainage network and of adequate basic sanitation, among other factors. In this context, due to the developments from the publication of Report No. 1 by CPRM, in accordance with applicable safety standards, on May 9, 2019, we suspended all salt extraction and, consequently, the operations of the chlor-alkali and dichloroethane plants located in the district of Pontal da Barra in Maceió, state of Alagoas and also reducing production in the Camaçari Petrochemical Complex in the state of Bahia, since they are integrated into the production chain. Given that, Braskem put in place a non integrated business model which the Company will import (i) caustic soda to supply the Brazilian market using its logistics structure and terminals along the Brazilian coast, (ii) EDC to continue to operate its PVC plants in Alagoas and Bahia, and (iii) sea salt to supply the Chlorine Soda plant of Bahia. We have been continuously cooperating with relevant authorities and the local community. If authorities conclude that the activities at our salt mine caused such incidents, we may be held responsible for any adverse environmental and social impacts attributable to it.

Further, we may face difficulties in obtaining or maintaining operating licenses and may suffer damage to our reputation following the occurrence of any such event. Petrochemical producers are sometimes subject to unfavorable market perceptions as a result of the environmental impact of their business, which can have an adverse effect on their results of operations.

In addition, we and other petrochemical producers are subject to stringent federal, state and local environmental laws and regulations concerning human health, the handling, storage, transportation, treatment, discharge and disposal of hazardous substances and waste into the environment. Our operations in Brazil, including those of our subsidiaries Cetrel and DAC, which are responsible for providing environmental services and water supply to the Camaçari Complex in the state of Bahia, for example, are subject to extensive federal, state and local laws, regulations, rules and ordinances relating to pollution, protection of the environment and the generation, storage, handling, transportation, treatment and disposal of hazardous substances and waste materials. The Brazilian government enacted the Environmental Crimes Law in 1998 that imposes criminal penalties on corporations and individuals that cause environmental damage. Corporations found to be guilty of polluting the environment may be fined up to R\$50.0 million, have their operations suspended, be prohibited from contracting with the government, be required to repair damage that they causes and lose certain tax benefits and incentives. Executive officers, directors and other individuals may also be imprisoned for up to five years for environmental violations.

Our operations in the United States, Germany and Mexico are subject to extensive U.S., German, European and Mexican federal, state and local laws, regulations, rules and ordinances relating to pollution, protection of the environment and the generation, storage, handling, transportation, treatment, disposal and remediation of hazardous substances and waste materials. U.S. environmental laws and regulations may impose liability on us for the conduct of third parties, or for actions that complied with applicable requirements when taken, regardless of negligence or fault. Of particular significance to us are (1) regulatory programs to be established to implement air quality standards under the National Ambient Air Quality Standards for ozone and fine particles promulgated by the U.S. Environmental Protection Agency, or the EPA, and (2) various legislative and regulatory measures in the United States that are under review, discussion or implementation to address greenhouse gas emissions. In Mexico, we adhere to the comprehensive responsibility program promoted by the Mexican National Chemical Industry Association (*Asociación Nacional de la Industria Química de México – ANIQ*), which is based on the responsible care standard adopted in the United States and Canada. We are also signatories of the responsible care program in the United States and Brazil.

Such existing stringent environmental and other regulations require significant capital expenditures. Our consolidated annual expenditures on environmental control were R\$353.3 million in 2018, R\$330.1 million in 2017 and R\$427.4 million in 2016, including investments, waste and wastewater treatment, emissions management, environment licenses, environmental liabilities and other environmental expenditures. In addition, evolving regulatory requirements could require significant additional capital expenditures depending on the timing of the adoption and enforcement of specific standards imposing such requirements. In addition, changes in environmental regulations could inhibit or interrupt our operations, or require modifications to our facilities. Accordingly, environmental, health or safety regulatory matters may result in significant unanticipated costs or liabilities.

We may also, from time to time, be involved in certain claims, disputes or litigation proceedings concerning environmental risks and liabilities, health and safety hazards, among others. For more information, please see "Item 8. Financial Information—Legal Proceedings".

We could be materially adversely affected by the impacts of the Global Settlement.

In the context of allegations of improper payments in connection with the so-called Operation Car Wash (*Operação Lava Jato*) in Brazil, we engaged independent expert firms to conduct an investigation into such allegations (the "Investigation") and report their findings. We have cooperated with governmental authorities in several jurisdictions, including the U.S. Department of Justice, or the DoJ, the U.S. Securities and Exchange Commission, or the SEC, Brazil's Federal Prosecutor's Office (*Ministério Público Federal*), or the MPF, and Switzerland's Office of the Attorney General, or the OAG. On December 14, 2016, we entered into a leniency agreement with the MPF, or the Leniency Agreement, which was ratified by the competent Brazilian court on June 6, 2017. On December 21, 2016, we filed a plea agreement in the United States District Court for the Eastern District of New York under which we agreed to plead guilty to a one-count criminal information charging us with conspiracy to violate the anti-bribery provisions of the U.S. Foreign Corrupt Practices Act, or the FCPA. On the same date, we consented to the entry of a final judgment in a civil action brought by the SEC based on civil violations of the anti-bribery, books and records and internal accounting controls provisions of the FCPA. The competent federal courts in the United States approved the DoJ and SEC resolutions on January 26, 2017 and February 28, 2017, respectively. In addition, on December 21, 2016, the OAG closed its investigation of these matters. We refer to these actions as the Global Settlement. Under the Global Settlement, we agreed to pay to the governmental authorities in these jurisdictions an aggregate amount of US\$957 million (equivalent to R\$3.1 billion), based on the exchange rate of R\$3.27 per U.S. Dollar, applicable at the time of the negotiation.

The MPF will distribute the majority of the amount it receives as restitution to third parties for damages caused by the misconduct. Pursuant to the Global Settlement, the MPF agreed to communicate with other public authorities or entities, as well as stated-owned companies and mixed-capital companies with which Braskem enters into discussions to address the facts under the Global Settlement and avoid making duplicate restitution payments. In this context, as announced to the market on July 10, 2018, and disclosed in a material fact on May 27, 2019, we have cooperated and engaged in negotiations with the Ministry of Transparency and Controllershship (CGU) and the Office of the Attorney General (AGU) in Brazil, and our Board of Directors approved the signing of a leniency agreement with the CGU and the AGU (the "CGU/AGU Agreement").

The CGU/AGU Agreement, in the amount of R\$2.9 billion, to be adjusted by the SELIC rate, addresses the same facts that are the object of the Global Settlement executed in December 2016 with the Brazilian Federal Prosecution Office (MPF), the U.S. Department of Justice (DoJ), the U.S. Securities and Exchange Commission (SEC) and the Swiss Office of the Attorney General ("Global Settlement"). Of this amount, R\$2.5 billion will be offset by the amount that Company already had undertaken to pay under the scope of the Global Settlement, resulting in an additional disbursement of R\$410 million.

As of the date of this annual report, we have paid R\$2 billion of the total fine established in the Global Settlement, in the following manner:

- US\$94.9 million (R\$296.6 million) to the DoJ on February 8, 2017;
- US\$65.0 million (R\$206.5 million) to the SEC on April 27, 2017;
- CHF30.2 million (R\$104.3 million) to the OAG on June 27, 2017;
- R\$736.4 million to the MPF on July 6, 2017;
- R\$267.9 million to the MPF on January, 30 2018;
- CHF16.1 million (R\$62 million) to the OAG on June 28, 2018;
- R\$278 million to the MPF on January 30, 2019 ; and
- CHF16.1 million (R\$58 million) to the OAG on June 27, 2019.

The outstanding amount of R\$1.6 billion related to the Global Settlement and also the CGU/AGU Agreement will be paid in the following manner:

- CHF32.1 million to the OAG related to two remaining annual installments of CHF16.1 million due on June 30 of each year as from 2020;
- R\$1.1 billion to the MPF in four remaining annual installments due on January 30 of each year as from 2020. To guarantee payment of future installments, Braskem pledged collateral assets from its property, plant and equipment sufficient to cover one annual installment; and
- R\$409.9 million in connection with the CGU/AGU Agreement in two annual installments due on January 30, 2024 and 2025.

The MPF will distribute the majority of the amount it receives as restitution to third parties for damages caused by the misconduct. Pursuant to the Global Settlement, the MPF agreed to communicate with other public authorities or entities, as well as stated-owned companies and mixed-capital companies with which Braskem enters into discussions to address the facts under the Global Settlement and avoid making duplicate restitution payments. In this context, as announced to the market on July 10, 2018 and disclosed in a material fact on May 27, 2019, we have cooperated and engaged in negotiations with the Ministry of Transparency and Controllershship (CGU) and the Office of the Attorney General (AGU) in Brazil, and our Board of Directors approved the signing of a leniency agreement with the CGU and the AGU (the "CGU/AGU Agreement").

The Global Settlement does not prevent Braskem from responding to any legitimate third party, which may seek indemnification against us from damages for the facts subject to the Global Settlement. As a result, we cannot assure you that the aggregate amount disbursed as a requirement pursuant to the agreement will be sufficient to cover indemnification claims of all of the victims. We may be required to make additional disbursements to cover such claims.

Other authorities with jurisdiction over us may seek to impose monetary sanctions or fines on, or to initiate investigative proceedings against, us. As a result of entering into the Global Settlement, Braskem may be prevented from entering into certain agreements with government entities and may be subject to increased operating costs for being under the obligation to improve its governance and anti-corruption practices and procedures, including the cost of external monitorships.

Under the terms of the Global Settlement, we are required to cooperate with these governmental authorities and improve our governance and anti-corruption compliance practices. We will also be subject to external monitorship for a period of three years as from 2017, during which time the monitor will assess compliance with the Global Settlement, including the effectiveness of our internal controls, policies and procedures to reduce the risk of any anti-corruption violations. The monitorship period may be terminated early or extended for up to one year at the authorities' discretion depending on our compliance with the Global Settlement. We have retained monitors pursuant to the provisions of the Global Settlement, and they have been approved by the relevant authorities. The monitors may recommend changes to our policies and procedures, which we must adopt unless they are unduly burdensome or otherwise inadvisable, in which case we may propose alternatives that the authorities may choose to accept. Operating under the oversight of the monitors will likely require the assumption of additional responsibilities by members of our management. The costs that we are likely to incur in connection with compliance with the Global Settlement, including the implementation of the recommended changes could be significant and could negatively impact us by requiring the efforts of our management team and diverting their attention from our ordinary business operations.

We are fully in compliance with our obligations under the Global Settlement.

Unfavorable outcomes in pending or future litigation may reduce our liquidity and negatively affect our financial performance and financial condition.

We are, and in the future may be, involved in numerous tax, civil and labor disputes, among others, involving monetary claims. If unfavorable decisions are rendered in one or more of these lawsuits, we could be required to pay substantial amounts. For certain of these lawsuits, we have not established any provision on our balance sheet or have established provisions only for a portion of the amounts in controversy, based on our judgments as to the risk of loss for these lawsuits.

In July 2015, two putative class action lawsuits were filed against us and certain of our then-current and former officers and directors, or the Defendants, in the United States District Court for the Southern District of New York, or the U.S. Court. In those lawsuits that were subsequently consolidated under the caption In re Braskem, S.A. Securities Litigation, No. 15-cv-5132, the Lead Plaintiff, Boilermaker-Blacksmith National Pension Trust, alleged that the Defendants made misrepresentations or omissions that inflated the price of the Company's stock in violation of U.S. securities laws.

After the decision on the motion to dismiss filed by the Company, partially granting its arguments, the Company and the Lead Plaintiff signed the proposed settlement agreement ("Proposed Settlement"), which was ratified by the applicable Court, which issued a final decision ending all claims from all members of the class of Investors. We have made no admission of any wrongdoing or liability as part of the settlement.

Under the terms of the Proposed Settlement, Braskem paid US\$10 million (R\$31.7 million) to resolve all claims arising out of or relating to the subject matter of the class action of a settlement class consisting of all persons who purchased or otherwise acquired a legal or beneficial ownership interest in Braskem American Depository Receipts between July 15, 2010 and March 11, 2015, inclusive. The amount of the agreement was deposited by Braskem in the account designated by the judge ("Escrow Account") on October 2, 2017.

On February 21, 2018, a hearing was held in which a decision was handed down for the final approval of the agreement regarding the entire class of investors and the dismissal of the case. Said decision became final and unappealable. The individual distribution of the amount of the agreement is the responsibility of the manager of the Escrow Account, as determined by the Court and in accordance with the ratified allocation plan. The Proposed Settlement was signed solely to avoid the risk, uncertainty, and expense of further litigation and does not represent the admission of any wrongdoing or liability by Braskem.

In April 2019, the Alagoas State Attorney's Office (*Ministério Público do Estado de Alagoas*) and the State Public Defender's Office (*Defensoria Pública do Estado de Alagoas*) filed a lawsuit seeking to freeze our assets in an amount of up to R\$6.7 billion to secure funds allegedly required to ensure remediation and compensation for environmental, property and personal damages potentially resulting from a geological incident related to our mining activities in the city of Maceió. A preliminary decision ordered the freezing of R\$100 million in our banks accounts.

In addition, the Alagoas state court of appeals (*Tribunal de Justiça do Estado de Alagoas*) ordered the suspension of the distribution of dividends for the fiscal year 2018 that had been proposed in the amount of R\$2.7 billion, or, alternatively, the freezing of assets in the same amount of the proposed dividend distribution. This decision was subsequently reversed by a decision of the Superior Court of Justice (*Superior Tribunal de Justiça*, or STJ), which authorized the distribution of dividends upon posting of a judicial bond in the same amount. The Alagoas State Attorney's Office and the Alagoas State Public Defender's Office amended their claim to exclude the request for indemnification for the alleged environmental damages and reduce the amount of assets to be frozen to R\$3.7 billion, which according to their allegations would be equivalent to the actual damages caused to the residents of the districts affected by the geological event. On June 26, 2019, the presiding judge of the Alagoas state court of appeals (*Tribunal de Justiça do Estado de Alagoas*) issued a decision ordering an amount of R\$3.7 billion to be frozen. This decision was also subsequently reversed by the Superior Court of Justice (STJ), which ordered the frozen amount of R\$3.7 billion to be returned to our bank accounts after posting another judicial bond in an equivalent amount. On July 25, 2019, we were informed of another civil lawsuit filed against us by the Labor Prosecutor's Office of the State of Alagoas, or MPT-AL, requesting injunctive relief to freeze the amount of R\$2.5 billion to guarantee payment of any actual damages that workers affected by the geological event may suffer. In that lawsuit, MPT-AL further requested the payment of compensation to workers for pain and suffering. On October 10, 2019, the trial court denied the injunctive relief request.

On August 19, 2019, we became aware of the filing of another civil lawsuit by the Federal Prosecutor's Office (*Ministério Público Federal*) against us and other parties, requesting the following injunctive reliefs: (i) the set-up of a fund of R\$3.1 billion for the benefit of social and environmental programs and emergency measures to be carried out, and the maintenance in said fund of working capital in the amount of at least R\$2.0 billion or, after a financial schedule is approved for such fund, an amount equivalent to 100% of the expenses projected for the subsequent 12 months; (ii) the posting of bonds in the amount of R\$20.5 billion; (iii) prohibition on us to encumber or dispose of any of our fixed assets and to distribute profits, in the form of dividends, interest on shareholders' equity or any other form; (iv) freezing of any profits not yet distributed; and (v) suspension of receipt of government financings and government incentives, as well as acceleration of existing indebtedness with BNDES (a federal development bank). As of the date of this annual report, the plaintiff's requests for injunctive relief have not yet been ruled upon.

We are taking all relevant measures to defend against these lawsuits and we have been continuously cooperating with relevant authorities to identify the causes of the incident, with the support of independent experts.

For more information about our legal proceedings, see “Item 8. Financial Information—Legal Proceedings.”

Labor unrest may materially and adversely affect our operations.

Labor unrest in our plants and facilities may have a material adverse effect on our financial condition or results of operations. For example, in August 2010, the unionized employees at our Neal, West Virginia plant went on strike. During the strike, the plant operated under the supervision of management until May 2011, when Braskem America entered into a new collective bargaining agreement. Although we believe that we maintain good relations with our employees, future labor actions, including strikes, could have a material adverse effect on our financial performance.

Natural disasters, severe weather and climate conditions could have a material adverse effect on our overall business.

Some of our facilities are located in places that could be affected by natural disasters, such as floods, earthquakes, hurricanes, tornados and other natural disasters, which could disrupt our operations or the operations of our customers and could damage or destroy infrastructure necessary to transport our products as part of the supply chain. Such events could require maintenance shutdowns, delay shipments of existing inventory or result in costly repairs, replacements or other costs, all of which could have a material adverse effect on our financial performance.

While our energy risk policy dictates that we purchase energy in advance at fixed prices through long-term contracts, the majority of Brazilian power generation capacity is provided by hydroelectric generation facilities. If the amount of water available to energy producers becomes scarce due to drought or diversion for other uses, the cost of energy may increase. Such conditions could have a material adverse effect on our sales and margins.

We could be materially affected by violations of the U.S. Foreign Corrupt Practices Act, the Brazilian Anti-Corruption Law and similar anti-corruption laws.

We, our subsidiaries and our joint venture partners are subject to a number of anti-corruption laws, including Law No. 12,846/2013, or the Brazilian Anti-Corruption Law, which entered into effect on January 28, 2014, the FCPA and various other anti-corruption and anti-bribery laws of other jurisdictions.

The FCPA, the Brazilian Anti-Corruption Law and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to government officials or other persons for the purpose of obtaining or retaining business. Violations of these laws may result in criminal or civil sanctions, inability to do business with existing or future business partners, injunctions against future conduct, profit disgorgements, disqualifications from directly or indirectly engaging in certain types of businesses, the loss of business permits or other restrictions which could have a material adverse effect on our business, financial condition, results of operations or liquidity. For instance, see “—We could be materially adversely affected by the impacts of the Global Settlement” for the impact on us of allegations of improper payments in connection with the Operation Car Wash.

We are exposed to behaviors of our employees and non-employees that may be incompatible with our ethics and compliance standards, and failure to timely prevent, detect or remedy any such behavior and/or process vulnerabilities may have a material adverse effect on our results of operations and financial condition.

Our business, including our relationships with third parties, is guided by ethical principles. We have adopted a Code of Conduct, a Global Compliance System Policy, an Anti-Corruption Policy, and several other internal policies designed to guide our management, employees and counterparties and reinforce our principles and rules for ethical behavior and professional conduct. We maintain an independent whistleblower channel (denominated “Ethics Line”) managed by a third party available for employees and non-employees (including third parties). Every whistleblower complaint is investigated and submitted for evaluation to our Ethics Committee.

We are subject to the risk that our employees, counterparties or any person doing business with us may engage in fraudulent activity, corruption or bribery, circumvent or override our internal controls and procedures or misappropriate or manipulate our assets for their personal or business advantage. In the event that we believe or have reason to believe that our employees or agents have or may have violated applicable anti-corruption laws, including the FCPA, we may be required to investigate or have outside counsel investigate the relevant facts and circumstances, which can be expensive and require significant time and attention from senior management. We have in place a robust Compliance and Anti-Corruption Program implemented through every area of our company, including several processes for identifying, monitoring and mitigating these risks, but such program may not be completely effective.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act of 1934. During our assessment of internal control over financial reporting as of December 31, 2018 (see “Item 15. Controls and Procedures”), we identified certain material weaknesses. We also identified material weaknesses in internal control over financial reporting as of December 31, 2017, certain of which still existed as of December 31, 2018. A material weakness is defined as a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim consolidated financial statements will not be prevented or detected on a timely basis.

As we were required to conduct additional procedures and analyses with respect to our internal processes and controls for the year ended December 31, 2017, we were unable to timely conclude our audited financial statements for such year and, therefore, were unable to timely file our annual report on Form 20-F for the year ended December 31, 2017. We obtained extensions from the SEC to file our annual report on Form 20-F for the year ended December 31, 2017 until May 16, 2019. Since we were not able to file our Form 20-F until the date granted by SEC and no further extensions have been granted pursuant to Section 802.01E of the NYSE Listed Company Manual, on May 13, 2019, we were notified by the NYSE it had suspended the trading of our ADSs and had initiated delisting procedures. We have appealed the decision.

In the future, we may be required to conduct additional procedures and analyses with respect to our internal processes and controls that may lead to a delay in the conclusion of our audited financial statements and, as a result, prevent us from filing future annual reports in a timely manner. Any failure to timely file our annual reports in the future may have an adverse effect on our business.

If we are unable to comply with the restrictions and covenants in the agreements governing our indebtedness, there could be a default under the terms of these agreements, which could result in an acceleration of payment of funds that we have borrowed and could affect our ability to make principal and interest payments on our debt obligations.

Any default under the agreements governing our indebtedness that is not cured or waived by the required lenders could result in the holders of any such indebtedness accelerating the payment of amounts outstanding, which could make us unable to pay principal and interest on those and other debt obligations. If we are unable to generate sufficient cash flow and are otherwise unable to obtain funds necessary to meet required payments of principal and interest on our indebtedness, or if we otherwise fail to comply with the various covenants in the agreements governing our indebtedness, we could be in default under the terms of such agreements. In the event of such default:

- the holders of such indebtedness could elect to declare all the funds borrowed thereunder to be due and payable, together with accrued and unpaid interest;
- the lenders under such agreements could elect to terminate their commitments thereunder and cease making further loans;
- the acceleration under such indebtedness may trigger cross-acceleration provisions under other financing arrangements entered into by us; and
- we could be forced into bankruptcy or liquidation.

Although our Mexico Complex is fully operational and Braskem Idesa has satisfied and continues to satisfy its debt service requirements and all other payment obligations under its US\$3,193 million senior secured syndicated facility on a timely basis, certain defaults have occurred and are continuing thereunder. These defaults give the creditors thereunder the right to vote to accelerate their debt under this facility and exercise their remedies in respect of the collateral for the facility, including the Mexico Complex and the outstanding shares of Braskem Idesa. Braskem Idesa has submitted requests for waiver of these defaults to and is currently negotiating such waiver with the intercreditor agent for this facility. However, there can be no assurance that the intercreditor agent and the lenders will agree to extend such waiver, or if they agree to extend such waiver, whether the waiver will include additional obligations with which Braskem Idesa would be required to comply.

In addition, certain of our contractual arrangements contain change of control provisions that provide our counterparties with a termination right or the ability to accelerate the maturity of our indebtedness with them in the event of a change of our control without their consent. These provisions would be triggered in the event Odebrecht ceases to own, directly or indirectly, capital stock representing more than 50% of the voting power of our capital stock outstanding. As a result, if Odebrecht ceases to control, or in some cases, own a certain percentage of our common shares, whether as a result of the Odebrecht Judicial Restructuring Proceedings, an alternative sale, foreclosure by creditors, reorganization, restructuring or other similar circumstance in connection with the Odebrecht Judicial Restructuring Proceedings or otherwise, if appropriate consents or waivers are not obtained, such counterparties could terminate such contracts or accelerate the maturity of such contractual arrangements. The termination of any of our contractual arrangements or the acceleration of the maturity of any of our financing arrangements could have a material adverse effect on our business, financial condition, results of operations and cash flows, and ultimately result in the cross-acceleration of all of our indebtedness.

Furthermore, pursuant to the indentures governing our 7.00% Notes due 2020, 5.75% Notes due 2021, 5.375% Notes due 2022, 3.50% Notes due 2023, 6.45% Notes due 2024, 4.50% Notes due 2028, 7.125% Notes due 2041 and 7.375% Perpetual Bonds, a change of control with a ratings decline would require a repurchase of any such outstanding notes, plus accrued and unpaid interest, if any, to the repurchase date. See “Item 5. Operating and Financial Review and Prospects—Recent Developments—Odebrecht Judicial Restructuring Proceedings” and other disclosures in this Annual Report on Form 20-F for additional information relating to the Odebrecht Judicial Restructuring Proceedings.

We may in the future need to obtain waivers under our other indebtedness to avoid being in default. If we breach any covenants under any of our debt instruments and seek a waiver, we may not be able to obtain a waiver from the required lenders. If this occurs, we would be in default under such agreements, the lenders could exercise their rights or remedies, as described above, and we could be forced into bankruptcy or liquidation.

Unauthorized disclosure, or loss of intellectual property, trade secrets, other sensitive business or personal information, or disruption in information technology by cyber-attacks, as well as our failure to comply with existing and future laws and regulations relating to data privacy and data security can subject us to significant penalties or liability and can adversely impact our operations, reputation and financial results.

We collect, store, process, and use certain confidential information and other user data in connection with our business operations. We must ensure that any processing, collection, use, storage, dissemination, transfer and disposal of data for which we are responsible complies with relevant data protection and privacy laws. The protection of our customer, employee and company data is critical to us. We rely on commercially available systems, software, tools and monitoring to provide secure processing, transmission and storage of confidential information, such as customer, employee, company and other personal information.

Data protection and privacy laws are developing to take into account the changes in cultural and consumer attitudes towards the protection of personal data. For example, on August 14, 2018, Brazil enacted Law No. 13,709/2018 (Lei Geral de Proteção de Dados, or the LGPD), a comprehensive data protection law establishing general principles and obligations that apply across multiple economic sectors and contractual relationships. The LGPD establishes detailed rules for the collection, use, processing and storage of personal data and will affect all economic sectors, including the relationship between customers and suppliers of goods and services, employers and employees, and other relationships in which personal data is collected, whether in a digital or physical manner. The LGPD is expected to come into effect in August 2020. By then, all entities subject to it, [including us, will be required to adapt their data processing activities to the new rules. Any additional privacy laws or regulations enacted or approved in Brazil or in other jurisdictions in which we operate could seriously harm our business, financial condition or results of operations. On May 25, 2018, the Regulation No. 2016/279 of the European Parliament and of the Council of April 27, 2016 on the protection of personal data (the General Data Protection Regulation, or the GDPR) became directly applicable in all member states of the European Union. The GDPR has introduced new obligations relating to data privacy, control and retention, including, among others: (i) accountability and transparency requirements; (ii) enhanced data consent requirements; (iii) obligations to consider data privacy as any new products or services are developed and limit the amount of information collected, processed, stored and its accessibility; (iv) constraints on using data to profile data subjects; (v) providing data subjects with personal data in a useable format upon request and erasing personal data in certain circumstances; and (vi) reporting breaches without undue delay.

As we seek to expand our business and operations, we expect that we will be increasingly subject to laws and regulations relating to the collection, use, retention, security, and transfer of information, including the personally identifiable information of our employees and customers. These laws and regulations may be interpreted and applied differently over time and from jurisdiction to jurisdiction, and it is possible that they will be interpreted and applied in ways that will materially and adversely affect our business. Any failure, real or perceived, by us to comply with any regulatory requirements or orders or other local, state, federal, or international privacy or consumer protection-related laws and regulations could cause our customers to reduce their use of our products and services and could materially and adversely affect our business. The implementation of the GDPR and the LGPD, and of any other existing or future laws and regulations relating to data privacy is expected to require revisions of our procedures and policies and significant implementation resources. There can be no guarantee that we will have sufficient financial resources to comply with any new regulations or successfully compete in the context of a shifting regulatory environment. Further, there is a risk that the measures may not be implemented correctly or that there may be non-compliance with the new procedures. If there are breaches of the GDPR or the LGPD obligations, or of other data privacy laws and regulations, as the case may be, we could face significant administrative and monetary sanctions as well as reputational damage, which could have a material adverse effect on our operations, financial condition and prospects.

In addition, despite the security measures that we have in place, our facilities and systems, and those of our third-party service providers, may be vulnerable to security breaches, cyber-attacks, acts of vandalism, computer viruses, misplaced or lost data, programming or human errors, or other similar events. Any security incident, or any perceived failure involving the misappropriation, loss or other unauthorized disclosure of confidential information, as well as any failure or perceived failure to comply with laws, policies, legal obligations or industry standards regarding data privacy and protection, whether by us or our vendors, could damage our reputation, expose us to litigation risk and liability, subject us to negative publicity, disrupt our operations and harm our business.

For instance, in the second half of 2018, one of our information technology service providers experienced a cybersecurity incident in Brazil, in which specified credentials for access to certain cloud storage accounts maintained by such service provider were disclosed to unauthorized third parties online. We were not affected by this security incident because we were not among the customers of such service provider whose credentials were disclosed. However, we cannot assure you that our security measures, or those put in place by our service providers, will be sufficient to prevent future security breaches, which may directly or indirectly affect us, or that our failure to prevent them will not have a material adverse effect on our business, results of operations or financial condition.

Cyber-attacks or security breaches could compromise confidential, business and other critical information, cause a disruption in our operations or harm our reputation, as our operations are heavily dependent on information technology and telecommunication systems and services. Information assets, including intellectual property, trade secrets, personal data and other business-sensitive critical information are an attractive asset to cyber criminals, cyberterrorism or other external agents. While we have a comprehensive cyber security program in place, which is continuously reviewed, maintained and upgraded, a significant cyber-attack, a human error, including from our employees and partners, or obsolescence of technology could result in the loss of critical business information and/or negatively impact our operations, which could have a negative impact on our financial results.

Risks Relating to Brazil

Brazilian political, economic and business conditions, and the Brazilian government's economic and other policies, may negatively affect demand for our products as well as our net sales revenue and overall financial performance.

The Brazilian economy has been characterized by frequent and occasionally extensive intervention by the Brazilian government and unstable economic cycles. The Brazilian government has often changed monetary, taxation, credit, tariff and other policies to influence the course of Brazil's economy. The Brazilian government's actions to control inflation and implement other policies have at times involved wage and price controls, blocking access to bank accounts, imposing capital controls and limiting imports into Brazil.

Our results of operations and financial condition may be adversely affected by factors such as:

- fluctuations in exchange rates;
- exchange control policies;
- interest rates;
- inflation;
- tax policies;
- expansion or contraction of the Brazilian economy, as measured by rates of growth in GDP;
- liquidity of domestic capital and lending markets; and
- other political, diplomatic, social, economic and business developments in or affecting Brazil.

Brazilian markets have been experiencing heightened volatility due to the uncertainties derived from the ongoing corruption investigations by the Federal Prosecutor's Office under Operations Car Wash, Zelotes, Greenfield, Efficiency and others, and their impact on the Brazilian economy and political environment. Certain current and former members of the Brazilian government and of the legislative branch, as well as former senior officers of the state-owned oil company and our shareholder Petrobras are being prosecuted for political corruption. These government officials and former senior officers allegedly accepted bribes by means of kickbacks on contracts granted by Petrobras to several infrastructure, oil and gas and construction companies, including Odebrecht, our controlling shareholder. We cannot currently predict how the Operation Car Wash investigation, related investigations and any future decisions and actions by authorities or developments in relation to our shareholders, may impact us. The profits of these kickbacks allegedly financed the political campaigns of political parties of federal, state and city governments that were unaccounted for or not publicly disclosed, as well as served to personally enrich the recipients of the bribery scheme. As a result of the ongoing Operation Car Wash investigation, a number of current and former senior politicians, including congressman and officers of the major state-owned companies in Brazil resigned or have been arrested. Senior elected officials and other public officials in Brazil are being investigated for allegations of unethical and illegal conduct identified during the Operation Car Wash investigation.

The potential outcome of these investigations is uncertain, but they have adversely affected and we expect that they will continue to adversely affect the Brazilian markets and trading prices of securities issued by Brazilian issuers. We cannot predict whether the allegations will lead to further political and economic instability or whether new allegations against government officials or other companies in Brazil will arise in the future. In addition, we can neither predict the outcome of any such allegations nor their effect on the Brazilian economy. The development of those unethical conduct cases could have a material adverse effect.

In addition, Brazilian politics have been characterized by considerable instability in recent years. The conviction of Former President Luiz Inácio Lula da Silva and potential ongoing judicial appeals may further increase political and economic instability. In addition, following a divisive presidential race, former Congressman Jair Bolsonaro became Brazil's president on January 1, 2019. It is unclear if and for how long the political divisions in Brazil that arose prior to the elections will continue under Mr. Bolsonaro's presidency and the effects that any such divisions will have on Mr. Bolsonaro's ability to govern Brazil and implement reforms. Any continuation of such divisions could result in congressional deadlock, political unrest and massive demonstrations and/or strikes that could materially adversely affect our operations. Uncertainties in relation to the implementation by the new government of changes relating to monetary, tax and pension funds policies as well as to the relevant legislation may contribute to economic instability. These uncertainties and measures adopted by the new administration may increase market volatility of Brazilian securities issued abroad.

Changes in industrial policy and related actions undertaken by the Brazilian government may negatively affect demand for our products as well as our net sales revenue and overall financial performance.

We currently benefit from certain industrial policies and related actions undertaken by the Brazilian government intended to strengthen the domestic economy and certain local industries. Some of these policies and actions have recently included reductions in payroll taxes for plastic manufacturers, a program to improve the competitiveness of Brazilian producers in the export markets by refunding the federal taxes levied on their export sale, intervention of the federal government to reduce incentives to imports at local ports, increases in import duties on certain products, including polyethylene, and the reduction in the rates of the Social Integration Program (*Programa de Integração Social*), or PIS, a federal value-added tax, and Contribution for Social Security Financing (*Contribuição para Financiamento da Seguridade Social*), or COFINS, taxes on feedstock purchases by first- and second-generation petrochemical producers.

These taxes on feedstock purchases were set at a rate of 5.6% for naphtha and 9.25% for other feedstocks prior to June 2013. After September 2013, naphtha and also other feedstocks taxes rates, were lowered to 1% in 2015, increased to 3% in 2016, 5% in 2017 and further increased to 5.6% in 2018. On May 30, 2018, the Brazilian government issued Provisional Measure No. 836/18, which revoked the tax rebates for social contribution taxes, PIS and COFINS, beginning on September 1, 2018. Further, in early October 2018, the petrochemical industry special regime (REIQ) was not passed into law, which kept the PIS/COFINS taxes levied on the acquisition of domestic and imported feedstocks unchanged at 5.6%.

We cannot predict or control which policies will be renewed or discontinued and whether future changes to Brazilian industrial policy will be proposed and enacted in the future. If industrial policies that benefit us expire, or policies detrimental to us are implemented, our business, results of operations and financial condition may be adversely affected.

Fluctuations in the real/U.S. dollar exchange rate could increase inflation in Brazil, raise the cost of servicing our foreign currency-denominated debt and negatively affect our overall financial performance.

The exchange rate between the *real* and the U.S. dollar and the relative rates of depreciation and appreciation of the *real* have affected our results of operations and may continue to do so.

The Brazilian currency has been devalued on several occasions. Throughout the last several decades, the Brazilian government has implemented various economic plans and various exchange rate policies, including sudden devaluations, periodic mini-devaluations (during which the frequency of adjustments has ranged from daily to monthly), exchange controls, dual exchange rate markets and a floating exchange rate system. From time to time, there have been significant fluctuations in the exchange rate between the Brazilian currency and the U.S. dollar and other currencies. On average, the *real* depreciated by 13.4% against the U.S. dollar during 2014, by 47.0% during 2015, appreciated by 16.5% during 2016, by 8.5% during 2017, and depreciated by 14.5% during 2018.

Depreciation of the *real* relative to the U.S. dollar also could result in inflationary pressures in Brazil by generally increasing the price of imported products and services. On the other hand, the appreciation of the *real* against the U.S. dollar may lead to a deterioration of the country's current account and the balance of payments and may dampen export-driven growth.

We had total foreign currency-denominated debt obligations, all of which were denominated in U.S. dollars, in an aggregate amount of R\$24,167.0 million (US\$6,237.0 million) as of December 31, 2018 (inclusive of an aggregate amount of R\$373.6 million (US\$96.4 million) outstanding as of December 31, 2018 in connection with the Leniency Agreement), representing 97% of our consolidated indebtedness, net of transaction costs. This indebtedness does not include an aggregate amount of R\$10,504.6 million (US\$2,711.0 million) outstanding as of December 31, 2018 in connection with the Braskem Idesa Financing (as defined elsewhere in this annual report). As of December 31, 2018, we had R\$2,698.5 million (US\$696.4 million) in foreign currency-denominated cash and cash equivalents, not including the aggregate amount of R\$963.4 million (US\$248.6 million) of Braskem Idesa's cash and cash equivalents.

A significant depreciation of the *real* in relation to the U.S. dollar or other currencies could increase our financial expenses as a result of foreign exchange losses that we must record and could reduce our ability to meet debt service requirements of our foreign currency-denominated obligations. To enable us to more efficiently manage the effects of exchange rate fluctuations on our results, in 2013 we decided to designate part of our U.S. dollar-denominated liabilities as a hedge for our future exports.

The prices of naphtha, our most important raw material, and of some of our other raw materials, are denominated in or linked to the U.S. dollar. Naphtha accounted, directly and indirectly, for 41.8% of our consolidated cost of products sold in 2018. When the *real* depreciates against the U.S. dollar, the cost in *reais* of our U.S. dollar-denominated and U.S. dollar-linked raw materials increases, and our operating income in *reais* may decrease to the extent that we are unable to pass on these cost increases to our customers.

The Brazilian government's actions to combat inflation may contribute significantly to economic uncertainty in Brazil and reduce demand for our products.

Historically, Brazil has experienced high rates of inflation. Inflation, as well as government efforts to combat inflation, had significant negative effects on the Brazilian economy, particularly prior to 1995. The inflation rate, as measured by the General Price Index—Internal Availability (*Índice Geral de Preços—Disponibilidade Interna*), or the IGP-DI, reached 2,708% in 1993. Although inflation rates have been substantially lower since 1995 than in previous periods, inflationary pressures persist. Inflation rates, as measured by the IGP-DI, were 3.8% in 2014, 10.7% in 2015, 7.2% in 2016, negative 0.4% in 2017 and 7.1% in 2018. The Brazilian government's measures to control inflation have often included maintaining a tight monetary policy with high interest rates, thereby restricting availability of credit and reducing economic growth. Inflation, actions to combat inflation and public speculation about possible additional actions also may contribute to economic uncertainty in Brazil and to heightened volatility in the Brazilian securities markets.

Brazil may experience high levels of inflation. Increasing prices for petroleum, the depreciation of the *real* and future governmental measures seeking to maintain the value of the *real* in relation to the U.S. dollar may trigger increases in inflation in Brazil. Periods of higher inflation may slow the rate of growth of the Brazilian economy, which would lead to reduced demand for our products in Brazil and decreased net sales revenue. Inflation is also likely to increase some of our costs and expenses, which we may not be able to pass on to our customers and, as a result, may reduce our profit margins and net income. In addition, high inflation generally leads to higher domestic interest rates, and, as a result, the costs of servicing our *real*-denominated debt may increase, causing our net income to be reduced. Inflation and its effect on domestic interest rates can in addition, lead to reduced liquidity in the domestic capital and lending markets, which could adversely affect our ability to refinance our indebtedness in those markets. Any decline in our net sales revenue or net income and any deterioration in our financial condition would also likely lead to a decline in the market price of our securities, including class A preferred shares and the ADSs.

Fluctuations or changes in, or the replacement of, interest rates could raise the cost of servicing our debt or reduce our financial revenue, negatively affecting our overall financial performance.

Our financial expenses are affected by changes in the interest rates that apply to our floating rate debt. As of December 31, 2018, we had, among other debt obligations:

- R\$0.5 million of loans and financing that were subject to the Long-Term Interest Rate (*Taxa de Juros de Longo Prazo*), or TLP (which was formerly referred to as TJLP in connection with agreements entered into prior to January 1, 2018);
- R\$489.6 million of loans and financing that were subject to the Interbank Deposit Certificate (*Certificado de Depósito Interbancário*), or CDI, rate;
- R\$211.2 million of loans and financing that were subject to the Extended National Consumer Price Index (*Índice de Preços ao Consumidor Amplo*), or IPCA; and
- R\$1,957.9 million of loans and financing that were subject to the London Interbank Offered Rate, or LIBOR.

The TLP includes an inflation factor and is determined quarterly by the Central Bank. In particular, the TLP, the CDI and the SELIC rates have fluctuated significantly in the past in response to the expansion or contraction of the Brazilian economy, inflation, Brazilian government policies and other factors. See “Item 11. Quantitative and Qualitative Disclosures about Market Risk.” A significant increase in any of these interest rates could adversely affect our financial expenses and negatively affect our overall financial performance.

In addition, as a result of concerns about the accuracy of the calculation of LIBOR, a number of British Bankers’ Association, or BBA, member banks entered into settlements with certain regulators and law enforcement agencies with respect to the alleged manipulation or under-reporting of LIBOR. Actions by the BBA, regulators or law enforcement agencies, as a result of these or future events, may result in changes to the manner in which LIBOR is determined. Potential changes, or uncertainty related to such potential changes, may adversely affect the market for LIBOR-based indebtedness and/or investments. In addition, changes or reforms to the determination or supervision of LIBOR may result in a sudden or prolonged increase or decrease in reported LIBOR, which could have an adverse impact on the market for LIBOR-based indebtedness and/or investments.

In July 2017, the head of the United Kingdom Financial Conduct Authority announced the desire to phase out the use of LIBOR by the end of 2021. At this time, it is not possible to predict the effect of any such changes, any establishment of alternative reference rates or any other reforms to LIBOR that may be enacted in the United Kingdom or elsewhere. The elimination of LIBOR or any other changes or reforms to the determination or supervision of LIBOR could have a material adverse effect on our financial expenses and/or financial revenue and materially adversely affect our overall financial performance.

Brazilian government exchange control policies could increase the cost of servicing our foreign currency-denominated debt, adversely affect our ability to make payments under our foreign currency-denominated debt obligations and impair our liquidity.

The purchase and sale of foreign currency in Brazil is subject to governmental control. The current laws and regulations governing the Brazilian foreign exchange system allow the purchase and sale of foreign currency and the international transfer of *reais* by any person or legal entity, regardless of the amount, subject to certain regulatory procedures. Many factors could cause the Brazilian government to institute more restrictive exchange control policies, including the extent of Brazil’s foreign currency reserves, the availability of sufficient foreign exchange on the date a payment is due, the size of Brazil’s debt service burden relative to the economy as a whole, Brazil’s policy towards the IMF and political constraints to which Brazil may be subject. A more restrictive policy could increase the cost of servicing, and thereby reduce our ability to pay, our foreign currency-denominated debt obligations and other liabilities.

Our foreign-currency debt denominated in U.S. dollars represented an aggregate of 96% of our indebtedness on a consolidated basis as of December 31, 2018, including transaction costs. This indebtedness does not include the aggregate amount R\$10,504.6 million (US\$2,711.0 million) outstanding as of December 31, 2018 in connection with the Braskem Idesa Financing. If we fail to make payments under any of these obligations, we will be in default under those obligations, which could reduce our liquidity as well as the market price of our securities, including our class A preferred shares and ADSs.

Changes in tax laws may result in increases in certain direct and indirect taxes, which could reduce our gross margin and negatively affect our overall financial performance.

The Brazilian government implements from time to time changes to tax regimes that may increase our and our customers' tax burdens. These changes include modifications in the rate of assessments and, on occasion, enactment of temporary taxes, the proceeds of which are earmarked for designated governmental purposes. We cannot predict the changes to Brazilian tax law that may be proposed and enacted in the future. However, future changes in Brazilian tax law may result in increases in our overall tax burden, which could reduce our gross margin and negatively affect our overall financial performance.

Risks Relating to Mexico

Political conditions in Mexico could materially and adversely affect the Mexican economic policy and, consequently, our operations.

Our operations are subject to political and economic uncertainties and other political risks, including tension and confrontations among political parties. Some of these risks may be higher in the developing countries in which we conduct our activities, including Mexico. Mexico's most recent presidential election was held in July 2018. Presidential reelection is not permitted in Mexico. The President-elect, Andrés Manuel López Obrador, took office on December 1, 2018, and his political party, the *Movimiento Regeneración Nacional*, has a majority in both houses of Mexico's congress. We cannot predict what changes, if any, will result from the measures adopted by the new administration, including with respect to the energy and petrochemicals sectors. Political events in Mexico could adversely affect oil and gas production, economic conditions and our industry and, as a consequence, our results of operations and financial position.

Political and economic conditions and government policies in Mexico and elsewhere may have a material impact on our operations.

Deterioration in Mexico's economic condition, social instability, political unrest or other adverse social developments in Mexico could adversely affect our business and financial condition. These events could also lead to increased volatility in the financial markets, thereby affecting our ability to maintain financial liquidity and service our debt. Additionally, spending cuts related to Pemex or other government expenditures, or lack of investments in natural gas and ethane recovery, could adversely affect Pemex, Pemex's ability to produce and recover ethane, the Mexican economy and, consequently, our business, financial condition, operating results and prospects.

In the past, Mexico has experienced several periods of slow or negative economic growth, high inflation, high interest rates, currency devaluation and other economic problems. These problems may worsen or reemerge, as applicable, in the future and could adversely affect our business and ability to service our debt. A worsening of international financial or economic conditions, such as a slowdown in growth or recessionary conditions in Mexico's trading partners, including the United States, or the emergence of a new financial crisis, could have adverse effects on the Mexican economy, our financial condition and our ability to service our debt.

Furthermore, our long-term supply agreement to purchase ethane from Pemex TRI, a state-owned Mexican company, could be manipulated, terminated or jeopardized by them as a result of political pressure to not comply with the agreement, to change the terms of the agreement, expropriation measures, or change in laws regulations by the Mexican government. Any non-compliance, modification, termination or interruption of this supply agreement could have a material adverse effect on the results of our operations or our financial condition.

Developments in other countries could adversely affect the Mexican economy, our financial performance and the price of our shares.

The Mexican economy and the market value of Mexican companies may be affected to varying degrees by global economic and market conditions, and the economic and market conditions in other emerging market countries and major trading partners, in particular the United States. In recent years, economic conditions in Mexico have become increasingly correlated with economic conditions in the United States as a result of the North American Free Trade Agreement, or NAFTA, increased economic activity between the two countries, and the remittance of funds from Mexican immigrants working in the United States to Mexican residents. Therefore, adverse economic conditions in the United States, the termination of, or modifications to, NAFTA or its successor agreement, USMCA, or other related events, including global trade disputes and instability, could have a significant adverse effect on the Mexican economy. We cannot assure you that events in other emerging market countries, in the United States or elsewhere will not adversely affect our financial performance.

Mexico has experienced a period of increasing criminal activity, which could affect our operations.

In recent years, Mexico has experienced a period of increasing criminal activity, primarily due to the activities of drug cartels and related criminal organizations. In addition, the development of the illicit market in fuels in Mexico has led to increases in theft and illegal trade in the fuels that Pemex TRI, our principal supplier in Mexico, produces. In response, the Mexican government has implemented various security measures and strengthened its military and police forces aimed at decreasing incidents of theft and other criminal activity directed at petrochemical facilities and petrochemical products. Despite these efforts, criminal activity continues to exist in Mexico, some of which may target our facilities and products, including thefts of our products while transported by truck or rail, or those of Pemex TRI and other suppliers. These activities, their possible escalation and the violence associated with them may have a negative impact on our financial condition and results of operations.

Risks Relating to Our Equity and Debt Securities

The totality of the shares issued by Braskem and owned by OSP Investimentos S.A. were given as collateral in financing agreements entered into by the Odebrecht Group.

Pursuant to a shares fiduciary assignment agreement (*alienação fiduciária em garantia*) entered into by the Odebrecht Group on November 27, 2013, as amended on May 13, 2016, July 19, 2016, April 24, 2017 and May 23, 2018, all shares issued by Braskem and held by OSP Investimentos S.A. have been given as collateral in connection with certain financing agreements entered into by Odebrecht S.A. and certain of its subsidiaries. In the event that Odebrecht Group defaults on such financing agreements, or if such financing agreements are accelerated and, as a result, such collateral is seized by a creditor (assuming that Petróleo Brasileiro S.A. – Petrobrás does not exercise its preemptive rights to acquire such shares) we may be subject to a change of control following statutory and procedural formalities required pursuant to our shareholders' agreement. A change of control under these circumstances may adversely affect us.

A foreclosure on or sale of our shares held by OSP Investimentos S.A. - whether within or outside the Odebrecht Judicial Restructuring Proceedings - may result in a change of control. As we do not have the ability to consent to or otherwise influence or control the Odebrecht Judicial Restructuring Proceedings or otherwise the acquirer of the shares from any such foreclosure, we may have a change in our corporate control in the foreseeable future.

Shareholders of our class A preferred shares or the ADSs may not receive any dividends or interest on shareholders' equity.

As permitted by the Brazilian Corporation Law, our by-laws specify that 25% of our adjusted net profit for each fiscal year must be distributed to shareholders as mandatory dividends, or the Mandatory Distribution of Dividends. Under our by-laws, our preferred shareholders are entitled to a minimum annual non-cumulative preferential dividend, or the Minimum Preferred Dividend, equal to 6% of their *pro rata* share of our capital before dividends may be paid to our common shareholders. The Brazilian Corporations Law allows a publicly traded company like ours to suspend the mandatory distribution of dividends in any particular year if our board of directors informs our shareholders that such distributions would be inadvisable in view of our financial condition or cash availability, provided that such suspension does not affect the Minimum Preferred Dividend, which is still payable to the holders of preferred shares. However, the shareholders, including the holders of our class A preferred shares or the ADSs, may not receive any dividends or interest on shareholders' equity in any given year if our board of directors makes such a determination or if our operations fail to generate net income.

Our class A preferred shares and the ADSs have limited voting rights and are not entitled to vote to approve corporate transactions, including mergers or consolidations of our company with other companies, or the declaration of dividends.

Under the Brazilian Corporations Law and our by-laws, holders of our class A preferred shares and, consequently, the ADSs are not entitled to vote at meetings of our shareholders, except in very limited circumstances. These limited circumstances directly relate to key rights of the holders of class A preferred shares, such as modifying basic terms of our class A preferred shares or creating a new class of preferred shares with superior rights. Holders of preferred shares without voting rights are entitled to elect one member and his or her respective alternate to our board of directors and our fiscal council, depending on specific circumstances provided in the Brazilian Corporations Law. Holders of our class A preferred shares and the ADSs are not entitled to vote to approve corporate transactions, including mergers or consolidations of our company with other companies, or the declaration of dividends. However, if we do not pay dividends for three consecutive years, holders of our class A preferred shares and the ADSs will be granted voting rights. See "Item 10. Additional Information—Description of Our By-laws—Voting Rights."

Holders of the ADSs may find it difficult to exercise even their limited voting rights at our shareholders' meetings.

Under Brazilian law, only shareholders registered as such in our corporate books may attend our shareholders' meetings. All class A preferred shares underlying the ADSs are registered in the name of the depository. ADS holders may exercise the limited voting rights with respect to our class A preferred shares represented by the ADSs only in accordance with the deposit agreement relating to the ADSs, which provides that voting rights are only available to ADS holders at our discretion. There are practical limitations upon the ability of ADS holders to exercise their voting rights due to the additional steps involved in communicating with ADS holders. For example, we are required to publish a notice of our shareholders' meetings in certain newspapers in Brazil. To the extent that holders of our class A preferred shares are entitled to vote at a shareholders' meeting, they will be able to exercise their voting rights by attending the meeting in person or voting by proxy. By contrast, holders of the ADSs will receive notice of a shareholders' meeting by mail from the depository following our notice to the ADR depository requesting the ADR depository to do so. To exercise their voting rights, ADS holders must instruct the depository on a timely basis. This noticed voting process will take longer for ADS holders than for holders of class A preferred shares. If it fails to receive timely voting instructions for all or part of the ADSs, the depository will assume that the holders of those ADSs are instructing it to give a discretionary proxy to a person designated by us to vote their ADSs, except in limited circumstances.

In the limited circumstances in which holders of the ADSs have voting rights, they may not receive the voting materials in time to instruct the depository to vote the class A preferred shares underlying their ADSs. In addition, the depository and its agents are not responsible for failing to carry out the voting instructions of the holders of the ADSs or for the manner of carrying out those voting instructions. Accordingly, holders of the ADSs may not be able to exercise their voting rights, and they will have no recourse if the class A preferred shares underlying their ADSs are not voted as requested.

If holders of the ADSs exchange them for class A preferred shares, they may risk temporarily losing, or being limited in, the ability to remit foreign currency abroad and certain Brazilian tax advantages.

The Brazilian custodian for the preferred shares underlying the ADSs must obtain an electronic registration number with the Central Bank to allow the depository to remit U.S. dollars abroad. ADS holders benefit from the electronic certificate of foreign capital registration from the Central Bank obtained by the custodian for the depository, which permits it to convert dividends and other distributions with respect to the class A preferred shares into U.S. dollars and remit the proceeds of such conversion abroad. If holders of the ADSs decide to exchange them for the underlying preferred shares, they will only be entitled to rely on the custodian's certificate of registration with the Central Bank for five business days after the date of the exchange. Thereafter, they will be unable to remit U.S. dollars abroad unless they obtain a new electronic certificate of foreign capital registration in connection with the preferred shares, which may result in expenses and may cause delays in receiving distributions. See "Item 10. Additional Information—Exchange Controls."

Also, if holders of the ADSs that exchange the ADSs for our Class A preferred shares do not qualify under the foreign investment regulations, they will generally be subject to less favorable tax treatment of dividends and distribution on, and the proceeds from any sale of, our preferred shares. See "Item 10. Additional information—Exchange Controls" and "Item 10. Additional Information—Taxation—Brazilian Tax Considerations."

Restrictions on the movement of capital out of Brazil may impair the ability of holders of our shares, ADSs and debt securities to receive payments on their respective obligations or guarantees and may restrict our ability to make payments in U.S. dollars.

In the past, the Brazilian economy has experienced balance of payment deficits and shortages in foreign exchange reserves, and the government has responded by restricting the ability of Brazilian or foreign persons or entities to convert *reais* into foreign currencies. The government may institute a restrictive exchange control policy in the future. Any restrictive exchange control policy could prevent or restrict our access to U.S. dollars, and consequently our ability to meet our U.S. dollar obligations under our shares, ADSs and the guarantees we granted pursuant to our outstanding senior notes, and could also have a material adverse effect on our business, financial condition and results of operations. We cannot predict the impact of any such measures on the Brazilian economy.

The foreign exchange policy of Brazil may affect the ability of Braskem to make money remittances outside Brazil in respect of our equity securities or debt securities.

Under current Brazilian regulations, Brazilian companies are not required to obtain authorization from the Central Bank in order to make payments under guarantees in favor of foreign persons, such as the holders of our shares, ADSs or the outstanding senior notes. We cannot assure you that these regulations will continue to be in force in the event that Braskem is required to perform its payment obligations under its shares, ADSs or the guarantees under our outstanding senior notes. If these regulations or their interpretation are modified and an authorization from the Central Bank is required, Braskem would need to seek an authorization from the Central Bank to transfer the amounts under such obligations out of Brazil or, alternatively, make such payments with funds held by Braskem outside Brazil. We cannot assure you that such an authorization will be obtained or that such funds will be available. If such authorization is not obtained, we may be unable to make payments to holders of our shares, ADSs and/or the applicable senior notes in U.S. dollars. If we are unable to obtain the required approvals, if needed for the payment of amounts owed by Braskem through remittances from Brazil, we may have to seek other lawful mechanisms to effect payment of amounts due under the shares, ADSs or the senior notes. However, we cannot assure you that other remittance mechanisms will be available in the future, and even if they are available in the future, we cannot assure you that payment on the outstanding senior notes would be possible through such mechanism.

Holders of the ADSs may face difficulties in protecting their interests because we are subject to different corporate rules and regulations as a Brazilian company and our shareholders may have fewer and less well-defined rights.

Holders of the ADSs are not our direct shareholders and are unable to enforce the rights of shareholders under our by-laws and the Brazilian Corporations Law.

Our corporate affairs are governed by our by-laws and the Brazilian Corporations Law, which differ from the legal principles that would apply if we were incorporated in a jurisdiction in the United States, such as the State of Delaware or New York, or elsewhere outside Brazil. Even if a holder of ADSs surrenders its ADSs and becomes a direct shareholder, its rights as a holder of the class A preferred shares underlying the ADSs under the Brazilian Corporations Law to protect its interests relative to actions by our board of directors may be fewer and less well-defined than under the laws of those other jurisdictions.

Although insider trading and price manipulation are crimes under Brazilian law and are the subject of continuously evolving regulations promulgated by the Brazilian Securities and Exchange Commission, or the CVM, the Brazilian securities markets are not as highly regulated and supervised as the U.S. securities markets or the markets in some other jurisdictions. In addition, rules and policies against self-dealing or for preserving shareholder interests may be less well-defined and enforced in Brazil than in the United States and certain other countries, which may put holders of our class A preferred shares and the ADSs at a potential disadvantage. Corporate disclosures also may be less complete or informative than for a public company in the United States or in certain other countries.

Holders of the ADSs may face difficulties in serving process on or enforcing judgments against us and other persons.

We are a corporation (*sociedade por ações*) organized under the laws of Brazil, and all of our directors and executive officers and our independent public accountants reside or are based in Brazil. Most of our assets and those of these other persons are located in Brazil. As a result, it may not be possible for holders of the ADSs to effect service of process upon us or these other persons within the United States or other jurisdictions outside Brazil or to enforce against us or these other persons judgments obtained in the United States or other jurisdictions outside Brazil. In addition, because a substantial portion of our assets and all of our directors and officers reside outside the United States, any judgment obtained in the United States against us or any of our directors or officers may not be collectible within the United States. Because judgments of U.S. courts for civil liabilities based upon the U.S. federal securities laws may only be enforced in Brazil if certain conditions are met, holders may face greater difficulties in protecting their interests in the case of actions by us or our directors or executive officers than would shareholders of a U.S. corporation.

Judgments of Brazilian courts enforcing Braskem's obligations under our equity securities or the guarantees would be payable only in reais.

If proceedings are brought in the courts of Brazil seeking to enforce our obligations under our shares, ADSs, the guarantees under our outstanding senior notes or our other indebtedness, we would not be required to discharge our obligations in a currency other than *reais*. Any judgment obtained against us in Brazilian courts in respect of any payment obligations under such shares, ADSs, guarantees or other indebtedness would be expressed in *reais*. We cannot assure you that this amount in *reais* will afford the holders of the shares, ADSs, senior notes or our other indebtedness full compensation of the amount sought in any such litigation.

The New York Stock Exchange has commenced delisting procedures with respect to our ADSs.

On May 13, 2019, the New York Stock Exchange suspended trading of our ADSs on the exchange and commenced proceedings to delist us due to our delay in filing our annual report for the fiscal year ended December 31, 2017 and this annual report. We have appealed the decision. As a result, our ADSs have traded on the over-the-counter (OTC) market in the United States since May 15, 2019, which is a less liquid market than the New York Stock Exchange. If our appeal is unsuccessful and the New York Stock Exchange does not resume trading of our ADSs on the exchange and halts the delisting process, our ADSs may not trade on the New York Stock Exchange in the future. In addition, although we may continue to be subject to reporting and corporate governance requirements applicable under U.S. securities laws and regulations, we would not be subject to the listing requirements under the New York Stock Exchange. If we are not able to resume the trading of our ADSs on the New York Stock Exchange, this could materially impact the market price of our ADSs.

Actual or anticipated sales of a substantial number of class A preferred shares could decrease the market prices of our class A preferred shares and the ADSs.

Sales of a substantial number of our class A preferred shares could negatively affect the market prices of our class A preferred shares and the ADSs. If substantial sales of shares are made through the securities markets by our controlling shareholders or other class A preferred shares, the market price of our class A preferred shares and, by extension, the ADSs may decrease significantly. As a result, holders of the ADSs may not be able to sell the ADSs at or above the price they paid for them.

Holders of the ADSs or class A preferred shares in the United States may not be entitled to the same preemptive rights as Brazilian shareholders have, pursuant to Brazilian legislation, in the subscription of shares resulting from capital increases made by us.

Under Brazilian law, if we issue new shares in exchange for cash or assets as part of a capital increase, subject to certain exceptions, we must grant our shareholders preemptive rights at the time of the subscription of shares, corresponding to their respective interest in our share capital, allowing them to maintain their existing shareholding percentage. We may not legally be permitted to allow holders of ADSs or class A preferred shares in the United States to exercise any preemptive rights in any future capital increase unless (1) we file a registration statement for an offering of shares resulting from the capital increase with the U.S. Securities and Exchange Commission, or the SEC, or (2) the offering of shares resulting from the capital increase qualifies for an exemption from the registration requirements of the Securities Act. At the time of any future capital increase, we will evaluate the costs and potential liabilities associated with filing a registration statement for an offering of shares with the SEC and any other factors that we consider important in determining whether to file such a registration statement. We cannot assure the holders of the ADSs or class A preferred shares in the United States that we will file a registration statement with the SEC to allow them to participate in any of our capital increases. As a result, the equity interest of such holders into us may be diluted.

Brazilian tax laws may have an adverse impact on the taxes applicable to the disposition of our ADSs and preferred shares.

According to Law No. 10,833, of December 29, 2003, if a nonresident of Brazil disposes of assets located in Brazil, the transaction will be subject to taxation in Brazil, even if such disposition occurs outside Brazil or if such disposition is made to another nonresident. Dispositions of our ADSs between nonresidents, however, are currently not subject to taxation in Brazil. Nevertheless, in the event that the concept of "disposition of assets" is interpreted to include the disposition between nonresidents of assets located outside Brazil, this tax law could result in the imposition of withholding taxes in the event of a disposition of our ADSs made between nonresidents of Brazil. Due to the fact that, as of the date of this annual report, there is no judicial guidance on the application of Law No. 10,833/2003, we are unable to predict whether an interpretation applying such tax laws to dispositions of our ADSs between nonresidents could ultimately prevail in Brazilian courts. See "Item 10. Additional Information—Taxation—Brazilian Tax Considerations."

The relative volatility and liquidity of the Brazilian securities markets may adversely affect holders of our class A preferred shares and ADSs.

The Brazilian securities markets are substantially smaller, less liquid and more volatile than major securities markets in the United States and other jurisdictions, and may be regulated differently from the manner in which U.S. investors are accustomed. Factors that may specifically affect the Brazilian equity markets may limit the ability of holders of the ADSs to sell class A preferred shares underlying ADSs at a price and at a time when they wish to do so and, as a result, could negatively impact the market price of the ADSs themselves.

Economic developments and investor perceptions of risk in other countries, including both in developed or emerging market economies, may adversely affect the trading price of Brazilian securities, including our common shares and ADSs, as well as any outstanding debt securities.

The market value of securities of Brazilian issuers is affected in varying degrees by economic and market conditions in other countries, including in developed countries, such as the United States and certain European countries, and in emerging market countries. Although economic conditions in such countries may differ significantly from economic conditions in Brazil, the reaction of investors to developments in these other countries may have an adverse effect on the market value of securities of Brazilian issuers. The price of shares traded in the Brazilian capital markets, for instance, has been historically subject to fluctuation of interest rates in the United States and the variation in the main U.S. stock exchanges. In addition, crises in other emerging countries may diminish investor interest in securities of Brazilian issuers, including our common shares and ADSs and our debt securities. This could adversely affect the market price of our common shares, ADSs and outstanding debt securities and could also make it more difficult for us to access capital markets, affecting our ability to finance our operations on acceptable terms.

Recently, heightened volatility in the Brazilian market was due to, among other factors, uncertainties regarding adjustments to the implications of the policies of the current U.S. administration, U.S. monetary policy, the United Kingdom's vote to leave the European Union (popularly known as Brexit) and their consequences on international financial markets, increased aversion to risk in emerging countries, and uncertainties regarding macroeconomic and political conditions. We have no control over and cannot predict the effects of Donald Trump's administration, policies or actions. Furthermore, we have no control over the United Kingdom's Brexit negotiations, which requires the United Kingdom and the European Union to reach an agreement by October 31, 2019, absent further extensions to the initial two-year negotiating period. In addition, we are exposed to disruption and volatility of global financial markets due to their effects on the economic and financial environment, particularly in Brazil, such as economic downturn, increased unemployment rate, decreased purchasing power of consumers and unavailability of credit.

These disruptions or volatility in global financial markets may increase even further the negative effects on the Brazilian economic and financial environment, adversely affecting us.

Because Braskem Finance Limited and Braskem Netherlands Finance B.V. have no operations of their own, holders of our outstanding senior notes issued by Braskem Finance Limited or Braskem Netherlands Finance B.V. depend on Braskem to provide Braskem Finance Limited or Braskem Netherlands Finance B.V., respectively, with sufficient funds to make payments on these notes when they become due.

Braskem Finance Limited, a wholly-owned subsidiary of Braskem incorporated in the Cayman Islands, and Braskem Netherlands Finance B.V., or Braskem Netherlands Finance, an indirect wholly-owned subsidiary of Braskem incorporated under the laws of The Netherlands, have no operations of their own other than the issuing and making of payments on their respective senior notes and other indebtedness ranking equally with such senior notes, and using the proceeds therefrom as permitted by the agreements governing these issuances, including lending the net proceeds of the senior notes and other indebtedness incurred by Braskem Finance Limited and Braskem Netherlands Finance to Braskem and subsidiaries of Braskem. Accordingly, the ability of either Braskem Finance Limited or Braskem Netherlands Finance to pay principal, interest and other amounts due on the outstanding senior notes issued by it and other indebtedness will depend upon our financial condition and results of operations and our subsidiaries that are creditors of Braskem Finance Limited or Braskem Netherlands Finance, respectively. In the event of an adverse change in our financial condition or results of operations and our subsidiaries that are creditors of Braskem Finance Limited or Braskem Netherlands Finance, these entities may be unable to service their indebtedness to Braskem Finance Limited or Braskem Netherlands Finance, as the case may be, which would result in the failure of Braskem Finance Limited or Braskem Netherlands Finance, as the case may be, to have sufficient funds to repay all amounts due on or with respect to the respective outstanding senior notes.

Payments on Braskem's guarantees will be junior to Braskem's secured debt obligations and effectively junior to debt obligations of Braskem's subsidiaries and jointly controlled companies.

The outstanding senior notes are fully guaranteed by Braskem on an unsecured basis. The Braskem guarantees will constitute senior unsecured obligations of Braskem. The guarantees will rank equal in right of payment with all of Braskem's other existing and future senior unsecured indebtedness. Although the guarantees will provide the holders of the senior notes with a direct, but unsecured claim on Braskem's assets and property, payment on the guarantees will be subordinated to secured debt of Braskem to the extent of the assets and property securing such debt.

Upon any liquidation or reorganization of Braskem, any right of the holders of the notes, through enforcement of Braskem's guarantees (i) to participate in the assets of Braskem, including the capital stock of its subsidiaries and jointly controlled entities, will be subject to the prior claims of Braskem's secured creditors, and (ii) to participate in the assets of Braskem's subsidiaries and jointly controlled entities, and will be subject to the prior claims of the creditors of such subsidiaries and jointly controlled entities. The indentures relating to the outstanding senior notes include a covenant limiting the ability of Braskem and its subsidiaries to create or suffer to exist liens, although this limitation is subject to significant exceptions.

Our Mexico complex was financed under a project finance structure, in which the construction loan must be repaid using exclusively the cash generated by us with shareholders pledging limited guarantees. Accordingly, this financing structure includes guarantees typical to transactions of this kind, such as assets, receivables, cash generation and other rights of Braskem Idesa.

As of December 31, 2018, Braskem had (1) consolidated corporate debt, net of transaction costs, of R\$25,192.7 million (US\$6,501.7 million), and (2) consolidated project finance debt related to our Mexico Complex of R\$10,504.6 million (US\$2,711.0 million). Of the consolidated corporate debt, R\$1,982.1 million (US\$511.5 million) was unsecured debt of Braskem S.A., R\$188.9 million (US\$48.8 million) was secured debt of Braskem S.A., R\$23,016.8 million (US\$5,940 million) was unsecured debt of Braskem's subsidiaries and special purpose entities (other than Braskem Idesa S.A.P.I.), R\$4.8 million (US\$1.2 million) was secured debt of Braskem's subsidiaries and special purpose entities (other than Braskem Idesa S.A.P.I.).

Braskem conducts a portion of its business operations through subsidiaries and jointly controlled companies. In servicing payments to be made on its guarantees of the outstanding senior notes, Braskem may rely, in part, on cash flows from its subsidiaries and jointly controlled companies, mainly in the form of dividend payments and interest on shareholders' equity. The ability of these subsidiaries and jointly controlled entities to make dividend payments to Braskem will be affected by, among other factors, the obligations of these entities to their creditors, requirements of Brazilian corporate and other law, and restrictions contained in agreements entered into by or relating to these entities. In the event that these subsidiaries and jointly controlled entities fail to make dividend payments to Braskem due to insufficient cash flows, Braskem may be required to utilize its own cash flow to service payments on its outstanding senior notes.

Braskem's obligations under the guarantees under the outstanding senior notes are subordinated to certain statutory preferences.

Under Brazilian law, Braskem's obligations under the guarantees under the outstanding senior notes are subordinated to certain statutory preferences. In the event of a liquidation, bankruptcy or judicial restructuring of Braskem, such statutory preferences, including post-petition claims, claims for salaries, wages, social security, taxes and court fees and expenses and claims secured by collateral, among others, will have preference over any other claims, including claims by any investor in respect of the guarantees. In such event, enforcement of the guarantees may be unsuccessful, and holders of the outstanding senior notes may be unable to collect amounts that they are due under the outstanding senior notes.

Brazilian bankruptcy laws may be less favorable to holders of our shares, ADSs and outstanding senior notes than bankruptcy and insolvency laws in other jurisdictions.

If we are unable to pay our indebtedness, including our obligations under the shares, ADSs and guarantees under the outstanding senior notes, then we may become subject to bankruptcy proceedings in Brazil. The bankruptcy laws of Brazil currently in effect are significantly different from, and may be less favorable to creditors than, those of certain other jurisdictions. For example, holders of our outstanding debt securities may have limited voting rights at creditors' meetings in the context of a court reorganization proceeding. In addition, any judgment obtained against us in Brazilian courts in respect of any payment obligations under the guarantees normally would be expressed in the *real* equivalent of the U.S. dollar amount of such sum at the exchange rate in effect (1) on the date of actual payment, (2) on the date on which such judgment is rendered, or (3) on the date on which collection or enforcement proceedings are started against us. Consequently, in the event of our bankruptcy, all of our debt obligations that are denominated in foreign currency, including the guarantees, will be converted into *reais* at the prevailing exchange rate on the date of declaration of our bankruptcy by the court. We cannot assure you that such rate of exchange will afford full compensation of the amount invested in our outstanding debt securities plus accrued interest.

ITEM 4. INFORMATION ON THE COMPANY

According to IHS, we are the largest producer of thermoplastic resins in the Americas, based on the annual production capacity of our 29 plants in Brazil, six plants in the United States, two plants in Germany and four plants in Mexico as of December 31, 2018. We are the only producer of ethylene, polyethylene and polypropylene in Brazil. We produce a diversified portfolio of petrochemical and thermoplastic products and have a strategic focus on thermoplastic resins, including polyethylene, polypropylene and PVC.

As of December 31, 2018, our business operations were organized into five business units, which corresponded to our principal production processes, products and services. Our business units were as follows:

- our Chemicals Unit (formerly our Basic Petrochemicals Unit), which includes our production and sale of chemicals at the chemical complex located in Camaçari in the State of Bahia, or the Northeastern Complex, the chemical complex located in Triunfo in the State of Rio Grande do Sul, or the Southern Complex, the chemical complex located in Capuava in the State of São Paulo, or the São Paulo Complex and the chemical complex located in Duque de Caxias in the State of Rio de Janeiro, or the Rio de Janeiro Complex, and our supply of electricity produced at these complexes to second generation producers, including producers owned or controlled by us. This segment accounted for net sales revenue of R\$31,111.7 million, or 43.1% of our consolidated net sales revenue of all reportable segments, including net sales revenue to our other business units;
- our Polyolefins Unit, which includes the production and sale of polyethylene, including the production of "green polyethylene" from renewable resources, and polypropylene produced by us in Brazil. This segment accounted for net sales revenue of R\$22,483.9 million, or 31.1% of our consolidated net sales revenue of all reportable segments, including net sales revenue to our other business units;
- our USA and Europe Unit, which includes our production, operations and sale of polypropylene in the United States and Germany. This segment accounted for net sales revenue of R\$11,724.8 million, or 16.2% of our consolidated net sales revenue of all reportable segments, including net sales revenue to our other business units;
- our Mexico Unit, which includes our production, operations and sale of ethylene, HDPE (high-density polyethylene) and LDPE (low-density polyethylene) in Mexico. This segment accounted for net sales revenue of R\$3,770.5 million, or 5.2% of our consolidated net sales revenue of all reportable segments, including net sales revenue to our other business units; and
- our Vinyls Unit, which includes our production and sale of PVC and caustic soda. This segment accounted for net sales revenue of R\$3,167.4 million, or 4.4% of our consolidated net sales revenue of all reportable segments, including net sales revenue to our other business units.

In 2016, 2017 and 2018, 51.7%, 53.1% and 54.8% of our net sales revenue, respectively, related to sales performed in Brazil, and 48.3%, 46.9% and 45.2% of our net sales revenue in 2016, 2017 and 2018 was derived from our international operations.

Our Strategy

Our strategic objective is to satisfy clients in the chemicals and plastics value chain in a sustainable way and maximize return on the capital invested by shareholders, with a focus on:

- polyethylene, or PE, resins, polypropylene, or PP, polyvinyl chloride, or PVC, chemicals and renewable chemistry; and
- Brazil and in the Americas, including Europe as an export platform.

The key pillars of our strategy include:

- ***Productivity and Competitiveness***

The petrochemical industry is constantly evolving through investments in the current asset base, advances in innovation and technology, and addition of new capacities with enhanced productivity and competitiveness. Therefore, in order to maintain our leadership position in the industry a key element of our strategy is to pursue improvements in productivity and competitiveness of our current operations, focused on operational efficiency and excellence, commercial and logistics effectiveness, and cost leadership and differentiation through our relationships with clients.

Innovation and technology remains an important path to increase productivity and competitiveness and we are currently focusing efforts on development and innovation to constantly improve our operations. Focus on innovation extends not only to operations and our product portfolio but also to new management models and business practices. We seek to position ourselves to adopt and implement new digital technologies and solutions that bring greater efficiency to our industrial processes and business management.

This strategy will allow us to ensure optimal operational performance, considering reliability, production optimization, cost reductions, investment discipline and improvements of our industrial processes.

- ***Feedstock Diversification***

Feedstock is a key element of competitiveness in the petrochemical industry, driving a large part of production costs. Petrochemical feedstocks follow the volatile nature of commodity markets with the competitive gap between different feedstocks fluctuating over time and presenting different opportunities in specific regions.

We are constantly seeking to diversify our feedstock profile in order to reduce the volatility of our results, reduce risks related to feedstock availability, and position ourselves to capture opportunities. We are currently working to increase our exposure to gas, diversifying away from naphtha while investing in the flexibility of our assets to consume different feedstocks.

In 2017, we started a project that enables us to produce up to 15% of ethylene from ethane in the Northeastern complex of Brazil with a long-term ethane supply agreement with an U.S. based supplier with pricing based on the Mont Belvieu reference, and during 2018 we were able to successfully operate the assets taking advantage of the increasing flexibility it provided to the complex. We are also focused on capturing available feedstock opportunities in our current asset base by operating our US PP assets and Mexico cracker at full capacity, capturing propylene and ethane competitive advantage in the North American market and securing competitive feedstock contracts with a long-term view.

Additionally we are constantly monitoring opportunities to grow our asset base in feedstock advantaged regions and position our assets to capture local feedstock opportunities further diversifying our feedstock matrix, enhancing competitiveness and reducing exposure to feedstock related risks.

- ***Geographic Diversification***

Regional markets are influenced by the local supply and demand balance, macro-economic factors and the political environment. Having a local presence in a given market not only provides easier access to regional customers, feedstock opportunities and industrial policies, but also exposes the player to a number of risks related to government decisions, feedstock availability and demand growth. Having a diversified footprint is important to have access to regional opportunities but also to hedging our operations against local risks.

An important pillar of our strategy is to diversify geographically, growing our global footprint outside Brazil and increasing our competitive scale in PE and PP, enhancing our leadership in the Americas.

We started diversifying geographically in 2010 with the acquisition of Sunoco assets in the United States, continuing in the following year with the acquisition of Dow PP assets in the United States and Europe and later in 2016 with the start-up of our greenfield ethane cracker in Mexico, which is integrated with three polyethylene plants. More recently, in 2017, we commenced operations of a new Ultra High Molecular Weight Polyethylene – UHMWPE (UTE[®]) plant in the United States, which strengthened our position as one of the largest producers in the world, and approved the construction of a new PP facility in the United States (the largest PP production line in the Americas), which reached, during 2018, important construction milestones, keeping us on track for commencing operations in the beginning of 2020.

Braskem intends to continue its strategy to diversify geographically while continuing to strengthen our position in the Americas in PE and PP.

- ***People, Governance and Reputation***

We are committed to strengthening our image and reputation among key stakeholders - team members, society and investors, through advances in our compliance system, sustainability, innovation and people management, while strengthening our culture and financial health.

We are committed to strengthening our compliance system, guaranteeing the involvement and responsibility of all leaders and implementing all policies and actions defined by our compliance committee, guided by transparency, integrity and ethics.

Sustainability will continue to be an important aspect of our strategy and we will continue to drive improvements to our health, environment, safety, and eco-indicators, and strengthen our influence in local and international agendas of sustainable development.

In people management, we intend to develop a work environment that reinforces diversity and stimulates the attraction and integration of talented young people, preparing our team for our increasing globalization and preparing us for the new paradigms of managing people.

By these means, we intend to continue strengthening our image and reputation together with our stakeholders, positioning ourselves as a human-oriented, forward-thinking global company that cultivates strong relationships and generates value to all, offering sustainable solutions in chemicals and plastics.

Our History and Development

Our business began when the Odebrecht Group (comprised of Odebrecht S.A. and its subsidiaries) and Mariani Group acquired control of Copene, a raw materials petrochemical complex in Camaçari, in July 2001, and then subsequently integrated their assets in the petrochemical sector with Copene. From 2001 to 2004, we underwent a corporate reorganization and merged many companies that had been acquired. In addition, we acquired Polialden in 2005 and Politeno in 2006.

Through a partnership with Petrobras, we began consolidating the Southern Complex in Brazil in March 2007 with the acquired petrochemical assets from the Ipiranga group. In November 2007, we signed an agreement with Petrobras and Odebrecht, which required them to contribute part of their assets in the petrochemical sector to Braskem. In September 2008, Ipiranga Petroquímica, Petroquímica Paulínia and the spun-off portion of Ipiranga Química were merged into us. In May 2009, our merger with Triunfo was approved.

In January 2010, we announced the acquisition of Quattor in order to strengthen the Brazilian petrochemical sector and establish ourselves among the five largest and most competitive petrochemical companies in the world. In February 2010, we announced the acquisition of the polypropylene assets of Sunoco Chemicals, the fourth largest producer of this resin in the United States. This acquisition represented an important step towards strengthening our internationalization strategy, which combines our growth in the U.S. market with alternative access to competitive raw materials and main consumer markets. As a result of this acquisition, we became a leader of thermoplastic resins in the Americas, consolidating our position as a major player in the international petrochemical market and the third largest global player in the polypropylene industry. In 2010, Braskem inaugurated its green ethylene plant in Triunfo, Rio Grande do Sul, becoming the world leader in biopolymers and launched the brand I'm greenTM, which identifies Braskem's products made from renewable sources.

In July 2011, we announced the acquisition of Dow Chemical's polypropylene business, including four plants (two plants in the United States and two plants in Germany). The U.S. assets, located in Freeport and Seadrift, Texas, have a combined annual production capacity of 545,000 tons, which represented a 50% increase in annual capacity polypropylene production in the United States. The German assets, located in the cities of Wesseling and Schkopau, have a combined annual production capacity of 545,000 tons. This acquisition represented an important step in the consolidation of our international strategy, positioning us as the largest producer of polypropylene in the United States.

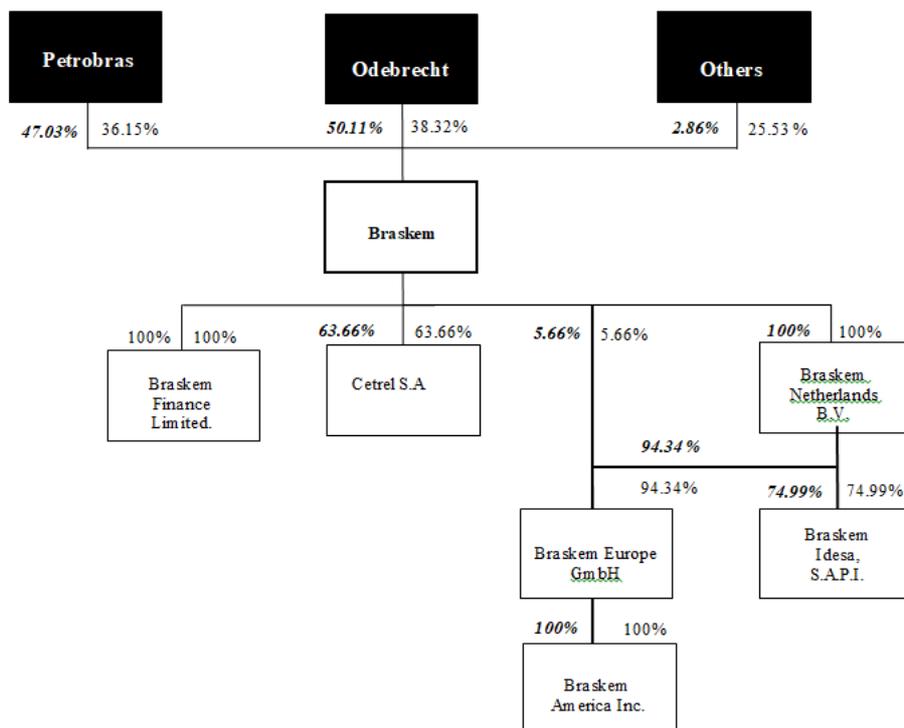
Beginning of Operations of Our Mexico Unit

In April, 2016 Braskem Idesa, our joint venture with the Mexican Idesa group, reached an important milestone with the production of the first batch of polyethylene in the Mexico Petrochemical Complex following a gradual start-up process initiated in December 2015 with the beginning of utilities area operations, followed by the start-up of the cracker in March 2016.

Located in the state of Veracruz, the Mexico Complex includes an ethane cracker integrated with three polyethylene plants, as well as utilities plants (electric power, water and steam). Ethane supply is assured through a 20-year contract with Pemex TRI at a price pegged to the U.S. gas price.

Our Corporate Structure

The following chart presents our simplified ownership structure and the corporate structure of our principal subsidiaries as of the date of this annual report. The percentages in bold italics represent the direct and indirect percentage of the voting share capital owned by each entity, and the percentages not in bold italics represent the direct and indirect percentage of the total share capital owned by each entity.



In November 2017, Braskem Petroquímica Ltda., or Braskem Petro, merged with and into Braskem S.A., with Braskem S.A. as the surviving entity. This merger simplified our corporate structure by consolidating our activities to reduce financial and operating costs.

In January 2019, Odebrecht informed us of the Odebrecht Reorganization, which was effective as of December 31, 2018. For additional information on the Odebrecht Reorganization, see “Item 5. Operating and Financial Review and Prospects—Recent Developments—Odebrecht Reorganization.”

The SEC maintains an internet website at www.sec.gov that contains reports, proxy and information statements and other information regarding companies that file or furnish documents electronically to the SEC, including us. Our internet website is www.braskem.com.br, and the internet website of our investors relations’ department is www.braskem-ri.com.br. The information included on our internet website, the internet website of our investor relations’ department, or the information that might be accessed through such websites is not included in this annual report and is not incorporated into this annual report by reference.

We are a corporation (*sociedade por ações*) organized under the laws of Brazil. Our registered office is at Rua Eteno, 1561, Pólo Petroquímico, Camaçari, Bahia, CEP 42810-000, Brazil, and our telephone number at this address is 55-71-3413-2102. Our principal executive office is at Rua Lemos Monteiro, 120 – 24° andar, Butantã, São Paulo, SP, CEP 05501-050, Brazil, and our telephone number at this address is 55-11-3576-9000.

Chemicals Unit

Nomenclature of Segment

In September 2017, our Basic Petrochemicals Unit changed its name to “Chemicals Unit” in order to reflect the nomenclature used by other companies in the same market.

As of December 31, 2018, according to IHS, our Chemicals Unit’s facilities had one of the largest annual production capacities of all first generation producers in the Americas, including net sales revenue to our other business units, our Chemicals Unit generated net sales revenue of R\$31,111.7 million in 2018, or 43.1% of the net sales revenue of all our reportable segments.

Our Chemicals Unit is comprised of the Chemicals operations conducted by us in the Northeastern Complex, the Southern Complex, the São Paulo Complex and the Rio de Janeiro Complex.

Our Chemicals Unit produces:

- olefins, such as ethylene, polymer and chemical grade propylene, butadiene and butene-1;
- BTX products;
- fuels, such as automotive gasoline, liquefied petroleum gas, or LPG, ethyl tertiary-butyl ether, or ETBE, and methyl tertiary-butyl ether, or MTBE;
- intermediates, such as cumene;
- aliphatics, aromatics and hydrogenated solvents; and
- specialties such as isoprene, dicyclopentadiene, or DCPD, piperylene, nonene, tetramer, polyisobutylene, or PIB, and hydrocarbon resins.

The products of our Chemicals Unit are used primarily in the manufacture of intermediate second generation petrochemical products, including those manufactured by our Polyolefins Unit and our Vinyls Unit. Our Chemicals Unit also supplies other second generation producers in each of the petrochemical complexes in which we operate and other companies located outside of these complexes, and renders services to those producers. In 2018, 47% of our Chemicals Unit’s net sales revenue was derived from intra-company sales of basic petrochemicals, 37% from the sale of basic petrochemicals to third parties, 8% from the sale of fuels, 1% from the resale of naphtha and condensate, 4% from the sale of intermediates and 3% from the sale of utilities and services.

Products of Our Chemicals Unit

Our other business units and third-party petrochemical producers use ethylene and propylene produced by our Chemicals Unit to produce second generation products such as polyethylene, polypropylene and PVC. We also sell butadiene, a variety of aromatics, including BTX products, and intermediates, such as cumene, to third-party petrochemical producers for use as raw materials in the production of a variety of second generation products, including synthetic rubber, elastomers, resins, nylon fibers, ethyl benzene (which is used to make styrene monomer/polystyrene), linear alkyl benzene, purified terephthalic acid, dimethyl terephthalate, bisphenol A, a feedstock for the production of polycarbonate resins, phthalic anhydride, plasticizers and paint.

The following table sets forth the sales volume of basic petrochemicals products by our Chemicals Unit (excluding our intra-company sales) for the periods indicated.

	Year Ended December 31,		
	2018	2017	2016
	(thousands of tons)		
Domestic sales:			
Ethylene	509.1	523.6	511.9
Propylene	345.8	360.4	291.3
Cumene	234.1	199.8	194.5
Butadiene	192.0	183.8	198.5
BTX products ⁽¹⁾	743.8	644.6	677.0
Gasoline	942.9	925.9	745.1
Others	441.4	679.3	666.4
Total domestic sales of Chemicals	3,402.6	3,317.6	3,090.2
Total export sales of Chemicals	1,188.8	1,321.8	1,318.2
Total sales of Chemicals	4,591.2	4,639.4	4,408.4

(1) Includes benzene, toluene and para-xylene.

In addition, we had the following intra-company sales:

	Year Ended December 31,		
	2018	2017	2016
	(thousands of tons)		
Ethylene	2,779.6	2,888.8	2,856.5
Propylene	969.5	1,041.1	1,023.1

Production Facilities of Our Chemicals Unit

We believe that the technological processes we use at plants in our Chemicals Unit are among the most advanced in the world. Our Chemicals Unit currently owns and operates:

- five major production facilities in the Northeastern Complex (two olefins units, two aromatics units and one utilities unit);
- five major production facilities in the Southern Complex (two olefins units, one green ethylene unit, one aromatics unit and one utilities unit);
- three production facilities in the São Paulo Complex (one olefins unit, one aromatics unit and one utilities unit); and
- two production facilities in the Rio de Janeiro Complex (one olefins unit and one utilities unit).

We define the term "unit" to mean several production lines that are linked together to produce olefins, aromatics or utilities.

The table below sets forth the primary products of our Chemicals Unit, annual production capacity as of December 31, 2018 and annual production for the years presented.

Primary Products	Annual Production Capacity	Production For the Year Ended December 31,		
		2018	2017	2016
		(in tons)		
Olefins:				
Ethylene	3,952,000	3,399,610	3,518,658	3,459,861
Propylene	1,585,000	1,324,358	1,445,887	1,400,466
Butadiene	480,000	394,998	430,040	411,630
Aromatics:				
BTX products ⁽¹⁾	1,367,000	841,485	977,184	1,000,489

(1) Consists of benzene, toluene and para-xylene.

Raw Materials of Our Chemicals Unit

The main raw material that we use for chemical production is naphtha, with a total consumption capacity of 10 million tons per year. One million tons of naphtha can be substituted by condensate, which has happened in recent years. Natural gasoline is also a feedstock that can be used as a replacement for naphtha. The cracker located in Rio de Janeiro uses ethane and propane, and its consumption is 0.4 million tons of each of these raw materials per year. The São Paulo cracker can also consume refinery off gas in a quantity equivalent to about 15% of the ethylene production capacity.

Naphtha

Naphtha is the main raw material that we use to produce our chemical products and represents the principal production and operating cost of our Chemicals Unit. We also use condensate as a raw material in the Southern Complex. The following table shows the average Amsterdam-Rotterdam-Antwerp, or the ARA price, of naphtha for the periods indicated.

	2018	2017	2016
Average ⁽¹⁾	US\$601.26	US\$483.84	US\$385.41
Month ended:			
January	592.23	499.37	317.82
February	555.15	498.26	292.71
March	571.44	459.41	350.64
April	607.20	467.94	379.27
May	666.82	434.62	402.43
June	632.55	400.68	417.19
July	642.73	424.81	380.15
August	640.60	459.16	369.00
September	676.13	503.96	395.89
October	661.82	519.13	441.79
November	505.59	571.73	415.97
December	462.87	566.98	463.16

(1) The information in the "Average" row represents the mean average monthly naphtha prices during each respective year.
Source: IHS.

Supply Contracts and Pricing of the Chemicals Unit

Naphtha and Condensate

The following table shows the distribution of the naphtha plus condensate purchases by our Chemicals Unit for the periods indicated by geographic location of the suppliers.

	Year Ended December 31,		
	2018	2017	2016
Brazil	43%	53%	62%
Algeria	19%	18%	16%
Europe	14%	6%	4%
South America	10%	10%	8%
North America	5%	4%	3%
West Africa	4%	6%	4%
Others	5%	3%	3%
Total	100%	100%	100%

Supply Contracts with Petrobras

On December 23, 2015, we and Petrobras entered into a new five-year Naphtha Purchase Agreement. This contract replaced the naphtha supply contract between us and Petrobras for the supply of naphtha to our Chemicals plants located in the Northeastern Complex and superseded the naphtha supply contract between us Petrobras for the supply of naphtha to our Chemicals plants located in the Southern Complex, Northeastern Complex and São Paulo Complex. The contract will expire in December 2020.

Under the terms of this agreement:

- Petrobras has agreed to sell and deliver naphtha, for a period of five years, to our Chemicals plants in the Northeastern, Southeastern and the Southern Complex exclusively for our use as a feedstock;
- we are required to purchase a minimum monthly volume of naphtha;
- we provide Petrobras with a firm commitment order for naphtha each month, together with an estimate of the volume of naphtha that we will purchase over the following six months;
- we may request volumes of naphtha that exceed a monthly firm commitment order, which Petrobras may supply at its discretion;
- the price we pay for naphtha is equal to 102.1% of the ARA price;
- the contract could be terminated or amended in the event that unforeseen extraordinary events occur that cause a disruption in the economic-financial equilibrium of the contract;
- beginning in January 2018, either party may renegotiate the contract upon the occurrence of certain market events. Certain of these market events have occurred, but we have not started, and have no intention to initiate, a renegotiation of the contract.
- either party may terminate the contract, without prior notice, in the event of: (1) failure to cure any breach of the contract following a 30-day grace period; (2) a force majeure event that continues for more than 90 days; (3) transfer or offer as a guaranty all or part of either party's rights and obligations under the contract to a third party without the other party's consent; (4) an alteration of ownership or corporate purposes that conflicts with the purpose of the contract; (5) dissolution; or (6) failure to comply with the compliance obligations of the contract; and
- Petrobras may terminate the contract, without prior notice, in the event of our bankruptcy or liquidation.

Supply Arrangements with SONATRACH

The Association for the Research, Production, Transport, Transformation and Sale of Hydrocarbons (Société Nationale pour la Recherche, la Production, le Transport, la Transformation et la Commercialisation des Hydrocarbures), or SONATRACH (the Algerian national oil company), is one of our suppliers of imported naphtha and condensate. We have imported naphtha supplied by SONATRACH since 2002. On an annual basis, we negotiate the minimum and maximum volumes of naphtha and condensate that we will purchase from SONATRACH. On average, we buy one million tons of condensate and 400 thousand tons of naphtha from SONATRACH.

In the event that we were unable to renew our supply arrangements with SONATRACH, we believe that we could purchase sufficient quantities of naphtha from other suppliers to meet the supply needs of our chemicals plants.

Other Supply Contracts

As part of our strategy to diversify our sources of supply of naphtha, we are acquiring naphtha under annual supply arrangements with international suppliers.

Spot Market Purchases of Naphtha

In addition to our supplies of feedstock under the agreements described above, we purchase naphtha on the spot market from time to time from foreign suppliers located in Africa, Europe, North America and Latin America.

Spot Market Purchases of Condensate

In addition to our supplies of feedstock under the agreements described above, we purchase condensate on the spot market from time to time from foreign suppliers.

Ethane and Propane

Ethane and propane are the principal feedstocks that we use to produce our chemical products in the Rio de Janeiro Complex and represent the principal production and operating cost of the Chemical unit in the Rio de Janeiro Complex. The price of ethane and propane that we purchase varies primarily based on changes in the U.S. dollar-based international price of these feedstocks.

- In December 2000, we and Petrobras entered into an ethane and propane supply agreement. The initial term of this contract expires in January 2021 and this agreement is automatically renewable for one two-year period, unless either party notifies the other party in writing, at least one year prior to the expiration of the contract, that it does not intend to renew this agreement. Under the terms of this agreement, Petrobras agrees to sell and deliver ethane and propane to our chemical plant in the Rio de Janeiro Complex exclusively for use as a raw material;
- we are required to purchase and Petrobras is required to deliver a minimum annual volume of ethane and/or propane;
- we agree to provide Petrobras with a firm commitment order for ethane and propane each month, together with an estimate of the volume of ethane and propane that we will purchase over the immediately succeeding four months;
- the price for ethane and propane is based on the Mont Belvieu price; and
- Petrobras may terminate the contract, without prior notice, in the event of: (1) our failure to cure any breach of the contract following a 60-day grace period; (2) a force majeure event that continues for more than 365 days; (3) we transfer or offer as a guaranty all or part of our rights and obligations under the contract to a third party without Petrobras' consent; and (4) the dissolution, bankruptcy or liquidation of RioPol.

Braskem also has an ethane supply contract with Enterprise Products Operating LLC, or Enterprise Products, to supply ethane from the United States to Brazil. This agreement will remain valid until 2027. The price of ethane is based on the Mont Belvieu ethane price plus a Terminal Fee, basis FOB USGC. The logistics to move the ethane to Brazil is managed by Braskem.

Since February 2017, Braskem has had the capability to receive imported ethane at the Rio de Janeiro Complex. The imported ethane is marginal to domestic supply and the quantity imported in 2017 was 17 ktons, and in 2018 it was 44 ktons.

Since November 2017, Braskem has the capacity to consume ethane in the cracker in Bahia, partially replacing naphtha. Braskem has invested to create the flexibility to substitute naphtha for ethane in a ratio equivalent to 15% of the ethylene production of the site.

2018 was the first year in which we operated our cracker in Bahia using imported ethane as feedstock. Of the total ethylene produced by the cracker, 11% was from ethane feedstock.

Refinery Off Gas

In January 2005, we entered into an agreement with Petrobras for the purchase and sale of steam from refinery off gas, from which we separate ethylene and propylene. This agreement provides that we and Petrobras will negotiate the renewal of this agreement prior to its expiration in 2020 and that, in the event that Petrobras does not intend to renew this agreement, it must notify us at least two years prior to the expiration of this agreement and must perform under the terms and conditions of this agreement until 2028.

Under the terms of this agreement, which represents 100% of our refinery off gas supply:

- we are required to purchase a minimum daily volume of refinery off gas and Petrobras to sell;
- the price for refinery off gas is based on a variety of market references;
- the contract will be amended in the event that unforeseen extraordinary events occur that cause a disruption in the economic-financial equilibrium of the contract;
- Petrobras may terminate the contract, without prior notice, in the event of: (1) our failure to cure any breach of the contract following a 30-day grace period; (2) a force majeure event that prevents the execution of the contract; (3) a transfer or pledge by us, as a guarantee for indebtedness, of all or part of our rights, obligations and credits under this contract to a third party without Petrobras' consent, unless the third party is a member of our economic group; (4) the dissolution or bankruptcy of Braskem S.A.; or (5) a change in business structure, merger, sale, spin-off or any other corporate reorganization of Braskem S.A. that conflicts with or impedes the execution of contract's purpose.

In December 2017, Petrobras informed us that it would not renew this agreement on the same terms. We are currently negotiating the terms and conditions of a future agreement for the purchase and sale of steam from refinery off gas with Petrobras, which would become effective following the expiration of the current agreement in 2028. By now, we cannot assure you the impact of the new terms and conditions of a possible future agreement and any failure to successfully negotiate with Petrobras could impair our ability to satisfy our refinery off gas needs.

Electricity

To supply our industrial operations in Brazil, which represents 87% of our global electric consumption, we self-generate 21% of our electrical energy consumption. 31% of our demand is supplied by Companhia Hidrelétrica do São Francisco, or CHESF, a Brazilian government-owned electric power generation company, pursuant to a power purchase agreement that will remain valid until 2037. The remaining energy is supplied primarily under long-term contracts with several suppliers in the free energy market (*Mercado Livre de Energia*).

- In the Bahia Complex, we self-generate 35% of the energy consumption, and about 52% of the demand is supplied by CHESF. The remaining energy is acquired primarily from several suppliers in the free energy market.
- In the Alagoas Complex, 64% of the energy consumption is supplied by CHESF. Therefore, the remaining energy from the Alagoas Complex is acquired primarily from several suppliers in the free energy market.
- In the Southern Complex, we self-generate 31% of the energy consumption, and the remaining energy is acquired primarily from several suppliers in the free energy market.
- In the São Paulo Complex, we self-generate 12% of the energy consumption, and the remaining energy is acquired primarily from several suppliers in the free energy market.
- In the Rio de Janeiro Complex, the energy consumption is acquired primarily from several suppliers in the free energy market.

Natural Gas

Natural gas is supplied to our industrial operations in Brazil under long-term contracts in the regulated market by companies that have government licenses and exclusivity to deliver it in each state. The natural gas consumed by our operations in Brazil in 2018 represented 63% of our consolidated consumption.

- In the Bahia Complex, natural gas is supplied by Companhia de Gás da Bahia, or Bahiagás, which represents 50% of our consumption in Brazil.
- In the Alagoas Complex, natural gas is supplied by Gás de Alagoas S.A., or Algás, which represents 17% of our consumption in Brazil.

- In the Rio Grande do Sul Complex, natural gas is supplied by Companhia de Gás do Estado do Rio Grande do Sul, or Sulgás, which represents 19% of our consumption in Brazil.
- In the São Paulo Complex, natural gas is supplied by Companhia de Gás do Estado de São Paulo, or Comgás, which represents 10% of our consumption in Brazil.
- In the Rio de Janeiro Complex, natural gas is supplied by CEG Rio S.A., or CEG, which represents 4% of our consumption in Brazil.

Others

In the Southern Complex we also buy methanol to produce MTBE and ethanol to produce the “green polyethylene.” Methanol is imported and price is based in international market quotations. Ethanol is bought in the domestic market from several producers. In the Bahia Complex, we also buy ethanol to produce ETBE.

Sales and Marketing of Our Chemicals Unit

We sell 79% of our Chemical products in Brazil to third-party petrochemical producers. We sell the remainder of our Chemical products to customers in the United States, Europe, South America and Asia. The following table sets forth our net sales revenue derived from domestic and export sales, excluding inter-company sales, by our Chemicals Unit for the years indicated:

	For the Year Ended December 31,		
	2018	2017	2016
	(in millions of reais)		
Net sales revenue ⁽¹⁾ :			
Domestic sales	RS12,021.9	9,367.7	8,201.7
Export sales	RS4,285.3	4,182.5	5,572.3
Total net sales revenue	RS16,307.2	13,550.2	13,744.0

(1) Does not include inter-company sales

Domestic Sales of Chemicals

As part of our commercial strategy, our Chemicals Unit focuses on developing long-term relationships with our customers and entering into long-term supply contracts that provide for minimum and maximum quantities to be purchased on a monthly basis. The domestic market pricing is based on international market references.

Export Sales of Chemicals

International market prices are also based on international market references, which usually vary according to the region to which the product is exported.

We are focused on maintaining our leading position in the Brazilian market, while continuing to use our exports to optimize our operations and adjust the imbalances between demand and production. Since we export large volumes of certain products, we also develop long-term relationships with international customers through contracts that minimize our exposure to market conditions and mitigate risk. Export net sales of our Chemicals Unit represented 14% of our Chemicals Unit’s net sales revenue during 2018.

Additionally, we have applied our expertise in commodities trading to resale of naphtha and ethane in the international markets. In order to meet our crackers’ naphtha and ethane requirements (in terms of timing, pricing and quality), we maintain an excess supply of feedstock and resell the surplus on the spot market. During 2018, we recorded resale operations of RS316 million.

Competition

Our chemical customers, which are mostly second generation petrochemical producers with plants located in the Brazilian petrochemical complexes, would have difficulty obtaining their feedstocks from other sources at lower prices due to the high cost of transportation of these products, as well as other logistical difficulties. In addition, because Brazil produces sufficient quantities of olefins to meet domestic demand, imports of these products are generally sporadic and usually related to scheduled plant maintenance shutdowns or to meet unsatisfied domestic demand.

During the past several years, as the relative cost of naphtha and gas as feedstock for petrochemical crackers has diverged, many crackers using gas as a feedstock have become low-cost producers in the global markets and have seen their margins improve as compared to naphtha crackers. However, as gas crackers are able to produce fewer of the co-products and byproducts that naphtha crackers generate, such as propylene, butadiene and BTX products, and in smaller quantities, the prices of these products in the international markets have increased. As a result of the increased prices available for these co-products and byproducts, our net sales revenue from export sales of these products increased. Competition in the international markets for these products is primarily based on the price of delivered products and competition has increased since mid-2008 as the balance between supply and demand was disrupted due to the impact of the global economic downturn on consumers of these products. In the international markets for our Chemical products, we compete with a large number of producers, some of which are substantially larger and have substantially greater financial, manufacturing, technological and marketing resources than us.

Polyolefins Unit

As of December 31, 2018, our polyolefins production facilities had the largest annual production capacity of all second generation producers of polyolefins products in Latin America. Our Polyolefins Unit generated net sales revenue of R\$22,484 million during 2018.

Our Polyolefins Unit is comprised of the operations conducted by us at nine polyethylene plants and five polypropylene plants located in the Northeastern Complex, the Southern Complex, the São Paulo Complex and the Rio de Janeiro Complex.

Products of Our Polyolefins Unit

Our Polyolefins Unit produces:

- polyethylene, including LDPE, LLDPE, HDPE, ultra-high molecular weight polyethylene, or UHMWPE, EVA and “green polyethylene” from renewable resources; and
- polypropylene.

We manufacture a broad range of polyolefins for use in consumer and industrial applications, including:

- plastic films for food, agricultural and industrial packaging;
- bottles, shopping bags and other consumer goods containers;
- automotive parts;
- engineering and infra-structure goods; and
- household appliances.

The following table sets forth a breakdown of the sales volume of our Polyolefins Unit by product and by market for the years indicated.

	Year Ended December 31,		
	2018	2017	2016
	(thousands of tons)		
Domestic sales:			
Polyethylene ⁽¹⁾	1,790.27	1,796.94	1,705.46
Polypropylene	1,143.33	1,164.95	1,105.68
Other	-	-	-
Total domestic sales	2,933.60	2,961.88	2,811.14
Total export sales	1,291.18	1,357.75	1,498.55
Total Polyolefins Unit sales	4,224.78	4,429.87	4,401.63

(1) Includes EVA, UHMWPE and Green PE.

We provide technical assistance to our customers to meet their specific needs by adapting and modifying our polyethylene and polypropylene products. We believe that the variety of technological processes at our polyolefins plants provides us with a competitive advantage in meeting our customers' needs.

Production Facilities of Our Polyolefins Unit

As of December 31, 2018, our Polyolefins Unit owned 14 production facilities. Our Polyolefins Unit operates five plants located in the Southern Complex, three plants located in the Northeastern Complex, four plants located in the São Paulo Complex and two plants located in the Rio de Janeiro Complex.

The table below sets forth for each of our primary polyolefins products, our annual production capacity as of December 31, 2018 and annual production for the years presented.

Primary Products	Annual Production Capacity (in tons)	Production For the Year Ended December 31,		
		2018	2017	2016
		(in tons)		
Polyethylene:				
LDPE/EVA ⁽¹⁾	795,000	663,285	682,030	720,240
HDPE/LLDPE/UHMWPE ⁽²⁾	2,260,000	2,009,389	2,066,004	1,988,228
Polypropylene ⁽³⁾	1,850,000	1,592,480	1,711,741	1,592,474

(1) Represents capacity and production at five production lines with swing line capacity capable of producing two types of resins.

(2) Represents capacity and production at eight production lines with swing line capacity capable of producing two types of resins. Capacity varies depending on actual production demands.

(3) Represents capacity and production at five plants.

In September 2010, we commenced production of ethylene at a new plant located in the Southern Complex that produces "green" ethylene using sugar cane ethanol received through the Santa Clara Terminal as its primary raw material. This plant has an annual production capacity of 200,000 tons of ethylene.

During 2014, we converted and expanded, by 25,000 tons, one of our polyethylene lines in the state of Bahia to produce metallocene-based LLDPE. This project began its operations in January 2015.

Raw Materials of Our Polyolefins Unit

Ethylene and Propylene

The most significant direct costs associated with our production of polyethylene and polypropylene are the costs of purchasing ethylene and propylene, which together accounted for 87.9% of our Polyolefins Unit's total variable cost of production during 2018. In the same period, our Polyolefins Unit purchased all of the ethylene and part of the propylene that it used from our Chemicals Unit.

Propylene Contracts with Petrobras and its Subsidiaries

We have entered into multiple propylene agreements, which have initial terms expiring at various dates between May 2021 and April 2028, and are priced based on international references to assure competitiveness of feedstock. In 2016, Braskem entered into an agreement with Petrobras for a 5-year propylene supply contract with Refap S.A., a subsidiary of Petrobras. This supply contract is also priced based on international references.

Petrobras may terminate these contracts, without prior notice, in the event of: (1) our failure to cure any breach of the contract following a 30-day grace period; (2) a force majeure event occurs, although some of these contracts require that the force majeure event continues for more than 180 days; (3) we transfer or offer as a guaranty all or part of its rights and obligations under the contract to a third party without Petrobras' consent; (4) an alteration of Braskem management or corporate purposes that conflicts with the purpose of the contract; (5) the dissolution, bankruptcy or liquidation of Braskem; and (6) a change of entity type, merger, sale, spin-off or any other corporate reconstruction of Braskem that conflicts with or impedes the execution of contract's purpose.

Ethanol Supply Contracts

We hold multiple ethanol contracts with major producers of ethanol to supply our facility that produces ethylene using sugar cane ethanol. These supply contracts have initial terms expiring at various dates between April 2019 and July 2019. Under these contracts, we are or will be required to purchase an annual supply of ethanol sufficient to meet at least 90% of the capacity of this ethylene plant. The price we pay under these contracts is or will be determined by reference to the monthly price of combustible hydrated alcohol as published by the Center for Advanced Studies in Applied Economics of the Superior School of Agriculture (Centro de Estudos Avançados em Economia Aplicada da Escola Superior de Agricultura- CEPEA/ESALQ).

We also purchase ethanol on the spot market from time to time to supplement the supplies that we obtain under these contracts. The price that we pay for ethanol under most of these contracts is determined by reference to market indexes.

Other Materials and Utilities

Our Polyolefins Unit uses butene and n-hexane as raw materials in the production of HDPE and LLDPE. Butene is supplied by our Chemicals Unit, and we import n-hexane from suppliers located in South Africa and U.S. Gulf Coast.

Our Unipol polyethylene plants in the Northeastern Complex and Rio de Janeiro Complex use catalysts supplied by Univation Technologies. Our HDPE plant in the São Paulo Complex uses catalysts supplied by W.R. Grace & Co. The catalysts for our swing line LLDPE/HDPE plants are purchased from Basell Polyolefins Company N.V., or Basell. We produce our own catalysts for our HDPE slurry plants in the Southern and Northeastern Complexes, and we purchase the inputs that we need to produce these catalysts from various suppliers at market prices. Our polypropylene plants use catalysts primarily supplied by Basell, while we import certain catalysts from suppliers in the United States and Europe.

Sales and Marketing of Our Polyolefins Unit

Our Polyolefins Unit sells polyethylene and polypropylene products to more than 1,500 customers worldwide. We have a diversified product mix that allows us to serve a broad range of end users in several industries. The customers of our Polyolefins Unit generally are third generation petrochemical producers that manufacture a wide variety of plastic-based consumer and industrial goods.

The following table sets forth our net sales revenue derived from domestic and export sales by our Polyolefins Unit for the years indicated:

	For the Year Ended December 31,		
	2018	2017	2016
	(in millions of reais)		
Net sales revenue:			
Domestic sales	RS16,116.8	RS13,856.4	RS13,903.1
Export sales:			
South America (excluding Brazil)	3,261.7	3,289.8	3,286.5
Europe	1,154.4	607.7	1,750.3
North America	467.7	683.8	82.4
Asia	940.2	269.1	879.7
Other	543.1	943.6	405.4
Total export sales	6,367.0	5,794.0	6,404.3
	RS22,483.9	RS19,650.4	RS20,307.4

Domestic Sales

We are focused on developing long-term relationships with our customers. Given the cyclical nature of the markets for our polyolefins products, we believe that we can strengthen customer loyalty during periods of reduced demand for polyethylene or polypropylene by providing a reliable source of supply to these customers during periods of high demand. We work closely with our customers to provide technical assistance and to coordinate the production and delivery of our products. Customers submit annual proposals giving their estimated monthly requirements for the upcoming year for each of our polyolefins products, including technical specifications, delivery terms and proposed payment conditions. We evaluate these proposals on a monthly basis to make any required adjustments and to monitor and attempt to ensure adequate supply for each customer. Despite having a regular client basis in the domestic market, prices in such market are driven by monthly spot negotiations. Both sales volume per client and the types of products our clients purchase may vary on a monthly basis.

In addition to direct sales of polyolefins to our customers, our Polyolefins Unit sells products in Brazil through exclusive independent distributors. Our Polyolefins Unit is served by five distributors, through which we distribute our products pursuant to formal agreements and spot market transactions. We have selected our distributors based on their ability to provide full service to their customers, and also based on their background. These distributors sell our polyethylene and polypropylene products to manufacturers with lower volume requirements and are able to aggregate multiple orders for delivery. They have a wide coverage network in Brazil and, as a result, expand the Braskem brand.

Furthermore, by providing customized services and serving smaller customers through a network of distributors, our account managers focus their efforts on delivering high quality service to a smaller number of large and medium direct customers.

Export Sales

Our volume of polyolefins export sales has generally varied based upon the level of domestic demand and the total production availability for our products. Our Polyolefins Unit has sales office in Argentina, Chile, Peru and Colombia. These offices are used to consolidate our marketing efforts in South America, one of our key markets outside of Brazil for this business unit. Our Polyolefins Unit also uses our European, Mexican and U.S. sales force in order to improve the profitability of our sales. In each of these regions, we have specific commercial strategies in connection with exports coming from Brazil, which complements our local product availability.

We have established a strategic position in the polyolefins business in South America, North America and Europe through regular direct sales, local distributors and agents who understand their respective markets. Our strategy to increase our presence in these foreign markets is intended, among other things, to reduce our exposure to the cyclicality of the international spot market for polyolefins through the development of long-term relationships with customers in neighboring countries. Our local presence in the United States and Europe allows us to further enhance our position in those markets and sell our Polyolefins Unit products through our USA and Europe Unit.

The main focus of our Polyolefins Unit is to maintain our leading position in the Brazil and South America reinforcing our commitment to the plastic industry chain in the region, maintaining our position as a leader in polyolefins through a continued local presence and regular product supply.

Prices and Sales Terms

We determine the prices of our products in accordance with international pricing references. In addition, we take into account segment, volume, and other information when we set our prices. Our customers in Brazil may pay in full on delivery or elect credit terms that require payment in full within three to 60 days following delivery. We charge interest based on prevailing market rates to our Brazilian customers that elect to pay on credit.

In addition, besides our strategic sales to South America, Europe, Mexico and the United States, our Polyolefins Unit generally conducts export sales to buyers in Asia and Africa through the international spot market. Our customer base in these markets consists primarily of trading houses and distributors. Pricing is based on international spot market prices.

Competition

We are the only producer of polyethylene and polypropylene in Brazil. We compete with polyolefins producers worldwide. In 2018, Brazilian polyethylene and polypropylene imports increased by 13% and represented 30% of Brazilian polyolefin consumption.

We compete for export sales of our polyolefins products in other countries in Latin America and in the North American, Asian and European markets. Similar to Braskem, those competitors also have a wide portfolio, ample research and development capabilities and sufficient production capacity. Our competitive position in the export markets that we serve is based on customer relationship, extensive product portfolio, product quality and customer service and support.

We are the only green polyethylene producer in the world, made by sugar cane that is 100% verified by ASTM D6866.

USA and Europe Unit

Our USA and Europe Unit includes:

- the operations of Braskem America, which consist of five polypropylene plants in the United States and one Ultra High Molecular Weight Polyethylene – UTEC[®] plant; and
- the operations of two polypropylene plants in Germany.

As of December 31, 2018, our USA and Europe Unit's facilities had the largest annual polypropylene production capacity in the United States. Our USA and Europe Unit generated net sales revenue of R\$11,724.8 million during 2018.

In June 2014, we announced the construction of an UHMWPE production line in our La Porte, Texas site, which began producing UTEC[®] in the first quarter of 2017. We believe that the production of specialized UHMWPE at this new line complements our existing portfolio of products and will enable us to access new markets and to develop close relationships with new and existing clients.

Products of Our USA and Europe Unit

Our USA and Europe Unit produces polypropylene. The sales volume of polypropylene by this unit was 1,923,227 tons in 2018, 2,116,529 tons in 2017 and 2,008,473 tons in 2016. For a description of the uses of our polypropylene products, see “—Polyolefins Unit.”

Production Facilities of our USA and Europe Unit

The table below sets forth the annual production capacity as of December 31, 2018 of the USA and Europe Unit’s polypropylene plants in the United States and Germany and the annual production for the years presented.

Plant	Annual Production Capacity	Production For the Year Ended December 31,		
		2018	2017	2016
		(in tons)		
United States	1,570,400	1,394,099	1,521,894	1,413,607
Germany	625,000	523,797	591,417	593,569

Raw Materials of Our USA and Europe Unit

Propylene

The most significant direct cost associated with the production of polypropylene by our USA and Europe Unit is the cost of purchasing propylene.

We acquire propylene for our polypropylene plants in the United States under a variety of long-term supply agreements and through the spot market. As of December 31, 2018, we had long-term supply agreements with multiple suppliers. The pricing formulas for propylene under these supply agreements are generally based on market prices.

As a result of rising natural gas production and related production of natural gas liquids, several companies have announced plans to build propane dehydrogenation, or PDH plants, which would produce on-purpose propylene. We have secured a long-term propylene agreement of 15 years with one such company, Enterprise Products, which recently completed construction of a PDH plant in Texas with an annual capacity of 750,000 tons. We expect this agreement with an established producer to provide us with a competitive, long-term supply of propylene, using shale gas and other nontraditional sources as its feedstock. This plant has commenced operations by the end of 2017. Under this arrangement, the pricing of these contracts will be based on market prices for propane and other market costs.

We acquire propylene for our polypropylene plants in Germany under long-term supply agreements that provide for the supply of 88% of the propylene requirements of these plants. We have two main supply agreements in Germany. One of them will expire in September 2021 and is automatically renewable for consecutive one-year terms, unless terminated by one of the parties, and the other expires in December 2021. We have entered into a third contract that will expire at the end of 2020, increasing the supply of our plants to 94% of the propylene required. The pricing formula for propylene under these supply agreements is based on market prices. We purchase the propylene used in our Europe plants based on monthly contract price for propylene for Europe (as reported by ICIS-LOR).

Sales and Marketing of Our USA and Europe Unit

Our USA and Europe Unit sells polypropylene products to around 465 customers. We have a diversified product mix that allows us to serve a broad range of end users in several industries. The customers of our USA and Europe Unit generally are third generation petrochemical producers that manufacture a wide variety of plastic-based consumer and industrial goods.

The following table sets forth our net sales revenue derived from sales of our USA and Europe Unit for the years indicated:

	For the Year Ended December 31,		
	2018	2017	2016
	(in millions of reais)		

Net sales revenue:			
USA and Europe	RS11,724.8	RS9,854.5	RS8,896.1

A 30% of the sales of polypropylene by the USA and Europe Unit are made under long-term supply agreements with our customers. These supply contracts generally have an initial two-year term and are automatically renewable for one-year periods unless one party notifies the other of its intention not to renew. These contracts also provide for minimum and maximum quantities to be purchased and monthly deliveries.

The remainder of the polypropylene production of the USA and Europe Unit is sold through (1) our direct sales force that seeks to establish supply relationships with customers, (2) a select number of distributors authorized to represent the Braskem brand in the U.S. and European markets, (3) resellers that trade these products under private labels in the North American and European markets, and (4) traders that resell these products in the export markets.

Competition

The USA and Europe Unit is largely a commodities business and competes with local, regional, national and international companies, some of which have greater financial, research and development, production and other resources than us. Although competitive factors may vary among product lines, our competitive position is primarily based on raw material and production costs, selling prices, product quality, product technology, manufacturing technology, access to new markets, proximity to the market and customer service and support.

Our primary competitors for sales in the polypropylene industry in North America are other large international petrochemical companies. In general, demand is a function of economic growth in North America and elsewhere in the world.

Our primary competitors for sales in the polypropylene industry in Europe are other large international petrochemical companies. In general, demand is a function of economic growth in Europe and elsewhere in the world.

Mexico Unit

Braskem and Idesa, one of Mexico's leading petrochemical groups, formed Braskem Idesa S.A.P.I. in April 2010, with Braskem holding 75% of the total share capital and Idesa holding the remaining 25%, to develop, construct and operate the Mexico Complex, located in the Mexican state of Veracruz. During April 2016, Braskem Idesa commenced commercial operations of the Mexico Complex. As a result of the commencement of operations of the Mexico Complex, we commenced recording the results of our Mexico business unit as a separate segment in our financial statements as of dates and for periods ended after January 1, 2017.

Products of Our Mexico Unit

Our Mexico business unit produces ethylene, HDPE and LDPE at our Mexico Complex. We use all of the ethylene produced by our Mexico Complex as raw material for the production of polyethylene by this complex. The sales volume of polyethylene by this unit was 798,840 tons in 2018. As with our Polyolefins Unit, our Mexico Complex manufactures a broad range of polyethylene grades for use in consumer and industrial applications, including plastic films for food and industrial packaging, bottles, shopping bags and other consumer goods containers, automotive parts, and household appliances.

Technologies selected for the Mexico Unit are proven and considered stated of the art with excellent track records in the petrochemical market and provides a competitive advantage in serving our customers to meet their specific needs by adapting and modifying our polyethylene products.

Production Facilities of Our Mexico Unit

Our Mexico Unit operates four plants located in the Mexico Complex, consisting of:

- an ethylene cracker, with an annual production capacity of 1,050,000 tons of ethylene, which commenced operations in March 2016;
- two high density polyethylene plants, with a combined annual production capacity of 750,000 tons, which commenced operations in April 2016; and
- a low density polyethylene plant, with an annual production capacity of 300,000 tons, which commenced operations in June 2016.

Plant	Annual Production Capacity	Production For the Year Ended December 31,		
		2018	2017	2016
		(in tons)		
Mexico (Polyethylene)	1,050,000	808,388	923,540	443,180

Raw Materials of Our Mexico Unit

The principal raw material used in our Mexico Complex is ethane, in addition to other raw materials such as hexane, propylene and polyaldehyde (PAL). Other chemicals, catalyzers, additives and utilities such as natural natural gas, electricity and nitrogen are used to produce polyethylene in the Mexico Complex.

Ethane

Ethane is the principal raw material that we use to produce ethylene in the Mexico Complex and represent the principal production and operating cost of the Mexico Complex. The price of ethane that we purchase varies based on changes in the U.S. dollar-based U.S. reference price of these feedstocks.

Ethylene

All of the ethylene produced by our Mexico Complex is used by the polyethylene plants in our Mexico Complex.

Other Materials and Utilities

Our Mexico Unit uses natural gas as the main fuel for its production process, which is supplied by PEMEX through CENAGAS.

Our Mexico Unit uses hexene as raw materials in the production of HDPE. We import hexene for the Mexico Complex from suppliers located in the United States.

Our Mexico Unit uses catalysts supplied by Ineos Europe Limited.

Supply Contracts of the Mexico Unit

Ethane

Braskem Idesa is party to an ethane supply agreement with Pemex TRI, a subsidiary of Pemex, dated February 19, 2010, pursuant to which Pemex TRI is obligated to provide, and Braskem Idesa is required to purchase, 66,000 barrels per day of ethane for the Mexico Complex for a period of 20 years at prices based on the highest reference between Mont Belvieu purity ethane or Henry Hub reference U.S. dollar-based international reference price of these feedstocks. Under this agreement, any daily amount rejected by Braskem Idesa must be purchased in installments in subsequent deliveries until the deficit has been resolved. This contract commenced in June 2015, will initially expire in 2035, and is renewable for three consecutive five-year periods if prior notice to renew is given by either party at least two years before it expires. Pemex TRI may terminate the contract in the event of: (1) a failure by Braskem Idesa to pay that continues for more than 180 days after notice, or (2) an emergency stoppage in operations or force majeure event that continues for more than 48 months.

The ethane supply agreement contains a volume delivery long-term performance covenant that requires Pemex TRI to meet a volume delivery of ethane over a six-month period averaging 70% of the agreed-upon volume under the ethane supply agreement (the “Long-Term Performance Test”). As of January 2019, Pemex TRI volume deliveries under the Long-Term Performance Test remained close to the 70% threshold. In the event that Pemex TRI fails to meet the Long-Term Performance Test, in addition to the direct negative impact on the production volumes of our Mexico Complex, it may (i) render us unable to generate sufficient cash to service our indebtedness with creditors under the Braskem Idesa Financing, (ii) cause such creditors to accelerate this indebtedness, and/or (iii) require Braskem Idesa to exercise a termination and put option against Pemex TRI that would force Pemex TRI to purchase the Mexico Complex from us. For further information, see “Item 3. Key Information—Risks Relating to Us and the Petrochemical Industry—We depend on ethane supplied by Pemex TRI in Mexico” and “Item 5. Operating and Financial Review and Prospects—Capital Expenditures—Joint Venture—Mexico Complex.”

Electricity

The Mexico Complex has its own power generation plant consisting of one gas turbine and two steam turbines, which generates more than 100% of the Mexico Complex’s energy consumption. In addition, the Mexico Complex is also connected to the high-voltage power grid of Comisión Federal de Electricidad (the Mexican government-owned power supplier) as a back-up power source and to sell excess power on the spot market. The Mexico complex generates all of its requirements of steam and its water requirements are supplied by the Comisión Nacional del Agua (the Mexican government-owned water commission) under an agreement that expires in 2029 and is subject to renewal.

In general, we believe that there are sufficient alternative sources available at reasonable prices for each of these other inputs used in our polyethylene production process such that the loss of any single supplier would not have a material adverse effect on our operations.

The main feedstock used for power generation is natural gas, which is currently supplied by PEMEX through CENAGAS.

Sales and Marketing of Our Mexico Unit

Our Mexico Unit sells polyethylene products to 250 customers in the Mexican market. We have a diversified product mix that allows us to serve a broad range of end users in several industries. The customers of our Mexico Unit generally are third generation petrochemical producers that manufacture a wide variety of plastic-based consumer and industrial goods.

Domestic Mexican Sales

In the first full year operation of our Mexico Complex since its start-up, we were focused on the domestic market and obtaining the customer approval of our products. One of our priorities has been to develop long-term relationships with our customers and, given the cyclical nature of the markets for our polyethylene products, we believe that we can strengthen customer loyalty during periods of reduced demand for polyethylene by providing a reliable source of supply to these customers during periods of high demand. We work closely with our customers to determine their needs, to provide technical assistance and to coordinate the production and delivery of our products.

Considering our Mexico Complex’s logistical infrastructure and logistics centers in different regions, we are able to project customer demand by region. Thus, we can anticipate and plan our production and logistics in order to make the products available on time and at the points of shipment. As our products portfolio can adjust to the nature of the demand of the Mexican market, we have greater flexibility to adapt and better serve the market.

In addition to direct sales of polyethylene to our customers, our Mexico Unit sells products in Mexico through independent distributors. Our Mexico Unit is served by distributors through which we distribute our products pursuant to formal agreements and spot market transactions.

We have selected our distributors based on their ability to provide full service to their customers, including the ability to prepare our products on a customized basis. These distributors sell our polyethylene products to manufacturers with lower volume requirements and are able to aggregate multiple orders for delivery to customers that would otherwise be uneconomical for us to serve. Furthermore, by serving smaller customers through a network of distributors, our account managers focus their efforts on delivering high quality service to a smaller number of large, direct customers.

Export Sales

The main focus of our Mexico Unit is to maintain our leading position in the Mexican market while continuing to export in order to manage the relationship between our production capacity and domestic demand for our products. We believe that our continued presence in export markets is essential to help manage any overcapacity in the Mexican market. The excess volume is exported to several regions such as North America, Asia, and Europe, using our existing sales force and complementing our portfolio in those regions, together with products exported from Brazil. In order to use the already established Braskem sales channels in the United States and Europe, the strategy of exports of the Mexico unit production, for these regions, is to develop and retain customers, in order to seek a greater added value in exports, especially considering the competitive logistics for serving the United States. This new polyethylene complex reinforces our position with polyethylene customers worldwide, which enhances our position in North America.

Prices and Sales Terms

We determine the Mexican domestic prices for polyethylene by reference to North American export prices. Our customers in Mexico may pay in full on delivery or elect credit terms that require payment in full within up to 60 days following delivery.

Our Mexico Unit's export sales consist of volumes to Asia, Europe and the United States through traders and distributors. Pricing is based on international spot market prices. We make all sales in these markets with letters of credit. As discussed under "—Export Sales" above, since the beginning of 2017, the Mexico Unit has been focused on export sales directly to customers in the United States and Europe, so the netback price of exports has been increasing.

Competition

We have the largest annual production capacity of polyethylene in Mexico. We compete in Mexico with a subsidiary of Pemex and with importers of polyethylene, primarily producers located in the United States and South America. We compete for export sales of our polyethylene products with producers from other countries in Latin America and in markets in the United States, Asia and Europe. Our export business is a commodities business and we compete with a variety of resin producers, some of which have greater financial, research and development, production and other resources than us. Our competitive position in the export markets that we serve is primarily based on raw material costs, selling prices, product quality and customer service and support.

Vinyls Unit

We were the leading producer of PVC in Brazil, based on sales volumes and installed capacity in 2018. As of December 31, 2018, our PVC production facilities had the second largest annual production capacity in Latin America. Our Vinyls Unit generated net sales revenue of R\$3,167.4 million in 2018, or 4.4% of our net sales revenue of all reportable segments.

Our Vinyls Unit is the only vertically integrated producer of PVC in Brazil. Our PVC production is integrated through our production of chlorine, ethylene and other raw materials. Our Vinyls Unit also manufactures caustic soda, which is mainly used by producers of alumina, pulp and paper, and in the soap industry.

In 2018, we had an approximate 49% share of the Brazilian PVC market and a 22% share of the Brazilian caustic soda market (excluding consumption of alumina by companies located in the North and Northeast of Brazil), based on sales volumes of our Vinyls Unit.

Products of Our Vinyls Unit

The following table sets forth a breakdown of the sales volume of our Vinyls Unit by product line for the years indicated.

	For the Year Ended December 31,		
	2018*	2017*	2016*
	(thousands of tons)		
PVC	490.1	525.7	528.3
Caustic soda	345.5	407.6	442.5
Other ⁽¹⁾	86.2	103.7	112.1
Total domestic sales	921.8	1,037.0	1,083.0
Total export sales	49.4	89.5	122.7
Total Vinyls Unit sales	971.2	1,126.5	1,205.7

(1) Includes chlorine, hydrogen, caustic soda flake and sodium hypochlorite.
(*) Unaudited.

Production Facilities of Our Vinyls Unit

We own five vinyls production facilities. Two of our facilities are located in the Northeastern Complex, and three others are located in the State of Alagoas.

The table below sets forth for each of our primary vinyls products, our annual production capacity as of December 31, 2018 and annual production for the years presented.

Primary Products	Annual Production Capacity	Production For the Year Ended December 31,		
		2018	2017	2016
		(in tons)		
PVC	710.0	533.2	611.2	594.0
Caustic Soda	539.0	329.2	423.6	453.2

Raw Materials of Our Vinyls Unit

Ethylene

The most significant direct cost associated with the production of PVC is the cost of ethylene, which accounted for 48% of our Vinyls Unit's total cost of products sold in 2018. Our Chemicals Unit supplies all of the ethylene required by our Vinyls Unit.

Electricity

Electric power is a significant cost component in our production of chlorine and caustic soda. Electric power accounted for 14% of our Vinyls Unit's total cost of products sold in 2018. Our Vinyls Unit obtains its electric power requirements from various generators under long-term power purchase agreements (see "Chemicals Unit—Supply Contracts and Pricing of the Chemicals Unit—Electricity").

Salt

We used 594,348 tons of salt during 2018. Salt accounted for 1% of our Vinyls Unit's total cost of products sold in 2018. We have exclusive salt exploration rights at a salt mine located near our Alagoas plant. We estimate that the salt reserves of this mine are sufficient to allow us to produce chlorine at expected rates of production for 35 to 45 years. We enjoy significant cost advantages when compared to certain of our competitors due to the low extraction costs of rock salt (particularly compared to sea salt), and low transportation costs due to the proximity of the salt mine to our production facility.

Sales and Marketing of Our Vinyls Unit

There is a structural link between the PVC and caustic soda markets because caustic soda is a byproduct of the production of chlorine required to produce PVC. When demand for PVC is high, greater amounts of caustic soda are produced, leading to an increase in supply and generally lower prices for caustic soda. Conversely, when demand for PVC is low, prices for caustic soda tend to rise.

We make most of our sales of PVC and caustic soda directly to Brazilian customers without the use of third-party distributors. However, our Vinyls Unit maintains contractual relationships through five distribution centers that provide logistical support, located in Paulínia and Barueri, both in the State of São Paulo, Joinville in the State of Santa Catarina, Extrema in the State of Minas Gerais and Araucaria in the State of Paraná. In addition, we operate twelve warehouse facilities for PVC, on a non-exclusive basis, and six terminal tank facilities for caustic soda strategically located along the Brazilian coast to enable us to deliver our products to our customers on a "just-in-time" basis. Our Vinyls Unit develops its business through close collaboration with its customers, working together to improve existing products as well as to develop new applications for PVC. Our marketing and technical assistance groups also advise customers and potential customers that are considering the installation of manufacturing equipment for PVC end products.

In addition, our Vinyls Unit supplies the Brazilian market with emulsion PVC and other copolymers with higher value by imports from Colombia under a long-term contract with Mexichem. Our primary customers operate in the laminated, shoe and automobile sectors. These products represented 1.9% of our consolidated sales volume in 2018

Prices and Sales Terms

We determine the domestic prices for our PVC resins with reference principally to the prices paid by third generation producers in Brazil for imports of PVC, which generally reflect the Northeast Asian spot market price. Delivery time, quality and technical service also affect the levels of sales of PVC resins. We establish our domestic price for caustic soda based on North American spot market prices. 48% of our caustic soda sales in 2018 were made pursuant to agreements that are generally for one - to three-year terms and may include minimum and maximum prices and volumes.

Competition

PVC

Unipar Carbocloro (formerly Solvay), or Unipar, and Braskem are the only two producers of PVC in Brazil. Unipar's total Brazilian installed annual production capacity is 300,000 tons, compared to our annual production capacity of 710,000 tons. Unipar's Brazilian production facilities are located in São Paulo, which is closer to the primary PVC market in Brazil than our facilities. However, we believe that our vertically integrated production capabilities, our modern PVC suspension plants, our strong relationship with our customers and our technical assistance programs enable us to make up for any competitive disadvantage due to distance and compete effectively with Unipar.

Braskem also competes with Unipar's Argentina production facilities and other importers of PVC. Unipar has a PVC plant in Argentina in addition to its plants in Brazil. Imports accounted for 7% of Brazilian PVC consumption in 2018. Domestically produced PVC is currently competitively priced with imported PVC, considering that our price is based on international market.

In addition, Braskem competes with other producers of thermoplastics that manufacture the same PVC products or substitutes for products in our PVC product line. Thermoplastic resins, principally polyethylene and polypropylene, are used in certain applications as substitutes for PVC. Wood, glass and metals also are used in some cases as substitutes for PVC.

Caustic Soda

According to IHS and Abiclor (*Associação Brasileira da Indústria de Álcalis, Cloro e Derivados*), the three largest Brazilian producers of caustic soda, including Braskem, accounted for 92% of capacity in Brazil in 2018. We and another international petrochemical company operate in this market throughout Brazil, while the other domestic producers of caustic soda generally operate on a local or regional basis. Imports accounted for 31% of Brazil's total caustic soda consumption in 2018.

Our principal competitors in the caustic soda market elsewhere in South America are other international petrochemical companies operating in Brazil and producers located on the U.S. Gulf Coast.

Technology, Research and Development

Technology Licenses

We rely on technology from third parties for the production processes at several of our facilities, including our crackers and our PE and PP manufacturing units. Our operations could be adversely affected if such third party licensors choose not to renew or continue to provide sufficient technical support under the license or technical services agreements that we have entered into with them.

Most of the original license agreements with regard to our Chemicals units in Brazil have already expired. However, new Technical Services Agreements have been entered into to optimize plant performance. No new license agreements for the construction of plants were signed since 2016. In Mexico, we also have a License Agreement in place with regard to our cracker unit.

We operate Vinyls units only in Brazil. The most recent license agreement with regard to our Vinyls units was signed in 2008 and terminated in 2013. The effects of such license agreement with regard to the interim period after its termination continued until the year ended December 31, 2018, and there is currently no technical services agreement in place. No new license agreements for the construction of plants were signed since 2016.

With respect to our Polyolefin units, Braskem uses various process technologies licensed from leading licensor companies under non-exclusive agreements in Brazil, Mexico, the United States and Germany. For some of these licenses, Braskem pays royalty fees based on production volume using the licensed technology on a quarterly basis and also participates in technical exchange meetings to share and receive information regarding improvements pursuant to the respective license agreement or technical service agreement. For some specific projects, Braskem has entered into joint development agreements, or JDA, with the original licensors and/or other technology partners under exclusive terms and cost-sharing conditions. No new license Agreements for the construction of plants were signed since 2016.

Research and Development

Our ability to compete in the markets that we serve depends on our ability to integrate new technologies developed by us and third parties in order to lower our costs and offer new products. In addition, our relationships with our customers are enhanced by our ability to develop new products and customize existing products to meet their needs.

We develop technology at our research and development centers: (1) Innovation and Technology Center in Triunfo, Rio Grande do Sul, Brazil; (2) Innovation and Technology Center in Pittsburgh, Pennsylvania, United States; (3) Renewable Chemicals Research Center in Campinas, São Paulo, Brazil; (4) Process Technology Development Center in Mauá, São Paulo, Brazil; (5) European Technical Center in Wesseling, North Rhein Westphalia, Germany; and (6) Mexican Technical Center in Nanchital, Vera Cruz, Mexico, where we develop new processes, products and applications for many market segments and which, as of December 31, 2018, collectively had 299 employees. Through these centers, we coordinate and conduct our research and development programs, which include the operation of (1) pilot plants, (2) catalysis, polymerization and polymer sciences laboratories, and (3) process engineering and research for renewable sources.

Braskem continues its efforts to develop solutions for products from renewable raw materials through internal projects and collaborations and partnerships with various third parties.

In November 2017, Braskem and Danish-based Haldor Topsoe, a world leader in catalysts and surface science, have signed a technological cooperation agreement to develop a pioneering route to produce monoethylene glycol (MEG) from sugar. With the agreement, Braskem seeks to expand its portfolio of renewable products to offer new solutions that complement its bio-based polyethylene marketed with the I'm green™ seal.

Maintenance

Most of our maintenance is performed by third-party service providers. For example, we have contracts with Construtora Norberto Odebrecht, or CNO, a subsidiary of our controlling shareholder Odebrecht, Asea Brown Boveri Ltd., Cegelec Ltda., Rip Serviços Industriais S.A., CI Engenharia Ltda. and other service providers to perform maintenance for our basic petrochemical plants in the Northeastern Complex and in the Southern Complex. We also perform some of our ordinary course maintenance with our small team of maintenance technicians, which also coordinate the planning and execution of maintenance services performed by third parties.

Chemicals Plants

Regular chemicals plant maintenance requires complete plant shutdowns from time to time, and these shutdowns usually take 30 to 45 days to complete. We occasionally undertake brief shutdowns of the chemical operations at our basic petrochemical plants that do not materially affect our production output, primarily for maintenance purposes, catalyst regeneration and equipment cleaning. In addition, because we have two independent olefins units and two independent aromatics units at the Northeastern Complex and two independent olefins units at the Southern Complex, we may continue production of chemicals at these complexes without interruption, even while we perform certain maintenance services.

The next scheduled general maintenance shutdown of:

- the Northeastern Complex's aromatics 1 and olefins 1 units is scheduled to take place in 2019;
- the São Paulo Complex's olefins and aromatics units is scheduled to take place in 2020;
- the Southern Complex's olefins 1 and aromatics 1 units is scheduled to take place in 2021; and
- the Northeastern Complex's olefins 2 and aromatics 2 units is scheduled to take place in 2022.

Plants of Our Polyolefins, Vinyls and USA and Europe Units

We have a regular maintenance program for each of our polyolefins plants. Production at each of our polyolefins plants generally is shut down for seven to 20 days every two to three years to allow for regular inspection and maintenance. In addition, we undertake other brief shutdowns for maintenance purposes that do not materially affect our production of polyolefins. We coordinate the maintenance cycles of our polyolefins plants with those of our basic petrochemicals plants. While our chemicals facilities must be shut down for up to 30 days for maintenance, our polyolefins facilities may be shut down for shorter periods because these facilities are less complex to operate and maintain than our chemicals plants. Similarly, plants of our USA and Europe Unit attempt to coordinate their maintenance cycles with the routines of their largest suppliers.

We have a regular maintenance program for each of our vinyls plants. Our Camaçari and Alagoas PVC plants are generally shut down for 15 to 20 days every two years to allow for regular inspection and maintenance. Our caustic soda and chlorine plant in Alagoas shuts down once a year for three days of maintenance in different parts of the plant. Our caustic soda and chlorine plant in Camaçari does not require prolonged maintenance shutdowns and is shut down for two or three days each year.

Environmental Regulation

We, like other petrochemical producers, are subject to stringent federal, state and local environmental laws and regulations concerning human health, the handling and disposal of solid and hazardous wastes and discharges of pollutants into the air and water. Petrochemical producers are sometimes subject to unfavorable market perceptions as a result of the environmental impact of their business, which can have an adverse effect on their results of operations.

Our consolidated annual expenditures on environmental control were R\$353.3 million in 2018, R\$330.1 million in 2017 and R\$427.1 million in 2016, which included investments, waste and wastewater treatment, emissions management, environment licenses, environmental liabilities and other environmental expenditures.

Costs and capital expenditures relating to environmental, health or safety matters are subject to evolving regulatory requirements and will depend on the timing of the promulgation and enforcement of specific standards which impose the requirements.

Compliance with Environmental Laws in Brazil

The Brazilian government enacted an Environmental Crimes Law in 1998 that imposes criminal penalties on corporations and individuals causing environmental damage. Corporations found to be polluting can be fined up to R\$50.0 million, have their operations suspended, be prohibited from government contracting, be required to repair damage that they cause and lose certain tax benefits and incentives. Executive officers, directors and other individuals may be imprisoned for up to five years for environmental violations.

Our operations are in compliance in all material respects with applicable Brazilian environmental laws and regulations currently in effect. Some environmental studies that we have commissioned have indicated instances of environmental contamination at certain of our plants. In addition, we and certain of our executive officers have received notices from time to time related to minor environmental violations and are or have been subject to investigations or legal proceedings with respect to certain alleged environmental violations. These environmental issues, and any future environmental issues that may arise, could subject us to fines or other civil or criminal penalties imposed by Brazilian authorities.

Operating Permits

Under Brazilian federal and state environmental laws and regulations, we are required to obtain operating permits for our manufacturing facilities. If any of our environmental licenses and permits lapse or are not renewed or if we fail to obtain any required environmental licenses and permits, we may be subject to fines ranging from R\$500 to R\$50.0 million, and the Brazilian government may partially or totally suspend our activities and impose civil and criminal sanctions on us.

Each State in which we operate has its own environmental standards and state authorities in each state have issued operating permits that must be renewed periodically. Additionally, all projects for the installation and operation of industrial facilities in the Northeastern Complex, Southern Complex, São Paulo Complex and Rio de Janeiro Complex are subject to approval by various environmental protection agencies, which must approve installed projects prior to their commencement of operations and must renew such approval periodically thereafter. State authorities have issued operating permits for all of our plants, as follows: the Northeastern Complex (State of Bahia); Southern Complex (State of Rio Grande do Sul), São Paulo Complex and Cubatão, Santo André, Mauá and Paulínia plants (State of São Paulo), Rio de Janeiro Complex (State of Rio de Janeiro) and our Alagoas plants (State of Alagoas). We are in possession of all necessary permits, and we have a management system in place assuring that the permits which will expire are submitted for renovation in a timely manner.

Industrial Waste

Companhia Riograndense de Saneamento, or Corsan, a state-owned sanitation company, operates an integrated system for liquid effluents treatment, or Sitel, in the Southern Complex. Sitel treats wastewater generated by us and the other petrochemical producers at the Southern Complex at a liquid effluents treatment station located in the Southern Complex. This treatment station also includes a system for the collection of contaminated wastewater and disposal after treatment. We treat wastewater generated by us at the Rio de Janeiro Complex at a liquid effluents treatment station located in the Rio de Janeiro Complex. This treatment station also includes a system for the collection and disposal of contaminated wastewater. Hazardous solid waste is co-processed in cement kilns or incinerated and other kinds of solid waste are disposed of in landfills at facilities approved by us.

We treat wastewater generated by us at the São Paulo Complex at a liquid effluents treatment station located in the São Paulo Complex. This treatment station also includes a system for the collection and disposal of contaminated wastewater. Hazardous waste generated at the São Paulo Complex is incinerated in cement kilns and other kinds of solid waste are disposed of in landfills.

In our Bahia facilities, all wastewater is transported to our wastewater treatment facility. Solid waste is incinerated in cement kilns or incinerators and the remaining waste is disposed of in landfills.

In our Alagoas Complex, organochlorines waste is incinerated, producing steam and wastewater. All wastewater is treated at a treatment station located in the complex. Solid waste is separated and disposed of in landfills.

Additionally, we have a series of recycling programs that include recycling of solid waste and wastewater. We recycle or reuse 38.3% of the solid waste generated by our facilities and 26.9% of the water used in our production processes.

Asbestos

Our largest chlor-alkali plant located in Alagoas previously used asbestos cell technology to produce chlorine and caustic soda. Such technology can no longer be used in new petrochemical production facilities under Brazilian legislation and the global trend has been to ban this technology. As a result, in November 2016, we concluded our shift to newer diaphragm technology and banned asbestos technology from our plants.

Compliance with Environmental Laws in the United States

Our operations in the United States are subject to U.S. federal, state and local laws and regulations governing the discharge of effluents and emissions into the environment; the generation, storage, handling, management, transportation and disposal of hazardous waste, industrial waste and other types of waste; the use, storage, and handling of various types of products and materials; and the protection of human health, safety and the environment. In many instances, specific permits must be obtained for particular types of operations, emissions or discharges. For example, our facilities in Texas, Pennsylvania and West Virginia are required to maintain various permits relating to air quality and treatment of industrial wastewater, and to comply with regulatory requirements relating to waste management. We are in possession of necessary permits to operate our facilities. We believe that our operations in the United States are in compliance in all material respects with applicable U.S. federal, state and local environmental laws and regulations currently in effect.

As with the U.S. petrochemical industry generally, compliance with existing and anticipated laws and regulations increases the overall cost of operating our U.S. plants, including operating costs and capital costs to construct, maintain and upgrade equipment and facilities. These laws and regulations have required, and are expected to continue to require us to make, expenditures of both a capital and an expense nature.

The Clean Air Act, which was last amended in 1990, requires the United States Environmental Protection Agency, or the EPA, to set National Ambient Air Quality Standards, or the NAAQS, for pollutants considered harmful to public health and the environment. The Clean Air Act requires periodic review of the science upon which the standards are based and the standards themselves. NAAQS for ozone and fine particulate matter (referred to as PM_{2.5}), promulgated by the EPA have resulted in identification of nonattainment areas throughout the country, including certain areas within Texas, Pennsylvania and West Virginia, where Braskem America operates facilities. As a result of these nonattainment designations by the EPA, state or local air pollution control agencies are required to apply permitting and/or control requirements intended to reduce emissions of ozone precursors (nitrogen oxides and volatile organic compounds), and fine particles (including PM_{2.5} precursors), in order to demonstrate attainment with the applicable NAAQS. Such requirements may include imposition of offset requirements, and could result in enhanced emission control standards. In addition, on August 24, 2016, the EPA finalized requirements for state and local agencies charged with the current PM_{2.5} NAAQS. These requirements could in turn translate into additional state-specific requirements to further reduce allowable emission rates for PM_{2.5} or its precursor pollutants. In October 2015, the EPA lowered the primary and secondary NAAQS for ozone from 0.075 ppm to 0.070 ppm. Such state-specific requirements would become applicable, if at all, following a multi-year process. Regulations implementing this change will likely not be promulgated for several years.

In addition to permitting and/or control requirements that may result from the implementation of the NAAQS at the state or local level, the EPA may promulgate new or revised federal New Source Performance Standards or National Emission Standards for Hazardous Air Pollutants that would apply directly to certain facility operations and may require the installation or upgrade of control equipment in order to satisfy applicable emission limits and/or operating standards under these regulatory programs. The EPA's currently-proposed regulations in this area would not specifically apply to Braskem America's operations.

Additionally, there are various legislative and regulatory measures to address greenhouse gas emissions which are in various stages of review, discussion or implementation by Congress and the EPA. In October 2015, the EPA finalized new regulations (known as the Clean Power Plan) aimed at lowering greenhouse gas emissions from existing, new and reconstructed electric generating units. In February 2016, the Supreme Court stayed implementation of the Clean Power Plan pending judicial review. On October 16, 2017, the EPA proposed repealing the Clean Power Plan, but this proposal has not been finalized. On August 21, 2018, the EPA proposed a replacement to the Clean Power Plan, the Affordable Clean Energy Rule. While it is currently not possible to predict the final impact, if any, that these regulations may have on Braskem America or the U.S. petrochemical industry in general, they could result in increased utility costs to operate our facilities in the United States. In addition, future regulations limiting greenhouse gas emissions of carbon content of products, which target specific industries such as petrochemical manufacturing could adversely affect our ability to conduct Braskem America's business and also may reduce demand for its products. The EPA's currently-proposed regulations in this area would not specifically apply to Braskem America's operations.

Compliance with Environmental Laws in Mexico

Braskem IDESA in Mexico is subject to federal, state and local laws and regulations that govern the discharge of effluents and emissions to the environment; the generation, storage, handling, management, transportation and disposal of hazardous waste, industrial waste and other types of waste; the use, storage and handling of various types of products and materials; and the protection of human health, safety and the environment. Specific permits may be required for certain types of operations.

Ethylene and Aromatic Hydrocarbons Mixture production require permission of the Secretary of Energy and Federal Commission for Sanitary Risks (COFEPRIS) related to risk management and public health. The Mexican legislation regulates the emission of particles, ozone, fixed sources and everything related to GHGs. There are regulations on water, effluent treatments and specific conditions for discharge of the effluent. Mexico operations comply with all federal, state and local environmental laws and regulations.

In Mexico, the Federal Attorney's Office for Federal Environmental Protection (PROFEPA) verifies compliance with the Mexican Regulation and Permits through audits.

Failure to comply with Mexican regulations may lead to economic and administrative penalties, including Operations shutdown in certain cases.

Compliance with Environmental Laws in Germany and the European Union

Our operations in Germany are subject to German federal, state and local laws and regulations governing the discharge of effluents and emissions into the environment and the handling and disposal of industrial waste and otherwise relating to the protection of the environment and waste management. Our operations in Germany are in compliance in all material respects with applicable German federal, state and local environmental laws and regulations currently in effect.

As with the petrochemical industry in the European Union generally, compliance with existing and anticipated German laws and regulations increases the overall cost of operating our European business, including operating costs and capital costs to construct, maintain and upgrade equipment and facilities. These laws and regulations have required, and are expected to continue to require us to make expenditures of both a capital and an expense nature.

At our Schkopau and Wesseling facilities in Germany, we are required to maintain air, radiation, waste water and waste management permits. We are in possession of all necessary permits.

Furthermore, our Wesseling and Schkopau facilities in Germany are subject to existing European GHG regulations and a cap and trade program relating to emissions. We have purchased sufficient carbon dioxide emissions permits for its operations until 2019/2020, provided it operates under normal business conditions. We will purchase any additional permits that may be required on the emission trade market. We are not aware of any new environmental regulations that would affect our European operations. Accordingly, we cannot estimate the potential financial impact of any future European Union or German environmental regulations.

Sustainability

In April 2018, our board of directors approved our policy on global sustainable development. Its objective is to encourage economic growth, environmental preservation and social justice by developing sustainable solutions related to chemical and plastic production. In connection with these goals, we have developed a three-pronged approach: (1) seek and develop sustainable sources and operations, (2) develop and deliver a portfolio of sustainable products and services, and (3) work with our clients to offer sustainable solutions that benefit society as a whole.

Circular Economy

Consistent with our purpose of contributing to the transition from a linear economy into a circular economy, effectively demonstrating our commitment to sustainable development, we announced our global positioning statement titled “Braskem’s Positioning in the Circular Economy.”

Through this positioning statement, we assumed a voluntary commitment to adopt best practices at all of our industrial units to further reduce the loss of pellets (i.e., granulated raw material used to make plastic products, a form in which most of our products are sold) in our industrial processes by 2020, and undertook industry commitments to work towards having all plastic packaging reused, recycled or recovered by 2040.

In the statement, we also announced eight key global initiatives to achieve these targets, which are: (i) partnerships with clients and value chain to develop new products that increase efficiency, recycling and reuse; (ii) more investments in renewable products; (iii) development and support of new technologies and the recycling chain; (iv) programs to engage consumers in conscientious consumerism, proper disposal and recycling; (v) use of science tools to select the most sustainable options; (vi) adoption of recycling indicators for plastic packaging; (vii) partnerships to understand, prevent and solve the problem of marine debris; and (viii) incentives for policies to improve solid waste management.

Property, Plant and Equipment

Our properties consist primarily of petrochemical production facilities in:

- Camaçari, in the State of Bahia;
- Triunfo, in the State of Rio Grande do Sul;
- Duque de Caxias, in the State of Rio de Janeiro;
- São Paulo, Paulínia, Cubatão, Santo André and Mauá, in the State of São Paulo;
- Maceió and Marechal Deodoro, in the State of Alagoas;
- the United States, in La Porte, Freeport and Seadrift, Texas; Marcus Hook, in Pennsylvania; Neal and West Virginia;
- Germany, in Schkopau and Wesseling; and
- Coatzacoalcos, in Mexico.

For more information, see note 12 to our audited consolidated financial statements included elsewhere in this annual report.

Our principal executive offices are located in São Paulo in the State of São Paulo, and we have an administrative support office in the City of Salvador in the State of Bahia. We also have equity interests in investments located in other parts of the country. We own all our production facilities, but we generally rent our administrative offices.

The following table sets forth our properties as of December 31, 2018 by location of facilities, products produced and size of plant.

Type of Product or Service	Location of Facilities	Size of Plant (in hectares) ⁽¹⁾
Chemicals	Triunfo	152.8
Chemicals	Santo André	74.1
Chemicals	Camaçari	65.5
Chemicals	Duque de Caxias	53.0
Chemicals	Mexico	23.6
Polypropylene	Paulínia	39.7
Polyethylene	Triunfo	30.5
Polyethylene	Camaçari	24.5
Polyethylene	Cubatão	17.6
Polyethylene	Santo André	15.8
Polyethylene	Duque de Caxias	15.0
Polyethylene	Mexico	14.9
Polypropylene	La Porte, Texas	87.0
Polypropylene	Neal, West Virginia	27.1
Polypropylene	Mauá	15.8
Polypropylene	Duque de Caxias	15.0
Polypropylene	Camaçari	13.2
Polypropylene	Triunfo	10.0
Polypropylene	Marcus Hook, Pennsylvania	6.9
Polypropylene	Freeport, Texas	8.9
Polypropylene	Seadrift, Texas	2.5
Polypropylene	Schkopau, Germany	3.7
Polypropylene	Wesseling, Germany	26.0
Caustic soda/chlorine	Maceió	15.0
PVC/caustic soda/chlorine	Camaçari	12.6
PVC	Marechal Deodoro	186.7
Distribution Center	Vila Prudente/Capuava	3.2

(1) One hectare equals 10,000 square meters.

We believe that all of our production facilities are in good operating condition. As of December 31, 2018, the consolidated net book value of our property, plant and equipment was R\$31,759.9 million.

The following properties are mortgaged or pledged to secure certain of our financial transactions: (1) our chemicals plant and our polyethylene plant located in the Southern Complex; (2) our chlor-alkali plant and PVC plant located in the Northeastern Complex; (3) our chemicals plant and our polyethylene plant located in São Paulo Complex; (4) our chlor-alkali plant and PVC plant located in the State of Alagoas; (5) our chemicals plant, our polyethylene plant and our polypropylene plant located in the Rio de Janeiro Complex; and (6) our chemical plant and our polyethylene plants located in Mexico.

Insurance

In addition to the policies described below for our Brazilian and international operations, we maintain other insurance policies for specific risks, including general and product liability, directors and officers liability coverage, workers' compensation, marine cargo and charterer's liability insurance, among others.

We believe that our insurance coverage is reasonable in amount and consistent with industry standards applicable to chemical companies operating globally.

Operations in Brazil, Mexico, the United States and Germany

We carry insurance for all our plants against material damage and consequent business interruption through comprehensive "all risk" insurance policies.

The "all risks" insurance program for our plants provides for a total replacement value of US\$29.5 billion for property damage. This insurance program is underwritten through separate policies in Brazil, Mexico, the United States and Germany by large insurance companies. The leading insurers are Mapfre (rating S&P BBB+), Inbursa (rating S&P AAA) and FM Global (rating S&P A+). These policies are valid until April 2020.

Set forth is a table with additional information related to our all risk insurance policies.

Policy / Region US\$ bn	Value at risk - Property Damage	Combined Property Damage and Business Interruption Limit	Comments
Brazil	26.4	3.4	-
Mexico ⁽¹⁾	6.1	2.9	-
USA and Germany	2.0	0.5	Limit increased from US\$330 million to US\$500 million;

(1) Includes coverage for acts of terrorism.

Our policies provide coverage for losses that arise from accidents caused by or resulting from fire, explosion and machinery breakdown, among others, and consequential business interruption, with maximum indemnity periods ranging from 12 to 33 months, depending on the plant and/or coverage.

As part of our program, we also have general and products liability insurances for our operations, which cover losses for damages to third parties caused by our operations and products, and include sudden environmental damage caused by pollution. In the United States, Germany and Mexico, Braskem has additional coverage for environmental liabilities and remediation activities such as clean-up costs. These policies are capped at US\$50 million for Mexico and US\$25 million for the United States and Germany (coverage is included in the general and umbrella liability policies).

New projects can be covered for Construction/Erection All Risks under the existing Property policies or through a standalone project-specific policy.

We have relevant exposure to operational risks, and our insurance policy requires our insurance coverage to be contracted through a complex insurance program involving multiple insurers and reinsurers in the commercial market, which have limited and variable capacity to offer insurance policies over time. In order to seek alternatives for the composition of hedges, the possibility of transferring operational risks through the mutual insurer "OIL" was identified. OIL is the global leader in the energy sector, including oil and gas, refining, chemical and petrochemicals, electric power and mining, and holds a total of US\$3 trillion in insured assets and has a portfolio of selected participants. In addition to providing a stable capacity to Braskem, OIL has a structure in which there is reciprocal cooperation among the insured companies participating in a known risk environment, in addition to a lower administrative cost compared to the commercial insurance market, providing less volatile and potentially more competitive premiums.

Compliance

We have adopted a Policy on Compliance in Acting Ethically with Integrity and Transparency, and several internal policies designed to guide our management, employees and counterparties and reinforce our principles and rules for ethical behavior and professional conduct. We maintain an Ethics Line managed by a third party available for employees and non-employees. Every whistleblower complaint is investigated and submitted for evaluation by our Ethics Committee.

As of December 31, 2018, we identified a material weakness in our control environment as we had an insufficient complement of resources with an appropriate level of knowledge, expertise and skills commensurate with our financial reporting requirements in certain areas. This resulted in a material weakness in our risk assessment as we did not have the necessary resources to effectively implement and execute our processes and controls over risk assessment. Additionally, we had a number of ineffective controls that also indicated that we had material weaknesses in our information and communication and monitoring components of internal control over financial reporting. These material weaknesses resulted in or were as a result of the following control deficiencies that were material weaknesses or aggregated to material weaknesses: (i) ineffective design and operation of general information technology controls (GITCs) related to user access and program change-management over all IT operating systems, databases and applications that support our financial reporting processes, which resulted in business process controls that are dependent on the affected IT systems also being considered ineffective because they could have been adversely impacted; (ii) ineffective design of controls over the purchase of raw materials; (iii) ineffective design of controls over the purchase of and payment for legal services; (iv) ineffective design and operation of controls over the provision for legal contingencies; and (v) ineffective design and operation of controls within the financial reporting process covering the analysis of complex and unusual transactions and the preparation and review of the financial statements, including the technical application of generally accepted accounting principles and applicability of required disclosures. In one instance, we did not fully evaluate an agreement signed with the authorities in Brazil that led to an improper tax deduction under the Plea Agreement signed in 2016 with the U.S. authorities. See "Item 15. Controls and Procedures". Our management is actively engaged on the development and implementation of remediation efforts to address the material weaknesses described above.

In addition, we have implemented and improved procedures and control activities, which allowed us to resolve certain material weaknesses described in our 2017 annual report on Form 20-F, including: (i) remediation efforts related to control environment – tone at the top and appointment of Board members; (ii) remediation efforts related to anti-corruption compliance program and controls; (iii) remediation efforts related to controls related to long-term debt; (iv) remediation efforts related to Braskem America; (v) controls over the purchase of raw materials; (vi) controls over purchases and payments of legal services; (vii) controls over legal contingencies; (viii) controls over the evaluation of significant unusual transactions; and (ix) controls over the preparation and review of the financial statements. We have implemented these remedial steps and successfully tested the related controls. Therefore, as of December 31, 2018, we have concluded that most of material weaknesses described in our annual report on Form 20-F for the year ended December 31, 2017 have been remediated. See “Item 15. Controls and Procedures.”

ITEM 4A. UNRESOLVED STAFF COMMENTS

Not Applicable.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

The following discussion of our financial condition and results of operations should be read in conjunction with our audited consolidated financial statements as of December 31, 2018 and 2017 and for the three years ended December 31, 2018, included in this annual report, as well as with the information presented under “Presentation of Financial and Other Information” and “Item 3. Key Information—Selected Financial and Other Information.”

The following discussion contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those discussed in the forward-looking statements as a result of various factors, including those set forth in “Cautionary Statement with Respect to Forward-Looking Statements” and “Item 3. Key Information—Risk Factors.”

Overview

Our results of operations for the years ended December 31, 2018, 2017 and 2016 have been influenced, and our results of operations will continue to be influenced, by a variety of factors, including:

- Brazil’s GDP, which expanded 1.1% in 2018, as compared to 1.0% in 2017, and a contraction of 3.6% in 2016, which affects the demand for our products and, consequently, our sales volume;
- the U.S. GDP, which expanded 2.9% in 2018, as compared to 2.2% in 2017 and 1.6% in 2016, which affects the demand for our products and, consequently, our sales volume;
- Europe’s GDP, which expanded 2.2% in 2018, as compared to 2.5% in 2017 and 1.7% in 2016, which affects the demand for our products and, consequently, our sales volume;
- Mexico’s GDP, which expanded 2.2% in 2018, as compared to 2.0% in 2017 and 2.9% in 2016, which affects the demand for our products and, consequently, our sales volume;
- the expansion of global production capacity for the products that we sell and the growth rate of the global economy;
- the international market price of naphtha, our principal raw material, expressed in U.S. dollars, which has a significant impact on the cost of producing our products and which has experienced volatility during the three years ended December 31, 2018, fluctuating in a range between US\$463 and US\$676 per ton during 2018, US\$400 and US\$571 per ton during 2017, and US\$293 and US\$462 per ton during 2016;
- the average domestic prices of our principal products expressed in U.S. dollars, which fluctuate to a significant extent based on international prices for these products and which also have a high correlation to our raw material costs;

- our crackers' capacity utilization rates, which decreased in 2018 as a result of the truck drivers' strike that took place in May; the incident involving the chlor-alkali plant in Alagoas; the blackout that affected Brazil's Northeast plants in March; and lower demand in the fourth quarter of 2018.
- government industrial policy;
- in line with our strategy and capacity to export any surplus not absorbed by Brazil's domestic market; sales outside Brazil, grew to R\$26.2 billion in 2018, compared to R\$23.1 billion in 2017 and R\$23.0 billion in 2016;
- changes in the *real*/U.S. dollar exchange rate, including the depreciation of the *real* against the U.S. dollar by 14.5% in 2018, as compared to an appreciation of 8.3% in 2017 and 16.5% in 2016.
- the level of our outstanding indebtedness, fluctuations in benchmark interest rates in Brazil, which affect our interest expenses on our *real*-denominated floating rate debt and financial income on our cash and cash equivalents, and fluctuations in the LIBOR rate, which affect our interest expenses on our U.S. dollar-denominated floating rate debt;
- the inflation rate in Brazil, which was 7.1% in 2018, negative 0.42% in 2017 and 7.2% in 2016, in each case, as measured by the IGP-DI, and the effects of inflation on our operating expenses denominated in *reais* and our *real*-denominated debt that is indexed to take into account the effects of inflation or bears interest at rates that are partially adjusted for inflation; and
- the tax policies and tax obligations.

Our financial condition and liquidity is influenced by various factors, including:

- our ability to generate cash flows from our operations and our liquidity;
- prevailing Brazilian and international interest rates and movements in exchange rates, which affect our debt service requirements;
- our ability to continue to be able to borrow funds from international and Brazilian financial institutions and to sell our debt securities in the international and Brazilian securities markets, which is influenced by a number of factors discussed below;
- our capital expenditure requirements, which consist primarily of maintenance of our operating facilities, expansion of our production capacity and research and development activities; and
- the requirement under Brazilian Corporations law and our by-laws that we pay dividends on an annual basis in an amount equal to at least 25% of our adjusted net income, unless our board of directors deems it inconsistent with our financial position and the decision of our board of directors is ratified by our shareholders.

Financial Presentation and Accounting Policies

Presentation of Financial Statements

We have prepared our audited consolidated financial statements as of December 31, 2018 and 2017 and for each of the years ended December 31, 2018, 2017 and 2016 in accordance with IFRS, as issued by the IASB.

The consolidated financial statements presented in this 20-F are not equivalent to the statutory financial statements of the Company as issued under the requirements of the Brazilian jurisdiction. The date of authorization for issue of these consolidated financial statements is different from the date when the consolidated financial statements were issued in Brazil, there are differences due to adjusting and non adjusting events after the reporting period, under IAS 10 – Events after the Reporting Period.

The statutory financial statements (parent company and consolidated) for the year ended December 31, 2018 were authorized for issue on March 11, 2019, in accordance with the accounting practices adopted in Brazil and the International Financial Reporting Standards ("IFRS"), filed with the Brazilian Securities and Exchange Commission (Comissão de Valores Mobiliários – "CVM") on March 13, 2019.

Operating Segments and Presentation of Segment Financial Data

We believe that our organizational structure as of December 31, 2018 reflected our business activities and corresponded to our principal products and production processes. As of December 31, 2018, we had five production business units and reported our results by five corresponding segments to reflect this organizational structure:

- *Chemicals (formerly Basic Petrochemicals)*—This segment includes (1) our production and sale of chemicals at the Northeastern Complex, the Southern Complex, the São Paulo Complex and the Rio de Janeiro Complex, and (2) our supply of utilities produced at these complexes to second generation producers, including some producers owned or controlled by us.
- *Polyolefins*—This segment includes the production in Brazil and sale of polyethylene, including the production of “green polyethylene” from renewable resources, and polypropylene by us.
- *USA and Europe*—This segment includes the operations of our five polypropylene plants in the United States and the operations of our two polypropylene plants in Germany.
- *Mexico*—This segment includes the operations of our polyethylene plants in the Mexican state of Veracruz.
- *Vinyls*—This segment includes our production and sale of PVC and caustic soda.

Significant Accounting Policies

The presentation of our financial condition and results of operations in conformity with IFRS requires us to make certain judgments and estimates regarding the effects of matters that are inherently uncertain and that impact the carrying value of our assets and liabilities. Actual results could differ from these estimates. In order to provide an understanding about how we form our judgments and estimates about certain future events, including the variables and assumptions underlying the estimates, and the sensitivity of those judgments to different variables and conditions, we have included comments related to the following significant accounting policies under IFRS:

- *Impairment of property, plant and equipment and non-financial assets.* Our goodwill balance as of December 31, 2018 was R\$2,058.9 million. The recoverable value of property, plant and equipment and other noncurrent assets including intangible assets (other than goodwill based on expected future profitability) are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. The recoverable value of goodwill based on expected future profitability is reviewed for impairment on an annual basis. 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 (1) an asset’s fair value less costs to sell; and (2) its value in use. For the purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash inflows that are cash-generating units (CGU). Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date. Our impairment tests of goodwill consider the operations at (1) the Southern Complex in the Chemicals Unit, (2) the Polyolefins Unit and (3) the Vinyls Unit.

In November 2018, Braskem conducted an impairment test of the goodwill using the value in use method (discounted cash flow) and did not identify any loss, as shown in the table below:

	Allocated goodwill	Discounted Cash flow (DCF)	Book value (with goodwill and work capital) ⁽¹⁾	CF/Book value
	(in thousands of Reals)			
CGU and operating segments				
CGU - UNIB - South	926,854	9,628,209	2,479,778	3.9
Operating segment - Polyolefins	939,667	21,750,937	8,189,204	2.7
Operating segment - Vinyls	192,353	4,617,326	2,763,882	1.7

(1) The carrying amount includes, in addition to goodwill, tangible and intangible assets with defined useful lives and working capital, defined as assets (accounts receivable, inventories, prepaid expenses and other receivables) minus liabilities (accounts payable, salaries and payroll charges, advances for customers and other liabilities) from each operating segment.

The assumptions adopted to determine the discounted cash flow are described in note 3.4(b) to our audited consolidated financial statements. The WACC used was 11.72% p.a. and the inflation rate considered for perpetuity was 3.7%.

Given the potential impact on cash flows of the “discount rate” and “perpetuity”, Braskem conducted a sensitivity analysis based on changes in these variables, with cash flows shown in the table below:

	+0.5% on discount rate	-0.5% on perpetuity
	(In thousands of Reais)	
CGU and operating segments		
CGU - UNIB - South	9,099,954	9,249,202
Operating segment - Polyolefins	20,455,434	20,798,767
Operating segment - Vinyls	4,351,801	4,424,347

The main assumptions used for projecting cash flows are related to the projection of macroeconomic indicators, international prices and global and local demand in the countries where Braskem has operational production plants.

Macroeconomic indicators are provided by a widely recognized consulting firm and include items such as: exchange, inflation and interest rates, among others.

Prices for key petrochemical products are obtained from projections made by IHS. However, final prices take into consideration meetings of specific internal committees and the knowledge of our experts in preparing the benchmarks for each market. In most cases, for a projected period, the internally projected prices go through a review in relation to those originally projected by [the international consulting firm].

Similar to prices, global demand also is contracted from a specific consulting firm and, in the markets where we operate more directly, they consider additional variables for the composition of local demand.

In the Vinyls Unit, whose main product is PVC, the projected cash flow exceeded the book value of assets by 67%. The main variables impacting this business are related to fluctuations in the exchange rate, international spreads (especially those related to the prices of naphtha, PVC and Caustic Soda) and Brazilian demand. Effective deviations of these important variables from our projections could lead to cash flows being lower than the value of the assets.

We did not record any impairment charges in the years ended December 31, 2018, 2017 and 2016. As of December 31, 2018, we do not believe that any of our cash generating units were at risk of impairment.

- *Valuation of derivative instruments.* The volatility of the foreign exchange and interest rate markets in Brazil has led to significant changes in future rates and interest rates over short periods of time, prompting significant changes to the market value of swaps and other financial instruments. We use swaps, non-deliverable forwards and other derivative instruments to manage risks from changes in foreign exchange, interest rates and commodities prices. We record these instruments at their estimated fair market value based on market quotations for similar instruments, which take into account reliable market curves for interest rates, foreign exchange rates and commodities prices.
- *Deferred Income Tax and Social Contribution.* The recognition and the amount of deferred taxes assets depend on the generation of future taxable income, which requires the use of an estimate related to our future performance. These estimates are included in our business plan and the main variable projections are made based on the recommendation of specialized external consulting firms and on our historical performance and strategic planning. We recognize deferred income tax and social contribution assets and liabilities based on the differences between the financial statement carrying amounts and the tax basis of assets and liabilities using prevailing tax rates. We regularly review any deferred income tax and social contribution assets for recoverability and reduce their carrying value based on our historical taxable income, projected future taxable income and the expected timing of any reversals of existing temporary differences. If one of our subsidiaries operates at a loss or is unable to generate sufficient future taxable income, or if there is a material change in the actual effective tax rates or the time period within which the underlying temporary differences become taxable or deductible, we evaluate the need to reduce partially or completely the carrying value of our deferred income tax and social contribution assets.
- *Provisions and contingencies.* We are currently involved in numerous judicial and administrative proceedings, as described under “Item 8. Financial Information—Legal Proceedings,” and in notes 22 and 23 to our audited consolidated financial statements. We believe that the estimates related to the outcome of the proceedings and the possibility of future disbursements may change in view of the following: (i) higher courts may decide in a similar case involving another company, adopting a final interpretation of the matter and, consequently, leading to the early resolution of our proceedings; and (ii) programs encouraging the payment of the debts implemented in Brazil at the federal and state levels, in favorable conditions that may lead to a disbursement that is lower than that which is recognized in our provisions or lower than the value attributed to the proceeding. We record accrued liabilities for proceedings that we deem probable of creating an adverse effect on our results of operations or financial condition. For the main contingencies that we deem possible of creating an adverse effect on our results of operations or financial condition, we disclose relevant information regarding the proceedings in accordance with IAS 37. Additionally, the contingencies assumed in a business combination for which an unfavorable outcome is considered possible are recognized at their fair value on the acquisition date. We believe that these judicial and administrative proceedings are properly recognized or disclosed in our financial statements.

- *Useful life of long-lived assets.* We recognize the depreciation of long-lived assets based on their estimated useful life, which in turn is based on the information of manufacturers of machinery and equipment, level of the plants' operations, quality of preventive and corrective maintenance and prospects of technological assets obsolescence. However, the actual useful life can vary based on the current state of technologies at each unit. The useful life of the long-lived asset also affects the impairment testing. The determination of such impairment involves judgments and estimates as to whether the asset is providing an adequate return in relation to its book value. We do not believe that there are any indications of material change in the estimates and assumptions used in the calculation or the impairment losses of long-lived assets. However, if the actual results are not consistent with the estimates and assumptions used in the future cash flows estimating the fair value of the assets, we could be exposed to potentially significant losses.

Changes in key accounting policies

We adopted "IFRS 15 – Revenue from Contracts with Customers" and "IFRS 9 – Financial Instruments" as of January 1, 2018.

Due to the transition methods chosen by us to apply these accounting standards, the comparative information in our audited consolidated financial statements has not been restated to reflect the requirements of the new standards.

The effects from the adoption of these standards are mainly due to the following:

- change in the impairment calculation methodology in accordance with IFRS 9 (note 7 to our audited consolidated financial statements);
- presentation of the variable considerations (bonuses) deducted directly from sales revenue (note 27 to our audited consolidated financial statements);
- change in the classification and measurement of financial assets (note 2.3(a.2.i) to our audited consolidated financial statements); and
- change in the accounting of operations involving dollar put and call options designated for hedge accounting (note 19.3.1(a.i) to our audited consolidated financial statements).

IFRS 15 – Revenue from Contracts with Customers

IFRS 15 introduced a comprehensive framework to determine if and when revenue must be recognized, and how revenue is measured. IFRS 15 replaces the standard IAS 18 – Revenue.

We adopted IFRS 15 using the cumulative effect method, with initial application of the standard on the initial date (i.e., January 1, 2018). As a result, we did not apply the requirements of IFRS 15 to the comparative period reported (2017).

We did not incur significant changes at the time or when measuring its sales revenue for the performance obligations identified, which are:

- delivery of goods sold – the performance obligation ends when the ownership of the good is transferred to the client. For us, there was no difference between IAS 18 – Revenue and IFRS 15 upon recognition of the revenue associated with this performance obligation; and
- contracting freight to deliver goods – the performance obligation of the Company to contract freight to deliver the goods sold ends when the service is completed. We did not change the time of recognition, and continue to recognize at the end of the delivery of goods sold. We consider immaterial on its profit and loss any change in the time of recognition the performance obligation associated with freight.

We adopt the practice of contracting with certain clients bonuses for achieving sales targets. For clients that we expect will meet such targets and accordingly will receive a bonus, the amounts due are accrued on a monthly basis.

We consider commercial discounts included on client invoices as part of the fair value of the revenue recognized, according to that established the accounting standard (IAS 18) applicable until December 31, 2017. Therefore, the commercial discounts included on client invoices did not result in any changes as a result of adoption or measurement of its accounting recognition in accordance with IFRS 15.

IFRS 9 – Financial Instruments

IFRS 9 – Financial Instruments established requirements for recognition and measurement of financial assets, liabilities and some contracts to buy or sell non-financial items. This standard replaced IAS 39 – Financial Instruments: Recognition and Measurement.

Classification – Financial Assets

IFRS 9 introduced a new approach for the classification and measurement of financial assets that reflects the business model in which assets are managed and its cash flow characteristics.

IFRS 9 introduced three main classification categories for financial assets: measured at amortized cost (“AC”), at fair value through other comprehensive income (“FVTOCI”) and at fair value through profit and loss (“FVTPL”). The standard eliminates IAS 39 classifications of held-to-maturity, loans and receivables and available-for-sale. IFRS 9 requires the classification of financial assets based on the business model of the entity for managing their financial assets.

Pursuant to IFRS 9, embedded derivatives in contracts where the host is a financial asset under the standard’s scope are never separated. Instead, the hybrid financial instrument is assessed in its entirety for classification.

Based on its assessment, we did not have a relevant impact on the accounting of its financial investments resulting from new requirements of IFRS9. However, because some trade accounts receivables are sold to financial institutions and derecognized before the maturity date (note 7 to our audited consolidated financial statements), we classified part of our trade accounts receivables that could be sold at fair value under FVTOCI. The effect of this new classification on January 1, 2018 was R\$0.6 million.

The following table and corresponding notes explain the original measurement categories, in accordance with IAS 39 and the new categories of measurement in accordance with IFRS 9, for each class of financial asset on January 1, 2018.

The effect from the adoption of IFRS 9 on the accounting balance of financial assets as of January 1, 2018 is related to the following:

- new impairment calculation methodology; and
- calculation of the fair value for receivables that, in accordance with our business model, may be sold before their maturities.

	Classification by category		Book value	
	CPC 38 / IAS 39	CPC 48 / IFRS 9	CPC 38 / IAS 39	CPC 48 / IFRS 9
Cash and cash equivalents				
Cash and banks	Loans and receivables	Amortized cost	1,428,766	1,428,766
Financial investments in Brazil	Loans and receivables	Fair value through profit and loss	1,706,784	1,706,784
Financial investments abroad	Held-for-trading	Fair value through profit and loss	639,543	639,543
			3,775,093	3,775,093
Financial investments				
LFTs and LFs	Held-for-trading	Fair value through profit and loss	1,816,889	1,816,889
Time deposit investments	Loans and receivables	Amortized cost	440,616	440,616
Time deposit investments	Held-for-trading	Fair value through profit and loss	15,764	15,764
Other	Held-for-trading	Fair value through profit and loss	39,739	39,739
			2,313,008	2,313,008
Trade accounts receivable	Loans and receivables	Amortized cost	3,244,851	3,235,463
Trade accounts receivable	Loans and receivables	Fair value through other comprehensive income	73,841	73,240
Derivatives	Financial assets measured at fair value	Fair value through profit and loss	74,378	74,378

Impairment – Financial and Contractual Assets

IFRS 9 replaced the “incurred loss” model from IAS 39 with a prospective model of “expected credit losses.” This change requires a relevant judgment regarding the way in which changes in economic factors affect the expected credit losses, which are determined based on weighted probabilities.

The new expected losses model will apply to financial assets measured at AC or FVTPL, excluding investments in equity instruments and contractual assets.

According to IFRS 9, provisions for expected losses are measured using one of the following bases:

- the 12-month expected credit losses, i.e. expected credit losses from possible default events within 12 months after the reporting date, and whose credit risk does not increase significantly since initial recognition; and
- the full lifetime expected credit losses (expected credit losses that result from all possible default events over the life of the financial instrument). The measurement of these credit losses applies when the credit risk of a financial asset at the reporting date has increased significantly since initial recognition.

Our assessment indicated that the adoption of the expected credit loss model as required by IFRS 9 on January 1, 2018 had the effect of RS9.4 million, net of taxes.

The judgments of how changes in economic factors affect our expected credit losses are determined by stages that can be observed in note 7 to our audited consolidated financial statements.

Hedge Accounting

IFRS 9 requires that we ensure that hedge accounting relationships are aligned with our risk management objectives and strategies, and that a more qualitative and prospective approach is applied to assess hedge effectiveness. IFRS 9 also introduced new requirements for rebalancing hedge relations and prohibits the voluntary discontinuation of hedge accounting.

Upon adopting IFRS 9, we elected to account for changes to fair value of forward points separately, as hedge cost. Therefore, as of January 1, 2018, these changes are recognized in other comprehensive income (loss) and accrued in a hedge cost reserve as a separate component in equity and subsequently accounted for in the same way as the cumulative gains or losses in the cash flow hedge reserve.

The types of hedge accounting relations presently designated by us meet the IFRS 9 requirements and are aligned with our risk management objective and strategy.

Transition

The changes to accounting policies stemming from the adoption of IFRS 9 were applied prospectively, including:

- (i) allowed exemption to not restate comparative information from prior periods due to changes in classification and measurement financial instruments, including expected credit losses;
- (ii) new requirements for hedge accounting;
- (iii) the following assessments were made based on facts and circumstances in place on the adoption date:
 - determination of business model in which the financial asset is held;
 - designation and revoking of prior designations of specific financial assets and liabilities measured at FVTPL.

Principal Factors Affecting Our Results of Operations

Growth of Brazil's GDP and Domestic Demand for Our Products

Our sales in Brazil represented 55.1% of our net sales revenue in the year ended December 31, 2018. We are significantly affected by economic conditions in Brazil, and our results of operations and financial condition have been, and will continue to be, affected by the growth rate of Brazilian GDP because our products are used in the manufacture of a wide range of consumer and industrial products.

The following table sets forth the growth rates of Brazilian GDP and domestic apparent consumption for polyethylene, polypropylene and PVC for the periods presented.

	December 31,				
	2018	2017	2016	2015	2014
Brazilian GDP	1.1%	1.0%	(3.6)%	(3.8)%	0.1%
Brazilian apparent consumption of polyethylene	3.2%	4.8%	(1.3)%	(3.2)%	0.6%
Brazilian apparent consumption of polypropylene	1.9%	5.9%	1.1%	(8.3)%	(2.6)%
Brazilian apparent consumption of PVC	1.4%	(1.9)%	(2.3)%	(16.0)%	(2.3)%

Source: Brazilian government and Tendências Consultoria.

Brazilian GDP growth has fluctuated significantly, and we anticipate that it will likely continue to do so. Our management believes that economic growth in Brazil should positively affect our future net sales revenue and results of operations. However, continued recession or low growth in Brazil would likely reduce our future net sales revenue and have a negative effect on our results of operations.

In 2016, indicators for economic growth in Brazil were weaker than expected, with negative GDP growth for the year, primarily due to lower borrowing as a result of higher levels of debt held by households and businesses. These factors, combined with the persistent bottlenecks contributing to Brazil cost and the prolonged political and institutional crisis, affected the country's economy, which resulted in lower demand for resins in the Brazilian market. As a result, Brazilian consumption volumes of thermoplastic resins declined by 2.3% for PVC and 1.3% for polyethylene.

In 2017 Brazilian economic indicators showed signs of a slow recovery. As a result, Brazilian consumption volumes of thermoplastic resins increased by 5.9% for polypropylene and 4.8% for polyethylene. PVC remained vulnerable to the effects of the contraction of the civil construction sector and consumption volumes declined by 1.9%.

In 2018, Brazil experienced a recovery in economic indicators and, as a result of stronger economic activity, Brazilian consumption volumes of thermoplastic resins increased by 1.9% for polypropylene and by 3.2% for polyethylene. The PVC market grew by 1.4% for the first time after four years of contraction.

Brazil's Macroeconomic Environment

The following table shows data inflation, interest rates and the U.S. dollar exchange rate for and as of the periods indicated.

	December 31,				
	2018	2017	2016	2015	2014
GDP growth / Reduction ⁽¹⁾	1.1%	1.0%	(3.6)%	(3.8)%	0.1%
Inflation (IGP-M) ⁽²⁾	7.5%	(0.42%)	7.2%	10.5%	3.7%
Inflation (IPCA) ⁽³⁾	3.7%	2.9%	6.2%	10.7%	6.4%
CDI rate ⁽⁴⁾	6.40%	6.99%	13.6%	14.1%	11.6%
Appreciation (depreciation) of the <i>real</i> vs. U.S. dollar	17.1%	1.5%	4.3%	41.8%	9.0%
Period-end exchange rate—US\$1.00	R\$3.874	R\$3.308	R\$3.259	R\$3.905	R\$2.656

Sources: Fundação Getúlio Vargas, the Central Bank and Bloomberg

(1) Brazilian GDP according to Sistema IBGE de Recuperação Automática—SIDRA.

(2) Inflation (IGP-M) is the general market price index measured by the Fundação Getúlio Vargas.

(3) Inflation (IPCA) is a broad consumer price index measured by the Instituto Brasileiro de Geografia e Estatística.

(4) The CDI rate is average of inter-bank overnight rates in Brazil (as of the last date of the respective period).

Effects of Fluctuations in Exchange Rates between the Real and the U.S. Dollar

Our results of operations and financial condition have been, and will continue to be, affected by the rate of depreciation or appreciation of the *real* against the U.S. dollar because:

- a substantial portion of our net sales revenue is denominated in or linked to U.S. dollars;
- our costs for some of our raw materials, principally naphtha and certain catalysts required in our production processes, are incurred in U.S. dollars or are linked to U.S. dollars;
- we have operating expenses, and make other expenditures, that are denominated in or linked to U.S. dollars; and
- we have significant amounts of U.S. dollar-denominated liabilities that require us to make principal and interest payments in U.S. dollars.

Virtually all of our sales are of petrochemical products for which there are international market prices expressed in U.S. dollars. We generally attempt to set prices that take into account (1) the international market prices for our petrochemical products, and (2) in Brazil, variations in the *real*/U.S. dollar exchange rate. As a result, although a significant portion of our net sales revenue is denominated in *reais*, substantially all of our products are sold at prices that are based on international market prices that are quoted in U.S. dollars.

Fluctuations in the *real* will affect the cost of naphtha and other U.S. dollar-linked or imported raw materials. The price of naphtha is linked to the U.S. dollar. The pricing formula included in the contract with Petrobras under which we purchase naphtha for our basic petrochemical plants in the Northeastern Complex and in the Southern Complex includes a factor that adjusts the price to reflect the *real*/U.S. dollar exchange rate.

The depreciation of the *real* against the U.S. dollar generally increases the production cost for our products and we generally attempt to increase the Brazilian prices for our products in *reais* (to the extent possible in light of then-prevailing market conditions in Brazil), which may result in reduced sales volumes of our products. To the extent that our price increases are not sufficient to cover the increased costs for raw materials, our operating margin decreases. Conversely, the appreciation of the *real* against the U.S. dollar generally decreases the production cost for our products and we generally decrease the Brazilian prices for our products in *reais*, which may result in increased sales volumes of our products. In periods when the *real*/U.S. dollar exchange rate is highly volatile, there is usually a lag between the time when the U.S. dollar appreciates or depreciates and the time when we are able to pass on increased costs, or are required to pass on reduced costs, in *reais* to our customers in Brazil. These pricing discrepancies decrease when the *real*/U.S. dollar exchange rate is less volatile.

Braskem can enter into financial derivatives transactions to mitigate exchange rate risk associated with exposure to costs in *reais*. Those operations can include call and put options and related strategies. For example, Braskem may apply a hedging strategy referred to as collar, which is composed of the purchase of a put option associated with the simultaneous sale of a call option, where both options having the same maturity. In this case, if the *real* depreciates and the strike price of the call exceeds the exchange rate of the option's exercise date, we may incur significant financial losses. However, since those strategies will be implemented only for non-speculative purposes (in accordance with our financial policy), potential losses on derivatives transactions should be offset by more competitive fixed costs in *reais*.

Our consolidated U.S. dollar-denominated indebtedness represented 97.1% of our outstanding indebtedness as of December 31, 2018. As a result, when the *real* depreciates against the U.S. dollar:

- the interest costs on our U.S. dollar-denominated indebtedness increase in *reais*, which adversely affects our results of operations in *reais*;
- the amount of our U.S. dollar-denominated indebtedness increases in *reais*, and our total liabilities and debt service obligations in *reais* increase; and
- our financial expenses tend to increase as a result of foreign exchange losses that we must record, mitigated by our decision to designate, on May 1, 2013, part of our U.S. dollar-denominated liabilities as a hedge for our future exports.

Appreciation of the *real* against the U.S. dollar has the converse effects.

Export sales and sales by our USA and Europe Unit, which enable us to generate receivables payable in foreign currencies, tend to provide a hedge against a portion of our U.S. dollar-denominated debt service obligations, but they do not fully match them. To further mitigate our exposure to exchange rate risk, we try, where possible, to enter into trade finance loans for our working capital needs, which funding is generally available at a lower cost because it is linked to U.S. dollar exports.

Effects of Brazilian Inflation

Brazilian inflation affects our financial performance by increasing some of our operating expenses denominated in *reais* (and not linked to the U.S. dollar). A significant portion of our cost of products sold, however, are denominated in or linked to the U.S. dollar and are not substantially affected by the Brazilian inflation rate. Some of our *real*-denominated debt is indexed to take into account the effects of inflation. Under this debt, the principal amount generally is adjusted with reference to the General Price Index—Market (*Índice Geral de Preços—Mercado*), an inflation index, so that inflation results in increases in our financial expenses and debt service obligations. In addition, a significant portion of our *real*-denominated debt bears interest at the TLP or the CDI rate, which are partially adjusted for inflation.

Effect of Sales outside Brazil on Our Financial Performance

We have significant production capacity located outside of Brazil from our plants located in the United States, Germany and Mexico.

During the year ended December 31, 2018, 45.2% of our net sales revenue was derived from sales of our products outside Brazil as compared 46.9% during 2017 and 48.3% during 2016. Net sales revenue derived from sales outside Brazil increased by, 13.4% during 2018, compared to 0.9% during 2017, and decreased by 0.3% during 2016.

During the year ended December 31, 2018, sales to customers in countries in the Americas (other than Brazil) accounted for 67.7% of our sales outside Brazil. During the year ended December 31, 2018, sales to customers in Europe accounted for 14.3% of our sales outside Brazil, and sales to customers in East Asia and Other accounted for 18.1% of our sales outside Brazil.

During the past several years, as the relative cost of naphtha and gas as feedstock for petrochemical crackers has diverged, the profit margins of many naphtha crackers, including ours, have decreased as crackers using gas as feedstock have become the low-cost producer in the global markets. However, since gas crackers are unable to produce the co-products and byproducts that naphtha crackers generate, such as propylene, butadiene and BTX products, the prices of these products in the international markets have increased. As a result of the increased prices available for most of these co-products and byproducts, our net sales revenue from export sales of these products increased.

Cyclicality Affecting the Petrochemical Industry

Global consumption of petrochemical products has increased significantly over the past 30 years. Due to this growth in consumption, producers have experienced periods of insufficient capacity for these products. Periods of insufficient capacity, including some due to raw material shortages, have usually resulted in increased capacity utilization rates and international market prices for our products, leading to increased domestic prices and operating margins. These periods have often been followed by periods of capacity additions, which have resulted in declining capacity utilization rates and international selling prices, leading to declining domestic prices and operating margins.

We expect that these cyclical trends in international selling prices and operating margins relating to global capacity shortfalls and additions will likely persist, principally due to the continuing impact of four general factors:

- cyclical trends in general business and economic activity produce swings in demand for petrochemicals;
- during periods of reduced demand, the high fixed cost structure of the capital intensive petrochemicals industry generally leads producers to compete aggressively on price in order to maximize capacity utilization;
- significant capacity additions, whether through plant expansion or construction, can take three to four years to implement and are therefore necessarily based upon estimates of future demand; and
- as competition in petrochemical products is, in most cases, focused on price, being a low-cost producer is critical to improved profitability. This favors producers with larger plants that maximize economies of scale, but construction of plants with high capacity may result in significant increases in capacity that can outstrip demand growth.

A variety of petrochemical companies have announced plans to build significant additional ethylene production capacity, primarily in Asia and North America. According to IHS, 40.6 million tons of annual global ethylene capacity is scheduled to be commissioned between 2019 and 2023, including 17.6 million tons of annual capacity in China and 9.4 million tons of annual capacity in North America. According to IHS, the majority of the new capacity in China will be based on flexible feedstock, with naphtha as the main raw material but also with the option to crack natural gas liquids. The scenario is different in North America, where all the new capacity is ethane-based, with only a small percentage of it being flexible to use another feedstock. Additionally, expansions of ethylene capacity are frequently subject to delays, and we cannot predict when the planned additional capacity will be commissioned, if at all.

International pricing pressures increased in 2011 and 2012 as the price differential between naphtha and gas increased and producers using ethane as raw materials were able to maintain competitive margins at sales prices lower than those required by some naphtha based producers. In 2013, the global economy showed signs of recovery, as reflected by the improved performance of the U.S. economy and indications that the euro zone had begun to emerge from crisis. This scenario helped support a recovery in the profitability of the global petrochemical industry, and the spreads for thermoplastic resins and main basic petrochemicals improved during the year. In 2014, world GDP growth fell short of initial forecasts for the year, reflecting the slower growth in emerging economies and in the euro zone. However, the recovery in the U.S. economy and the good performance of other developed markets, such as the United Kingdom, had a positive impact on the world economy in 2014. In 2015 crude oil prices fell sharply, which reduced the competitive advantage of gas-based producers compared to naphtha-based producers. In 2016 oil prices were kept under pressure and the petrochemical industry continued to benefit from the upcycle, even though prices were down from 2015.

In 2017, the wave of new ethylene capacity that had been expected to start up in North America in the prior year continued to suffer numerous delays. This factor, combined with several unscheduled maintenance turnarounds, especially in the U.S. due to extreme weather conditions, have allowed spreads to maintain a healthy level throughout the year, thus extending the upcycle of the industry.

In 2018, much of the capacity additions that had been delayed in prior years finally became available in the United States. The new plants benefit from a lower cost due to their use of ethane, and therefore have the ability to produce products at a lower price than most of their peers in the global market, which caused international price references to fall throughout the year. On the other hand, oil and naphtha prices were at high levels for most of the year, mainly due to OPEC production cuts and United States sanctions on Iran, which caused spreads to decrease. Additionally, trade disputes between the two largest economies in the world, China and the United States forced American companies to find new regions to market their products, therefore increasing the pressure on prices in these regions.

In the short to mid-term, the global economic slowdown, lower GDP growth in China, and increasingly protective global trade policies may continue to affect demand growth for petrochemical products. Furthermore, there is still a considerable amount of capacity to be started up, mainly in the United States and Asia, and some of the projects may come online faster than anticipated, continuing to put pressure on prices due to increased supply. Oil and naphtha prices may continue to show instability, as the cuts in production in the Middle East, deteriorating economic environment in Venezuela, and the increasing supply from the United States shale oil cause prices to remain volatile. Finally, ethane prices may show an upside due to the lack of fractionators to extract liquids from natural gas and pipelines to connect consumers to producers.

In the long-term, the trend is for the down cycle to soften and eventually revert into an upcycle again, as the industry waits to make decisions on new investments while global trade rebalances and the world absorbs new capacity. Additionally, projects that are announced to start up further into the future have a greater chance of being postponed or cancelled, as the scenario may change, feedstocks may become more or less advantaged, and cash cost curves may shift.

Effects of Fluctuations in Naphtha, Ethane, Propane and Propylene Prices

Fluctuations in the international market price of naphtha have significant effects on our costs of goods sold and the prices that we are able to charge our customers for our first and second generation products. Political instability in the Middle East or similar events that may occur in the future may lead to unpredictable effects on the global economy or the economies of the affected regions. These events have had and may continue to have negative effects on oil production and price volatility, consequently driving naphtha and petrochemical prices higher worldwide.

The price of ethane and propane in the Mont Belvieu region in Texas is used as a reference for our costs of feedstock. Any future developments that affect the U.S. supply/demand balance for natural gas may adversely affect the Mont Belvieu price of natural gas (including ethane, propane and butane) and increase our production costs or decrease the price of petrochemical products. External factors and natural disasters such as hurricanes, harsh winters or industry developments, such as shale gas exploration, may disrupt the supply of natural gas, thereby increasing the cost, which may materially adversely affect our cost of products sold and results of operations.

Effects on Cost of Products Sold

Naphtha is the principal raw material used by our Chemicals Unit and, indirectly, in several of our other business units. Naphtha accounted for 41.8% of our direct and indirect consolidated cost of products sold during 2018.

The cost of naphtha varies in accordance with international market prices, which fluctuate depending upon the supply and demand for oil and other refined petroleum products. We purchase naphtha under a long-term supply contract with Petrobras, and we import naphtha from other suppliers through our terminal at Aratú in the State of Bahia and Petrobras' terminal at Osório in the State of Rio Grande do Sul. The prices that we pay for naphtha under these arrangements, other than our supply contract with Petrobras, are based on the Amsterdam-Rotterdam-Antwerp (ARA) market price for naphtha. As a result, fluctuations in the ARA market price for naphtha have had a direct impact on the cost of our first generation products.

Our contracts with Petrobras provides for naphtha prices based on ARA quotations. The volatility of the quotation of this product in the international market, the *real*/U.S. dollar exchange rate, and the level of carbon disulfide, a contaminant of the naphtha that is delivered, also influence the price of naphtha that we purchase from Petrobras. We believe that these contracts have reduced the exposure of the cost of our first generation products to fluctuations in the ARA market price for naphtha.

The international price of naphtha has fluctuated significantly in the past, and we expect that it will continue to do so in the future. Significant increases in the price of naphtha and, consequently, the cost of producing our products, generally reduce our gross margins and our results of operations to the extent that we are unable to pass all of these increased costs on to our customers, and may result in reduced sales volumes of our products. Conversely, significant decreases in the price of naphtha and, consequently, the cost of producing our products, generally increase our gross margins and our results of operations and may result in increased sales volumes if this lower cost leads us to lower our prices. In periods of high volatility in the U.S. dollar price of naphtha, there is usually a lag between the time that the U.S. dollar price increases or decreases and the time that we are able to pass on increased, or required to pass on reduced, costs to our customers in Brazil. These pricing discrepancies decrease when the U.S. dollar price of naphtha is less volatile.

We do not currently hedge our exposure to changes in the prices of naphtha because a portion of our sales are exports payable in foreign currencies and linked to the international market prices of naphtha and also because the prices of our polyethylene, polypropylene and PVC products sold in Brazil generally reflect changes in the international market prices of these products.

Effects on Prices of Our Products

The prices that we charge for many of our basic petrochemical products are determined by reference to the European contract prices for these products. Because European producers of basic petrochemical products primarily use naphtha as a raw material, changes in the European contract prices are strongly influenced by fluctuations in international market prices for naphtha. To the extent that our prices are based on the European contract prices for our products, the prices that we charge for these products are significantly influenced by international market prices for naphtha.

We negotiate the prices in *reais* for part of our products, principally polyethylene, polypropylene and PVC, on a monthly basis with our domestic customers. We attempt to revise our prices to reflect (1) changes in the international market prices of these products, which tend to fluctuate in tandem with naphtha prices, especially for polyethylene, and (2) the appreciation or depreciation of the *real* against the U.S. dollar. However, during periods of high volatility in international market prices or exchange rates, we are sometimes unable to fully reflect these changes in our prices in a prompt manner.

The international market prices of our petrochemical products have fluctuated significantly, and we believe that they will continue to do so. Volatility of the price of naphtha and the upward trend in the price of petroleum and naphtha have effects on the price competitiveness of our naphtha-based crackers and our resins. Because pricing trends for naphtha and ethane have diverged in recent years to a greater extent than has been the case historically, producers of ethylene and resin products derived from ethane generally have experienced lower unit raw material costs than naphtha-based producers of these products. As a consequence, significant increases in the pricing differential between naphtha and gas increases the competitiveness of products derived from ethane and may result in pricing pressure in the international markets.

Significant increases in the international market prices of our petrochemical products and, consequently, the prices that we are able to charge, generally increase our net sales revenue and our results of operations to the extent that we are able to maintain our operating margins and increased prices do not reduce sales volumes of our products. Conversely, significant decreases in the international prices of our petrochemical products, and, consequently, the prices that we charge, generally reduce our net sales revenue and our results of operations if we are unable to increase our operating margins or these reduced prices do not result in increased sales volumes of our products.

Capacity Utilization

Our operations are capital intensive. Accordingly, to obtain lower unit production costs and maintain adequate operating margins, we seek to maintain a high capacity utilization rate at all of our production facilities.

The table below sets forth capacity utilization rates with respect to the production facilities for some of our principal products for the periods presented.

	Year Ended December 31,		
	2018	2017	2016
Ethylene	91%	94%	92%
Polyethylene	88%	90%	89%
Polypropylene	87%	93%	86%
PVC	76%	86%	84%
Polypropylene USA and Europe	87%	97%	100%
PE Mexico	77%	88%	42%

In 2018, average capacity utilization was affected by the truckers' strike that took place in Brazil in May of 2018; the incident involving the chlor-alkali plant in Alagoas; the blackout that affected Brazil's Northeast plants in March; and lower demand in the fourth quarter of 2018.

In 2017, average capacity utilization was affected by strong operating performance of the crackers, resulting from increased operating efficiency and higher availability of feedstock at the gas-based cracker in Rio de Janeiro.

In 2016, average capacity utilization was affected by (1) strong operating performance of the crackers, resulting from increased operating efficiency and exports of excess volumes not absorbed, and (2) higher availability of feedstock at the gas-based cracker in Rio de Janeiro.

Effects of Brazilian Industrial Policy

The Brazilian government has a significant influence in some sectors of the domestic economy, including the petrochemical sector in which we operate. The Brazilian government has adopted, or is considering adopting, measures to boost the competitiveness of domestic companies, as described below.

Reintegra

In December 2011, the Brazilian government implemented the "Reintegra" program, which is designed to improve the competitiveness of Brazilian manufacturers in the export markets by refunding the federal taxes levied on their export sales. As a result of this incentive, exports of third generation products by Brazilian companies have increased. The original program ended on December 31, 2013. In August 2014, the Brazilian government permanently reinstated Reintegra on a permanent basis and with variable rates that could vary by up to 5% of the revenue of the companies with exports. The refund tax rate was set at 0.1% in August 2014. In October 2014, the Brazilian government restored the rate to 3.0% until the end of 2015. However, in March 2015, the Brazilian federal government again decreased the rate to 1.0% for 2015 and 2016. In October 2015, according to the Decree 8,543, the Brazilian federal government decreased the refund rate to 0.1% as of December 1, 2015, which remained in effect until December 31, 2016. On August 28, 2017, pursuant to Decree 9,148 that amended the Decree 8,543, the Reintegra rate increased to 2% effective, as of January 1, 2017 until December 31, 2018. However, on May 30, 2018, the Brazilian government issued a new decree decreasing the refund rate to 0.1%, effective June 1, 2018.

Pricing and Tariffs

We set prices for ethylene, the principal first generation petrochemical product that we sell to third-party second generation producers, by reference to international market prices. See "Item 4. Information on the Company—Chemicals Unit—Sales and Marketing of Our Chemicals Unit." Prices paid by second generation producers for imported first generation petrochemical products partly reflect transportation and tariff costs. We establish the prices of ethylene by-products, such as butadiene, by reference to several market factors, including the prices paid by second generation producers for imported products. Prices paid for such imports also reflect transportation and tariff costs.

Second generation producers, including us, generally set prices for their petrochemical products by reference to several market factors, including the prices paid by third generation producers for imported products. Prices paid for such imports also reflect transportation and tariff costs.

The Brazilian government has used import tariffs to implement economic policies. As a result, import tariffs imposed on petrochemical products have varied in the past and may vary in the future. Tariffs on imports of first generation petrochemical products are between 0% and 4%, and tariffs on polyethylene, polypropylene and PVC resins are 14.0%.

Imports and exports within the free trade area in South America (*Mercado Comum do Sul*), or Mercosur, which is composed of Argentina, Brazil, Paraguay and Uruguay, have not been subject to tariffs since December 2001. Imports of suspension PVC from Bolivia, Chile, Colombia, Cuba, Ecuador, Peru and Venezuela are not subject to tariffs, due to a number of trade agreements. Imports of suspension PVC from Mexico are subject to reduced tariffs of 11.2%, due to a trade agreement. Imports and exports among Mercosur and Colombia, Ecuador e Venezuela are not subject to tariffs due to a trade agreement since 2005.

Imports of suspension PVC from the U.S. and Mexico have been subject to anti-dumping duties of 16.0% and 18.0%, respectively, that were imposed by the Brazilian Foreign Trade Chamber (*Câmara de Comércio Exterior*), or CAMEX. Since 2008, imports of suspension PVC from China have been also subject to duties of 21.6%, and imports of suspension PVC from South Korea have been subject to duties ranging between 0% and 18.9%, depending on the producer, as a result of the imposition of anti-dumping duties by CAMEX. The duties imposed to imports from U.S. and Mexico are scheduled to expire in 2021, and the duties imposed to imports from China and South Korea are scheduled to expire in 2019.

Additionally, in December 2010, CAMEX imposed an anti-dumping duty of 10.6% on polypropylene imports from the United States. Those measures were renewed in November 2016. In August 2014, the Brazilian government imposed anti-dumping duties on polypropylene imports from South Africa, India and South Korea of 16.0%, 6.4 to 9.9% and 2.4 to 6.3%, respectively. The duties imposed on imports of polypropylene from the United States are scheduled to expire in 2021, and the duties imposed on imports from South Africa, India and South Korea are scheduled to expire in 2019.

In 2018, 25% of Brazilian polyethylene, polypropylene and PVC resins were imported products, which reflected a 12.3% annual increase in the volume of resins imported, due to the higher availability of products from plants that recently entered into operation.

Effect of Level of Indebtedness and Interest Rates

As of December 31, 2018, our total outstanding consolidated indebtedness, net of transaction costs, was R\$25,192.7 million. The level of our indebtedness results in significant financial expenses that are reflected in our statement of operations. Financial expenses consist of interest expense, exchange variations of U.S. dollar- and other foreign currency-denominated debt, foreign exchange losses or gains, and other items as set forth in note 15 to our audited consolidated financial statements. In the year ended December 31, 2018, we recorded total financial expenses of R\$3,007.6 million, of which R\$2,084.8 million consisted of interest expense. In addition, we recorded a loss of R\$2,257.0 million in connection foreign exchange variation on our financial assets and liabilities. The interest rates that we pay depend on a variety of factors, including prevailing Brazilian and international interest rates and our risk assessments, our industry and the Brazilian economy made by our potential lenders, potential purchasers of our debt securities and the rating agencies that assess us and our debt securities.

Effect of Taxes on Our Income

We are subject to a variety of generally applicable federal and state taxes in multiple jurisdictions on our operations and results. We are generally subject to Brazilian federal income tax at 25%, combined with Social Contribution on Net Income (*Contribuição Social Sobre o Lucro Líquido*- CSLL) at 9%, totalizing an effective rate of 34%, which is the standard corporate tax rate in Brazil.

We have available certain federal tax exemptions based upon federal law that offers tax incentives to companies that locate their manufacturing operations in the Brazilian states of Bahia and Alagoas. These exemptions have been granted a 75% reduction and then we are entitled to pay 25% of the statutory income tax rate on the profits arising from the sale of:

- polyethylene manufactured at one of our polyethylene plants in the Northeastern Complex until 2026; and
- polyethylene manufactured at one of our polyethylene plants in the Northeastern Complex and caustic soda, chlorine, ethylene dichloride and PVC produced at our plants in the Northeastern Complex and Alagoas until 2024.

The exemption of 75% of income tax rate combined with CSLL at 9%, entitles us to pay only 44.9% of the 34% standard corporate tax rate on the profits arising from products manufactured at these plants.

Income tax loss carryforwards available for offset in Brazil do not expire. However, the annual offset is limited to 30% of our adjusted net profits. This limit also affects the social contribution on net profit, or CSLL. The deferred income tax and social contributions assets originating from tax loss carryforwards were completely used in 2018. There is no outstanding balance to be used in 2019.

The consolidated amount includes the impact from the different tax rates in countries where foreign subsidiaries are located, as follows:

- Braskem Europe (Germany): 31.18%;
- Braskem America e Braskem America Finance (United States): 21.00%;
- Braskem Argentina (Argentina): 30.00%;
- Braskem Petroquímica Chile (Chile): 27.00 %;
- Braskem Holanda, Braskem Holanda Finance and Braskem Holanda Inc Netherland (The Netherlands): 25.00%; and
- Braskem Idesa, Braskem Idesa Serviços, Braskem México, Braskem México Serviços and Braskem México Sofom (Mexico): 30.00%.

Our export sales are currently exempt from (1) PIS (2) COFINS, a federal value-added tax, (3) the Tax on Industrial Products (*Imposto sobre Produtos Industrializados*), or IPI, a federal value-added tax on industrial products, and (4) ICMS.

Recent Developments

Long-Term Share-Based Incentive Plan

On March 21, 2018, our shareholders approved our long-term share-based incentive plan for key executives, or the ILP Plan, which aims to align the interests of its participants with those of the our shareholders and to encourage participants' retention at the Company by offering eligible participants an opportunity to receive restricted shares in the Company by voluntarily investing own funds and holding such shares through the end of the three-year vesting period. For additional information, see Item 6—Directors, Senior Management and Employees—Compensation—Long-Term Incentive Plan.”

On March 28, 2018, our Board of Directors approved the “ILP Program 2018” in accordance with the terms and conditions of the ILP Plan, which includes the list of eligible persons, the deadline for acquiring own shares by participants and the number of restricted shares to be delivered to participants as matching contribution for each own share acquired. The maximum number of shares the Company expects to deliver to the participants of the ILP Program 2018, after the vesting period and subject to compliance with all necessary requirements, is 727,688 shares. The program's grant date is April 6, 2018.

On March 13, 2019, our Board of Directors approved the “ILP Program 2019” in accordance with the terms and conditions of the ILP Plan, which includes the list of eligible persons, the deadline for acquiring own shares by participants and the number of restricted shares to be delivered to participants as matching contribution for each own share acquired. The maximum number of shares the Company expects to deliver to the participants of the ILP Program 2019, after the vesting period and subject to compliance with all necessary requirements, is 573,345 shares.

Quantiq

On January 9, 2017, our Board of Directors approved the sale of the subsidiaries Quantiq Distribuidora Ltda (“Quantiq”) and IQAG Armazéns Gerais Ltda (“IQAG”) in the amount of R\$550 million, and on April 3, 2017 the transfer of control to the buyer company was concluded.

In April 2018, we received the amount of R\$81 million, adjusted by inflation, related to the outstanding balance of R\$100 million in connection with the sale of our subsidiaries Quantiq and IQAG in 2017. The difference between the expected amount and the received amount was recognized in the second quarter of 2018 in the line item “other income (expenses), net,” in the amount of R\$19.6 million, resulting from an adjustment provided for the agreement.

Dividends

On April 30, 2018, at our annual shareholders’ meeting, our shareholders approved the payment of additional dividends considering the net income for fiscal year 2017, in the amount of R\$1,500.0 million. We paid this dividend distribution on May 10, 2018.

In March 2019, our board of directors proposed the distribution of dividends for the year ended 2018, which was expected to be submitted for approval at our annual and extraordinary general shareholders’ meeting held on April 16, 2019. On April 15, 2019, a court of appeals in the state of Alagoas suspended such distribution of dividends to cover any potential liability costs in connection with a lawsuit filed in the state of Alagoas claiming damages arising out of a geological incident at our salt mine. This decision was reversed by a decision of the Superior Court of Justice (*Superior Tribunal de Justiça*, or STJ), which authorized the distribution of dividends upon posting of a judicial bond in the same amount.

On August 19, 2019, we became aware of the filing of another civil lawsuit by the Federal Prosecutor’s Office (*Ministério Público Federal*) against us and other parties, requesting injunctive reliefs for, among other things, freeze any profits not yet distributed. We are taking all relevant measures to defend against this lawsuit. We are taking all relevant measures to defend against these lawsuits. As of the date of this annual report, the plaintiff’s requests for injunctive relief have not yet been ruled upon.

On October 3, 2019, the Extraordinary General Meeting approved (i) the payment of the mandatory dividend, in the amount of R\$667 million, to be paid until December 31, 2019; (ii) the capital budget for the fiscal year of 2019; and (iii) the remaining amount of the 2018 net profit, of R\$2,002.3 million, be withheld by the Company, pursuant to article 196 of the Brazilian Corporation Law.

Standby Letter Of Credit

In April 2018, the Company replaced the standby letter of credit that covers Braskem’s obligation to constitute a reserve account for the project finance of its subsidiary Braskem Idesa, releasing the R\$476.9 million cash collateral that was given in connection with the previous standby.

Revolving Credit Facility

On May 11, 2018, Braskem S.A., in line with its commitment to maintain financial liquidity, entered into an international revolving credit facility in the amount of US\$1,000 million with a syndicate of banks, maturing in 2023. The two facilities held by the Company until then in the amounts of US\$750 million with expiration in December 2019 and of R\$500 million with expiration in September 2019 were cancelled.

Credit Facility

On May 30, 2018, our subsidiary Braskem America entered into a credit facility in the amount of up to US\$225 million, secured by Euler Hermes, a German export credit agency, which will be used to finance a portion of our investment in the new polypropylene plant located in Houston, Texas. The funds will be disbursed in accordance with the progress of the project’s construction, and we expect to have the full amount disbursed by December 30, 2020. As of this annual report, US\$172 million has been disbursed.

EDC (ethylene dichloride)

In July 2018, the Company was served a notice by the State of Alagoas claiming that it allegedly used an ICMS tax base lower than that envisaged in legislation for internal transfers to another unit in the State of Alagoas of EDC (*ethylene dichloride*), between January 2013 and May 2016, which is a product that is not subject to deferral in such transactions. The restated value of this tax assessment notice amounted to R\$175 million. The Company's external legal advisors estimate that the administrative proceedings should be concluded in 2022. No judicial deposit or other form of security was accrued for this proceeding, as it is currently still in its administrative stage.

SACE Financing

In November 2018, the subsidiary Braskem Netherlands B.V. secured a financing facility of US\$295 million guaranteed by SACE Covered Facility Agreement, the Italian export credit agency, with maturity in November 2028 and charges US dollar exchange variation + semiannual Libor + 0.90% per year.

Recovery of Federal Tax Credits

In March 2017, the Brazilian Federal Supreme Court ("STF") decided, in connection with an extraordinary appeal initiated by STF, that ICMS tax should not be included in the calculation base of PIS/COFINS. Despite the filing of a motion for clarification by the Federal Government requesting the prospective effects of the decision, the STF itself and all Regional Federal Appellate Courts in Brazil have applied the decision of the lead case indiscriminately. On December 31, 2018, the extraordinary appeal filed against us by the Brazilian Government was ruled moot. These developments increase the legal certainty of the STF's decision to exclude ICMS tax from the calculation of PIS/COFINS. As a result, on December 31, 2018 we recognized a tax credit in the amount of R\$519.8 million related to PIS and COFINS for the period from March 2017 to November 2018, of which R\$265.4 million was recorded under "net sales revenue", R\$235.9 million under "other income (expenses)" and R\$18.5 million under "financial income."

In 2019, a Brazilian court issued final and unappealable decisions in our favor in connection with a lawsuit filed by us, allowing the exclusion of ICMS tax from the calculation base of PIS/COFINS taxes with retroactive effect to the year 1991. The effects of these decisions were assessed by the Company which recognized in the first half of 2019, we recognized the amount of R\$2,038.9 million related to PIS and COFINS taxes, of which R\$1,851.0 million was recorded under "Other operating income (expenses)" and R\$188.0 million under "Financial income".

BNDES

On January 30, 2019, Braskem received the first installment of R\$266 million related to the onlending transaction with the BNDES in the aggregate amount of R\$476 million at an interest rate of 11.57% p.a. and with maturity on January 15, 2031, which was contracted on December 26, 2018. The Company will receive the remaining amounts by the end of fiscal year 2019.

Odebrecht Reorganization

As per the Notice to the Market disclosed on February 1, 2019, we were informed by Odebrecht S.A., our indirect controlling shareholder, of the corporate reorganization conducted by the Odebrecht Group with the main objective of segregating its businesses, whose corporate acts were filed with the Commercial Registry of the State of São Paulo on January 31, 2019, with retroactive effects through December 31, 2018.

We were informed that the reorganization involved the spin-off of Odebrecht Serviços e Participações S.A. ("OSP") with the segregation of its asset composed of all common and preferred shares of Braskem and liability composed of the Purchase and Sale Agreement of Debentures no. 16.2.0023.1, entered into on March 16, 2016 between BNDES Participações S.A. - BNDESPAR and OSP, with third-parties acting as intervening parties, as amended ("Spun-Off Portion"), the other operating activities of OSP, followed by the merger of the Spun-Off Portion into OSP Investimentos S.A. ("OSP Inv.").

The corporate reorganization took place within the Odebrecht Group and, therefore, Odebrecht S.A. continues to be our indirect controlling shareholder.

Odebrecht Judicial Restructuring Proceedings

On June 17, 2019, Odebrecht, together with certain of its controlling and controlled entities (collectively, the "Debtors"), filed the Odebrecht Judicial Restructuring Proceedings. The Odebrecht Judicial Restructuring Proceedings expressly excluded us and certain other entities controlled by Odebrecht. We have no relevant trade receivables from Odebrecht and the filing of the Odebrecht Judicial Restructuring Proceedings do not trigger the early termination of any of our liabilities.

As mentioned in this annual report, the Odebrecht Judicial Restructuring Proceedings may expose us to certain risks. Because Odebrecht owns a majority of the voting power of our common stock, the occurrence of an event of default, foreclosure, and a subsequent sale of all, or substantially all, of the shares of common stock held by Odebrecht and received upon foreclosure of any pledged securities could result in a change of control, change of corporate strategy, trigger certain events of default or lead to the breach of certain covenants under certain of the agreements we entered into. See "Item 3. Key Information—Risk Factors—Risks Relating to Us and the Petrochemical Industry. Some of our shareholders may have the ability to determine the outcome of corporate actions or decisions, which could affect the holders of our class A preferred shares and the ADSs" and "Item 3. Key Information—Risk Factors—Risks Relating to Our Equity and Debt Securities—The totality of the shares issued by Braskem and owned by OSP Investimentos S.A. were given as collateral in financing agreements entered into by the Odebrecht Group."

CGU/AGU Agreement

As per the notice to the market dated July 10, 2018 and the Material Fact notice dated May 27, 2019, Braskem engaged in a cooperation and negotiation process with the Ministry of Transparency, the Office of the Federal Controller General ("CGU") and the Office of the General Counsel for the Federal Government ("AGU"), which culminated in the signing of a leniency agreement with said authorities on May 31, 2019 ("CGU/AGU Agreement").

The CGU/AGU Agreement addresses the same facts that are the subject of the Global Settlement entered into in December 2016 and provides for an additional disbursement of R\$410 million due to the calculations and parameters adopted by CGU/AGU.

In response to a request by the Company and the MPF, the Federal Courts ratified the allocation of funds under the MPF Agreement to the payment of the CGU/AGU Agreement, with the outstanding installments restated by the variation in the SELIC basic interest rate as of the execution of the CGU/AGU Agreement. The additional disbursement of R\$410 million will be paid in two annual installments at the end of the payment schedule of the MPF Agreement, in 2024 and 2025. The CGU/AGU Agreement jointly with the Global Settlement are referred to as the "Agreements."

The Agreements do not exempt us from liability before third parties with legitimate interests that seek damages in connection with the facts covered by the Agreements, including other authorities seeking to apply new monetary sanctions or fines or to launch new investigations into the Company. Therefore, it is not possible to ensure that the aggregate amount agreed upon will be sufficient to ensure full reparation to all victims.

We are currently in compliance with all obligations under the Agreements.

Mining Activities

In April 2019, the Alagoas State Attorney's Office (*Ministério Público do Estado de Alagoas*) and the State Public Defender's Office (*Defensoria Pública do Estado de Alagoas*) filed a lawsuit seeking to freeze our assets in an amount of up to R\$6.7 billion to secure funds allegedly required to ensure remediation and compensation for environmental, property and personal damages potentially resulting from a geological incident related to our mining activities in the city of Maceió. A preliminary decision ordered the freezing of R\$100 million in our banks accounts.

In addition, the Alagoas state court of appeals (*Tribunal de Justiça do Estado de Alagoas*) ordered the suspension of the distribution of dividends for the fiscal year 2018 that had been proposed in the amount of R\$2.7 billion, or, alternatively, the freezing of assets in the same amount of the proposed dividend distribution. This decision was subsequently reversed by a decision of the Superior Court of Justice (*Superior Tribunal de Justiça*, or STJ), which authorized the distribution of dividends upon posting of a judicial bond in the same amount. The Alagoas State Attorney's Office and the Alagoas State Public Defender's Office amended their claim to exclude the request for indemnification for the alleged environmental damages and reduce the amount of assets to be frozen to R\$3.7 billion, which according to their allegations would be equivalent to the actual damages caused to the residents of the districts affected by the geological event. On June 26, 2019, the presiding judge of the Alagoas state court of appeals (*Tribunal de Justiça do Estado de Alagoas*) issued a decision ordering an amount of R\$3.7 billion to be frozen. This decision was also subsequently reversed by the Superior Court of Justice (STJ), which ordered the frozen amount of R\$3.7 billion to be returned to our bank accounts after posting another judicial bond in an equivalent amount.

On July 25, 2019, we were informed of another civil lawsuit filed against us by the Labor Prosecutor's Office of the State of Alagoas, or MPT-AL, requesting injunctive relief to freeze the amount of R\$2.5 billion to guarantee payment of any actual damages that workers affected by the geological event may suffer. In that lawsuit, MPT-AL further requested the payment of compensation to workers for pain and suffering. On October 10, 2019, the trial court denied the injunctive relief request.

On August 19, 2019, we became aware of the filing of another civil lawsuit by the Federal Prosecutor's Office (*Ministério Público Federal*) against us and other parties, requesting the following injunctive reliefs: (i) the set-up of a fund of R\$3.1 billion for the benefit of social and environmental programs and emergency measures to be carried out, and the maintenance in said fund of working capital in the amount of at least R\$2.0 billion or, after a financial schedule is approved for such fund, an amount equivalent to 100% of the expenses projected for the subsequent 12 months; (ii) the posting of bonds in the amount of R\$20.5 billion; (iii) prohibition on us to encumber or dispose of any of our fixed assets and to distribute profits, in the form of dividends, interest on shareholders' equity or any other form; (iv) freezing of any profits not yet distributed; and (v) suspension of receipt of government financings and government incentives, as well as acceleration of existing indebtedness with BNDES (a federal development bank). As of the date of this annual report, the plaintiff's requests for injunctive relief have not yet been ruled upon.

We are taking all relevant measures to defend against these lawsuits.

NYSE

Since the Company was not able to file Form 20-F, for the year ended December 31, 2017, in accordance with the filing requirements of the SEC and no further extensions have been granted pursuant to Section 802.01E of the NYSE Listed Company Manual, on May 13, 2019, the New York Stock Exchange suspended trading of the Registrant's American Depositary Shares and had initiated delisting procedures.

The Company appealed the decision, which is scheduled by the NYSE for October 17, 2019.

On October 7, 2019 the Company filed Form 20-F for the year ended December 31, 2017.

Negotiations

As per the material fact dated June 4, 2019, we were informed by Odebrecht of its decision taken jointly with LyondellBasell to terminate negotiations for a potential transaction involving the transfer to LyondellBasell of the entire interest held by Odebrecht in our capital stock. Those negotiations were started on June 15, 2018.

Braskem Idesa

As of October 9th, 2019, a Waivers & Consent package was approved by the Intercreditor Agent on behalf of the Lenders, thus extending the dates for achieving the Guaranteed Physical Completion Date from November 30, 2016 to December 31, 2020 and the Guaranteed Financial Completion Date from December 31, 2016 to December 31, 2020.

The approval of the Waivers & Consent package allows Braskem Idesa to reclassify the Senior Debt from current to non-current liabilities. As of December 2018, R\$9,554.5 million will be reclassified from current liabilities to non-current liabilities for all periods reported after the date of the waiver.

Statement of Profit or Loss

The discussion of the results of our business units is based upon financial information reported for each of the segments of our business, as presented in the following tables, which set forth the results of each of our segments and the reconciliation of these results of our segments to our consolidated results of operations. This segment information was prepared on the same basis as the information that our senior management uses to allocate resources among segments and evaluate their performance. We evaluate and manage the performance of our segments based on information generated from our accounting records maintained in accordance with IFRS, and reflected in our audited consolidated financial statements.

Year Ended December 31, 2018						
Net sales revenue	Cost of products sold	Gross profit	Selling, general and distribution expenses	Results from equity investments	Other operating income (expense), net ⁽¹⁾	Operating profit (loss)
(in millions of reais)						
Chemicals	31,111.7	(27,464.0)	3,647.6	(756.7)	(139.4)	2,751.5
Polyolefins	22,483.9	(19,255.4)	3,228.5	(1,310.1)	(93.5)	1,824.9
Vinyls	3,167.4	(2,889.5)	277.9	(169.4)	(18.4)	90.1
USA and Europe	11,724.8	(9,126.4)	2,598.4	(610.4)	10.7	1,998.7
Mexico	3,770.5	(2,333.8)	1,436.7	(296.4)	305.5	1,445.7
Total segments	72,258.2	(61,069.2)	11,189.0	(3,143.0)	64.8	8,110.9
Other segment ⁽²⁾	292.4	(173.6)	118.8	(34.8)	(0.1)	83.9
Corporate unit ⁽³⁾	265.4		265.4	(200.6)	(0.9)	90.0
Reclassifications and eliminations ⁽⁴⁾	(14,816.2)	14,811.6	(4.6)			(4.6)
Consolidated	57,999.9	(46,431.2)	11,568.6	(3,378.4)	90.9	8,280.2

(1) Includes research and development.

(2) Represents income (expenses) of Braskem that are not allocated to any particular segment.

(3) Includes the amount of R\$501.4 million (R\$265.4 million in "net sales revenue" and R\$236.0 million in "other operating income (expenses), net") related to PIS and COFINS tax credits – exclusion of ICMS from the calculation basis (note 10(c) to our audited consolidated financial statements).

(4) Eliminations consist primarily of intersegment sales, which are made in similar terms as arm's length transactions.

Year Ended December 31, 2017

	Net sales revenue	Cost of products sold	Gross profit	Selling, general and distribution expenses	Results from equity investments	Other operating income (expense), net ⁽¹⁾	Operating profit (loss)
	(in millions of reais)						
Chemicals	25,179.3	(20,478.9)	4,700.4	(773.4)	—	(197.3)	3,729.7
Polyolefins	19,650.4	(15,432.2)	4,218.2	(1,321.6)	—	(177.5)	2,719.1
Vinyls	3,066.9	(2,572.8)	494.1	(163.0)	—	(163.4)	167.7
USA and Europe	9,854.5	(7,419.3)	2,435.2	(582.7)	—	(21.3)	1,831.2
Mexico	3,600.8	(2,097.5)	1,503.3	(283.3)	—	27.9	1,247.9
Total segments	61,351.9	(48,000.6)	13,351.3	(3,124.0)	—	(531.6)	9,695.8
Other segment ⁽²⁾	83.7	(65.7)	18.0	(13.4)	—	(2.4)	2.2
Corporate unit	—	—	—	(61.4)	40.0	(320.9)	(342.3)
Reclassifications and eliminations ⁽³⁾	(12,175.0)	11,888.9	(286.1)	137.4	—	—	(148.6)
Consolidated	49,260.6	(36,177.4)	13,083.2	(3,061.3)	40.0	(854.9)	9,206.9

(1) Includes research and development.

(2) Represents income (expenses) of Braskem that are not allocated to any particular segment.

(3) Eliminations consist primarily of intersegment sales, which are made in similar terms as arm's length transactions.

Year Ended December 31, 2016 (adjusted)

	Net sales revenue	Cost of products sold	Gross profit	Selling, general and distribution expenses	Results from equity investments	Other operating income (expense), net ⁽¹⁾	Operating profit (loss)
	(in millions of reais)						
Chemicals	25,062.6	(20,248.2)	4,814.4	(680.1)	—	(409.9)	3,724.4
Polyolefins	20,307.4	(15,980.9)	4,326.5	(1,284.7)	—	(199.1)	2,842.7
Vinyls	3,016.4	(2,815.2)	201.2	(236.8)	—	(71.9)	(107.4)
USA and Europe	8,896.1	(6,080.7)	2,815.4	(497.8)	—	(71.0)	2,246.6
Mexico ⁽²⁾	1,586.9	(1,152.0)	434.9	(231.8)	—	(4.8)	198.3
Total segments	58,869.4	(46,277.0)	12,592.3	(2,931.2)	—	(756.7)	8,904.5
Other segment ⁽³⁾	12.2	(14.8)	(2.6)	(1.9)	—	(20.8)	(25.3)
Corporate unit	—	—	—	(33.6)	30.1	(3,128.4)	(3,131.9)
Reclassifications and eliminations ⁽⁴⁾	(11,217.6)	11,306.3	88.7	115.3	—	—	204.0
Consolidated	47,664.0	(34,985.5)	12,678.4	(2,851.3)	30.1	(3,905.9)	5,951.3

(1) Includes research and development.

(2) With the operational startup of Braskem Idesa, Braskem began to report, as of January 1, 2016, the "Mexico" segment, which includes activities related to polyethylene production and sales from that subsidiary.

(3) Represents income (expenses) of Braskem that are not allocated to any particular segment.

(4) Eliminations consist primarily of intersegment sales, which are made in similar terms as arm's length transactions.

In the following discussion, references to increases or declines in any period are made by comparison with the corresponding prior period, except as the context otherwise indicates.

Year Ended December 31, 2018 Compared with Year Ended December 31, 2017

The following table sets forth our audited consolidated financial information for the years ended December 31, 2018 and 2017.

	Year Ended December 31,		
	2018	2017	% Change
	(in millions of reais)		
Net sales revenue	57,999.9	49,260.6	17.7%
Cost of products sold	(46,431.2)	(36,177.4)	28.3%
Gross profit	11,568.6	13,083.2	(11.6%)
Income (expenses):			
Selling and distribution	(1,545.6)	(1,459.6)	5.9%
General and administrative	(1,633.0)	(1,434.3)	13.9%
Research and development	(199.8)	(167.5)	19.3%
Results from equity investments	(0.9)	40.0	n.m.
Other income expenses, net	90.9	(854.9)	n.m.
Operating profit	8,280.2	9,206.9	(10.1%)
Financial results:			
Financial expenses	(3,007.6)	(3,747.2)	(19.7%)
Financial income	589.1	603.6	(2.4%)
Exchange rate variations, net	(2,257.0)	(798.7)	182.6%
Financial expenses, net	(4,675.5)	(3,942.4)	18.6%
Profit (loss) before income tax and social contribution	3,604.7	5,264.6	(31.5%)
Current and deferred income tax and social contribution	(736.6)	(1,357.7)	(45.7%)
Profit (loss) for the year from continuing operations	2,868.2	3,906.9	(26.6%)
Discontinued operations results	—	8.9	n.m.
Profit (loss) for the year	2,868.2	3,915.8	(26.8%)

n.m.: Not meaningful

Net Sales Revenue

Net sales revenue increased by 17.7%, or R\$8,739.3 million, to R\$57,999.9 million in 2018, from \$49,260.6 million in 2017, primarily as a result of (1) a R\$1,870.3 million, or 19.0%, increase in net sales revenue of our USA and Europe Unit, to R\$11,724.8 million in 2018 from R\$9,854.5 million in 2017, and (2) an increase in net sales revenue of our Chemicals Unit to R\$31,111.6 million in 2018 from R\$25,179.3 million in 2017. Reclassifications and eliminations of net sales revenue of our segments in consolidation, primarily reflecting intercompany sales of chemicals by our Chemicals Unit to our other segments, increased by 21.7%, or R\$2,641.2 million, to R\$14,816.2 million in 2018 from R\$12,175.0 million in 2017.

In 2018 and 2017, we did not have any revenue arising from transactions with any single client that was equal to or greater than 10% of its total net sales revenue. In 2018, the most significant revenue from a single client accounted for 2.4% of our total net sales revenue and refers to the Chemical segment.

Net Sales Revenue of Chemicals Unit

Net sales revenue of the Chemicals Unit increased by R\$5,932.4 million, or 23.6%, to R\$31,111.6 million in 2018, from R\$25,179.3 million in 2017.

Net Sales Revenue Generated by Sales in Brazil:

In 2018, net sales revenue of the Chemicals Unit from domestic sales in Brazil increased by 27.1%, or R\$5,633.9 million, to R\$26,700.8 million, (including R\$14,468.7 million from sales to the Polyolefins and Vinyls Units) in 2018, compared to R\$21,006.9 million (including R\$11,355.4 million from sales to the Polyolefins and Vinyls Units) in 2017, primarily due to higher sales by volume of chemicals to third parties, in particular an increase in the sales volume of gasoline and budadiene in the domestic market as a result of the prioritization of domestic sales.

Sales Volume in Brazil:

The table below sets forth our Chemicals Unit's internal transfers, mainly ethylene to the Vinyls Unit and ethylene and propylene to the Polyolefins Unit, by volume for the periods indicated.

Chemicals Unit's Internal Transfers Volume	Year Ended December 31,		% Change
	2018	2017	
	<i>(in tons)</i>		
Ethylene	2,779,589	2,888,776	(3.8%)
Propylene	969,491	1,041,017	(6.9%)
Total	3,749,080	3,929,794	(4.6%)

The table below sets forth our Chemicals Unit's sales in Brazil to third parties by volume for the periods indicated:

Chemicals Unit's Domestic Sales Volume	Year Ended December 31,		% Change
	2018	2017	
	<i>(in tons)</i>		
Ethylene	509,056	523,639	(2.8%)
Propylene	345,795	360,394	(4.1%)
Cumene	234,108	199,792	17.2%
Butadiene	192,049	183,849	4.5%
Gasoline	942,864	925,867	1.8%
BTX ⁽¹⁾	647,968	644,589	0.5%
Total	2,871,839	2,838,130	1.2%

(1) BTX is defined as benzene, toluene and para-xylene.

Net Sales Revenue Generated by Exports.

Net sales revenue of the Chemicals Unit from exports increased by 5.7%, or R\$238.5 million, to R\$4,410.91 million in 2018, compared to R\$4,172.4 million in 2017, mainly due to the higher sales volume of ethylene and para-xylene.

Sales Volume from Exports.

Our Chemicals Unit's volume of export sales decreased 31%, to 570.7 ktons in 2018 from 824.6 ktons in 2017, mostly in propylene and BTX, primarily due to the lower availability of product since Braskem's crackers operated at an average capacity utilization rate of 91%, down 3 p.p. from 2017. The decrease in the capacity utilization rate was mainly explained by the: (i) truckers' strike that took place in Brazil in May of 2018; (ii) incident involving the chlor-alkali plant in Alagoas in January of 2018; (iii) blackout that affected Brazil's Northeast plants in March of 2018; and (iv) lower demand in the fourth quarter of 2018.

The table below sets forth our Chemicals Unit's export sales by volume for the periods indicated:

Chemicals Unit's Export Sales Volume	Year Ended December 31,		% Change
	2018	2017	
	<i>(in tons)</i>		
Ethylene	114,549	100,927	13.5%
Propylene	9,600	43,127	(77.7%)
Butadiene	206,162	241,019	(14.5%)
Gasoline	60,437	78,030	(22.5%)
BTX ⁽¹⁾	179,994	361,476	(50.2%)
Total	570,741	824,579	(30.8%)

(1) BTX is defined as benzene, toluene and para-xylene.

Net Sales Revenue of Polyolefins Unit

Net sales revenue of the Polyolefins Unit increased by 14.4%, or R\$2,833.5 million, to R\$22,483.9 million in 2018, from R\$19,650.4 million in 2017, mainly as a result of the depreciation of the *real* against the U.S. dollar during the corresponding period.

Net Sales Revenue Generated by Sales in Brazil.

Net sales revenue from domestic sales of the Polyolefins Unit in Brazil increased by 16.3%, or R\$2,260.5 million, to R\$16,116.8 million in 2018, from R\$13,856.4 million in 2017.

Sales Volume in Brazil.

In 2018, sales volume in Brazil decreased 1.0%, to 2,932 ktons in 2018, from the (i) truckers' strike that took place in Brazil in May of 2018; (ii) blackout that affected Brazil's Northeast plants in March; and (iii) lower demand in the fourth quarter of 2018.

Polyolefins Unit's Domestic Sales Volume	Year Ended December 31,		% Change
	2018	2017	
	(in tons)		
Polyethylene	1,788,332	1,795,446	(0.4%)
Polypropylene	1,143,327	1,164,947	(1.9%)
Total	2,931,658	2,960,393	(1.0%)

Net Sales Revenue Generated by Exports.

Our Polyolefins Unit's net sales revenue from exports increased 9.9%, or R\$573.0 million, to R\$6,367.0 million in 2018, from R\$5,794.0 million in 2017, reflecting the depreciation of the real against the U.S. dollar during the corresponding period.

Sales Volume from Exports.

Our Polyolefins Unit's volume of export sales decreased 12.6% to 1,257 kton in 2018 from 1,438 kton in 2017 due to the lower availability of product, as described above.

The table below sets forth our Polyolefins Unit's export sales by volume for the periods indicated:

Polyolefins Unit's Export Sales Volume	Year Ended December 31,		% Change
	2018	2017	
	(in tons)		
Polyethylene	819,979	916,115	(10.5%)
Polypropylene	437,367	522,210	(16.2%)
Total	1,257,346	1,438,325	(12.6%)

Net Sales Revenue of Vinyls Unit

Net sales revenue of our Vinyls Unit increased by 3.3%, or R\$100.5 million, to R\$3,167.4 million in 2018 from R\$3,066.9 million in 2017, primarily as a result of the depreciation of the real against the U.S. dollar during the corresponding period.

Net Sales Revenue Generated by Sales in Brazil.

Net sales revenue of the Vinyls Unit generated by sales in Brazil increased 6.4%, or R\$180.5 million, to R\$3,005.2 million in 2018 from R\$2,824.6 million in 2017.

Sales Volume in Brazil.

Our Vinyls Unit's volume of sales in Brazil decreased 6.8% to 490.1 ktons in 2018 from 525.7 ktons in 2017.

Vinyls Unit's Domestic Sales Volume	Year Ended December 31,		% Change
	2018	2017	
	(in tons)		
PVC	490,139	525,683	(6.8%)
Total	490,139	525,683	(6.8%)

Net Sales Revenue Generated by Exports.

Our Vinyls Unit's net sales revenue generated by exports decreased by 33.0%, or R\$80.0 million, to R\$162.2 million in 2018 from R\$242 million in 2017, primarily due to a decrease in the export sales volume of PVC.

Sales Volume from Exports.

Our Vinyls Unit's volume of export sales decreased by 44.5%, to 45 kton in 2018 from 82 kton in 2017, despite the lower volume, Braskem continued to export PVC to offset the Brazilian market.

Vinyls Unit's Export Sales Volume	Year Ended December 31,		% Change
	2018	2017	
	<i>(in tons)</i>		
PVC	45,512	82,008	(44.5%)
Total	45,512	82,008	(44.5%)

Net Sales Revenue of USA and Europe Unit

Net sales revenue of our USA and Europe Unit, which includes our polypropylene assets in the United States and Europe, increased by 19.0%, or R\$1,870.3 million, to R\$11,724.8 million in 2018 from R\$9,854.5 million in 2017, primarily as a result of better international PP prices.

Net Sales Revenue of Mexico Unit

Net sales revenue of the Mexico Unit increased by 4.7%, or R\$169.7 million, to R\$3,770.5 million in 2018 from R\$3,600.8 million in 2017 due to higher USG price for PE.

Cost of Products Sold and Gross Profit

Cost of products sold increased by 28.3%, or R\$10,253.8 million, to R\$46,431.2 million in 2018 from R\$36,177.4 million in 2017, primarily as a result of a 34.1% increase in the cost of products sold by our Chemicals Unit and a 23.0% increase in the cost of products sold by our USA and Europe Unit. Reclassifications and eliminations of cost of products sold by our Units calculated as part of our consolidation, primarily reflecting the costs of chemicals purchases by our Polyolefins and Vinyls Units from our Chemicals Unit, increased by 24.6% in 2018.

Consolidated gross profit decreased by 11.6%, or R\$1,514.5 million to R\$11,568.6 million in 2018 from R\$13,083.2 million in 2017. Gross margin (gross profit as a percentage of net sales revenue) decreased to 19.9% during 2018 from 26.6% during 2017.

Cost of Products Sold of Chemicals Unit

Cost of products sold of the Chemicals Unit increased by 34.1%, or R\$6,985.1 million, to R\$27,464.0 million in 2018 from R\$20,478.9 million in 2017, primarily as a result of increase in the prices of all raw materials.

Gross profit of the Chemicals Unit decreased by 22.4% to R\$3,647.6 million in 2018 from R\$4,700.4 million during 2017, and gross margin decreased to 11.7% during 2018 from 18.5% during 2017.

Cost of Products Sold of Polyolefins Unit

Cost of products sold of the Polyolefins Unit increased by 24.8%, or R\$3,823.2 million, to R\$19,255.4 million in 2018 from R\$15,432.2 million in 2017 because of higher cost of raw materials associated with depreciation of the *real*.

Gross profit of the Polyolefins Unit decreased by 23.5% to R\$3,228.5 million during 2018 from R\$4,218.2 million during 2017, and gross margin was 14.4% during 2018 from 21.5% during 2017.

Cost of Products Sold of Vinyls Unit

Cost of products sold of the Vinyls Unit increased by 12.3%, or R\$316.7 million, to R\$2,889.5 million in 2018 to R\$2,572.8 million in 2017, primarily as a result of increase in the prices of all raw material.

Gross profit of the Vinyls Unit decreased by 43.8% to R\$277.9 million during 2018 to R\$494.1 million during 2017, while gross margin was 8.8% during 2018 from 16.1% during 2017.

Cost of Products Sold of USA and Europe Unit

Cost of products sold of the USA and Europe Unit increased by 23.0%, or R\$1,707.1 million, to R\$9,126.4 million in 2018 from R\$7,419.3 million in 2017, due to the increase in ethane prices, many producers substituted the gas by heavier feedstocks, such as LPG (propane and butane) and naphtha, which contributed to the higher supply of propylene in the region.

Gross profit of the USA and Europe Unit increased by 6.7% to R\$2,598.4 million during 2018 from R\$2,435.2 million during 2017, and gross margin decreased to 22.2% during 2018 from 24.7% during 2017.

Cost of Products Sold by Mexico Unit

Cost of products sold by the Mexico Unit increased by 11.3%, or R\$236.4 million, to R\$2,333.8 in 2018 from R\$2,097.5 million in 2017, due to the increase in ethane prices driven by stronger demand from recently inaugurated crackers, combined with the lack of pipelines to transport gas and fractionators to extract ethane

During 2018, the Mexico Unit recorded a gross profit of R\$1,436.7 and gross margin of 38.1%. During 2017, the Mexico Unit recorded a gross profit of R\$1,503.3 million and gross margin of 41.8%.

Selling and Distribution Expenses

Selling and distribution expenses increased by 5.9%, or R\$86.0 million, to R\$1,545.6 million in 2018 from R\$1,459.6 million in 2017, primarily as a result of higher expenses relating to sales and distribution in the United States and Europe.

General and Administrative Expenses

General and administrative expenses increased by 13.9%, or R\$198.7 million, to R\$1,633.0 million in 2018 from R\$1,434.3 million in 2017, primarily as a result of strategic project expenditures in the United States, auditing and legal expenses in support of our corporate monitors and higher expenses with advertising and publicity.

Research and Development Expenses

Research and development expenses increased by 19.3%, or R\$32.4 million, to R\$199.8 in 2018 from R\$167.5 million in 2017. Research and development expenses as a percentage of net sales revenue were 0.3%, during 2018 and 2017.

Results from Equity Investments

Results from equity investments decreased to a loss of R\$0.9 million in 2018 from a gain of R\$40.0 million in 2017, as a result of decrease in the results of jointly-controlled investments, primarily RPR and Borealis. For more information related to our results of equity investments, see note 11 to our audited consolidated financial statements included elsewhere herein.

Other Operating Income (Expenses), Net

Other operating expenses, net increased to an income of R\$90.9 million in 2018 from a loss of R\$854.9 million in 2017, primarily due to the Federal Supreme Court (STF) decision that ICMS tax should not be included in the calculation base of PIS/COFINS. In this scenario Braskem recognized an income related to PIS and COFINS tax liabilities paid in excess from March 2017 to November 2018; and the delivery-or-pay provision related to ethane supply agreement in Mexico.

Operating Profit

As a result of the foregoing:

- operating profit on a consolidated basis decreased by 10.1%, or R\$926.7 million, to R\$8,280.2 million in 2018 from R\$9,206.9 million in 2017, and as a percentage of net sales revenue, operating profit decreased to 14.8% in 2018 from 18.7% during 2017;

- operating profit of the Chemicals Unit decreased by 26.2% to R\$2,751.5 million during 2018 from R\$3,729.7 million during 2017, and the operating margin of the Chemicals Unit decreased to 8.8% during 2018 from 14.8% during 2017;
- operating profit of the Polyolefins Unit decreased by 32.9% to R\$1,824.9 million during 2018 from R\$2,719.1 million during 2017, and the operating margin of the Polyolefins Unit decreased to 8.1% from 13.8% during 2017;
- operating profit of the Vinyls Unit decreased by 46.3% to R\$90.1 million during 2018 from R\$167.7 million during 2017, and the operating margin of the Vinyls Unit decreased by 2.8% during 2018 from 5.5% during 2017;
- operating profit of the USA and Europe Unit increased by 9.1% to R\$1,998.7 million during 2018 from R\$1,831.3 million during 2017, and the operating margin of the USA and Europe Unit decreased to 17.0% during 2018 from 18.6% during 2017; and
- Operating profit of the Mexico Unit increased by 15.8%, to R\$1,445.7 million during 2018 from R\$1,247.9 million during 2017, and the operating margin of the Mexico Unit increased to 38.3% during 2018 from 34.7% during 2017.

Financial Results

Financial expenses, net increased by 18.6%, or R\$733.1 million, to R\$4,675.5 million in 2018 from R\$3,942.4 million in 2017, primarily as a result of our recording of a R\$2,257.0 million loss in exchange rate variation, net in 2018 compared to a R\$798.8 million loss in exchange rate variation, net in 2017, mainly due to the Brazilian *real* depreciation in the period on the net exposure of the financial result not designated for hedge accounting, and by the expense with the transition to hedge accounting of exports of Braskem and Braskem Idesa, which previously were recorded under shareholders' equity.

Financial Income

Financial income decreased by 2.4%, or R\$14.6 million, to R\$589.0 million in 2018 from R\$603.6 million in 2017, mainly due to the reduction in Brazil's interest rates.

Financial Expenses

Financial expenses decreased by 19.7%, or R\$739.7 million, to R\$3,007.6 million in 2018 from R\$3,747.2 million in 2017. Despite the effect from the Brazilian *real* depreciation of 17% on consolidated net exposure, financial expenses decreased compared to 2017, during which period "Other Expenses" were impacted in the amount of R\$471 million by the early settlement of derivative operations due to debt prepayment.

Current and deferred

Income Tax and Social Contribution

Our income tax and social contribution expense decreased by 45.7% to R\$736.6 million during 2018 from R\$1,357.7 million during 2017. The effective tax rate applicable to our profit before income tax and social contribution was 20.4% as compared to effective tax rate applicable to our profit before income tax and social contribution in 2017 of 25.8%.

Profit (Loss) for the year

As a result of the foregoing, we recorded a profit of R\$2,868.2, or 4.9% of net sales revenue, during 2018, compared to a profit of R\$3,915.8 million, or 7.9% of net sales revenue, during 2017.

Year Ended December 31, 2017 Compared with Year Ended December 31, 2016

	Year Ended December 31,		
	2017	2016 (Adjusted)	% Change
	(in millions of reais)		
Net sales revenue	49,260.6	47,664.0	3.3%
Cost of products sold	(36,177.4)	(34,985.6)	3.4%
Gross profit	13,083.2	12,678.4	3.2%
Income (expenses):			
Selling and distribution	(1,459.6)	(1,403.7)	4.0%
General and administrative	(1,434.3)	(1,285.6)	11.6%
Research and development	(167.5)	(162.0)	3.4%
Results from equity investments	40.0	30.1	32.9%
Other operating expenses, net	(854.9)	(3,906.0)	(78.1%)
Operating profit	9,206.9	5,951.2	54.7%
Financial results:			
Financial expenses	(3,747.2)	(3,571.0)	4.9%
Financial income	603.6	690.1	(12.5%)
Exchange rate variations, net	(798.8)	(3,210.4)	(75.1%)
Financial expenses, net	(3,942.3)	(6,091.3)	(35.3%)
Profit (loss) before income tax and social contribution	5,264.6	(140.1)	n.m.
Income tax and social contribution	(1,357.7)	(616.0)	120.4%
Profit (loss) from continuing operations	3,906.9	(756.1)	n.m.
Results from discontinued operations	8.9	26.9	(66.9%)
Profit (loss)	3,915.8	(729.2)	n.m.

The following table sets forth our consolidated financial information for the years ended December 31, 2017 a

n.m.: Not meaningful

Net Sales Revenue

Net sales revenue increased by 3.3%, or R\$1,596.6 million, to R\$49,260.6 million in 2017 from R\$47,664.0 million in 2016, primarily as a result of (1) a R\$2,013.9 million, or 126.9%, increase in net sales revenue of our Mexico Unit, to R\$3,600.8 million in 2017 from R\$1,586.9 million in 2016, and (2) an increase in net sales revenue of our USA and Europe Unit to R\$9,854.5 million in 2017 from R\$8,896.1 million in 2016. Reclassifications and eliminations of net sales revenues of our segments in consolidation, primarily reflecting intercompany sales of chemicals by our Chemicals Unit to our other segments, increased by 8.5%, or R\$957.4 million, to R\$12,175.0 million in 2017 from R\$11,217.6 million in 2016.

In 2017 and 2016, the Company did not have any revenue arising from transactions with any single client that was equal to or greater than 10% of its total net revenue. In 2017, the most significant revenue from a single client accounted for 2.9% of total net revenues of the Company and refers to the Chemical segment.

Net Sales Revenue of Chemicals Unit

Net sales revenue of the Chemicals Unit increased by R\$116.7 million, or 0.5%, to R\$25,179.3 million in 2017 from R\$25,062.6 million in 2016.

Net Sales Revenue Generated by Sales in Brazil:

In 2017, net sales revenue of the Chemicals Unit from domestic sales in Brazil increased by 7.8%, or R\$1,516 million, to R\$21,007 million (including R\$11,355.4 million from sales to the Polyolefins and Vinyls Units) in 2017 compared to R\$19,490 million in 2016, primarily due to higher sales by volume of chemicals to third parties, in particular an increase in the sales volume of gasoline and propylene in the domestic market as a result of the prioritization of domestic sales.

Sales Volume in Brazil.

The table below sets forth our Chemicals Unit's internal transfers, mainly ethylene to the Vinyls Unit and ethylene and propylene to the Polyolefins Unit, by volume for the periods indicated.

Chemicals Unit's Internal Transfers Volume	Year Ended December 31,		
	2017	2016	% Change
	<i>(in tons)</i>		
Ethylene	2,888,776	2,856,541	1.1%
Propylene	1,041,017	1,023,708	1.7%
Total	3,929,794	3,880,49	1.3%

The table below sets forth our Chemicals Unit's sales in Brazil to third parties by volume for the periods indicated:

Chemicals Unit's Domestic Sales Volume	Year Ended December 31,		
	2017	2016	% Change
	<i>(in tons)</i>		
Ethylene	523,639	511,865	2.3%
Propylene	360,394	291,311	23.7%
Cumene	199,792	194,472	2.7%
Butadiene	183,849	198,451	(7.4)%
Gasoline	925,867	745,087	24.3%
BTX ⁽¹⁾	644,589	676,958	(4.8)%
Total	2,838,130	2,618,144	8.4%

(1) BTX is defined as Benzeno, Tolueno and Paraxylene.

Net Sales Revenue Generated by Exports.

Net sales revenue of the Chemicals Unit from exports decreased by 25.1%, or R\$1,399 million, to R\$4,172 million in 2017 compared to R\$5,572 million in 2016, mainly due to the lower of sales volume of gasoline due to a decision to prioritize sales in the Brazilian market.

Sales Volume from Exports.

Our Chemicals Unit's volume of export sales decreased 8.3%, to 824.6 ktons in 2017 from 898.9 ktons in 2016, primarily due to the substitution of propylene and export volumes to supply to the Polyolefins Unit to produce polypropylene and the increased volume of gasoline allocated to the Brazilian market. These factors were partially offset by higher exports of ethylene and butadiene.

The table below sets forth our Chemicals Unit's export sales by volume for the periods indicated:

Chemicals Unit's Export Sales Volume	Year Ended December 31,		
	2017	2016	% Change
	<i>(in tons)</i>		
Ethylene	100,927	64,193	57.2%
Propylene	43,127	79,312	(45.6)%
Butadiene	241,019	213,666	12.8%
Gasoline	78,030	194,222	(59.8)%
BTX ⁽¹⁾	361,476	347,498	4.0%
Total	824,579	898,893	(8.3)%

(1) BTX is defined as Benzeno, Tolueno and Paraxylene.

Net Sales Revenue of Polyolefins Unit

Net sales revenue of the Polyolefins Unit decreased by 3.2%, or R\$657.0 million, to R\$19,650.4 million in 2017 from R\$20,307.4 million in 2016, mainly as a result of the appreciation of the real against the U.S. dollar during the corresponding period.

Net Sales Revenue Generated by Sales in Brazil.

Net sales revenue from domestic sales of the Polyolefins Unit in Brazil decreased by 0.3%, or R\$47.0 million, to R\$13,856 million in 2017 from R\$13,903 million in 2016.

Sales Volume in Brazil.

In 2017, sales volume in Brazil increased 5.3%, to 2,960 ktons in 2017 from 2,811 ktons in 2016, primarily as a result higher level of activity of the packaging sector and recovery in some segments, especially in the automotive, retail and electronics sectors.

Polyolefins Unit's Domestic Sales Volume	Year Ended December 31,		
	2017	2016	% Change
	<i>(in tons)</i>		
Polyethylene	1,795,446	1,705,462	5.3%
Polypropylene	1,164,947	1,105,675	5.4%
Total	2,960,393	2,811,137	5.3%

Net Sales Revenue Generated by Exports.

Our Polyolefins Unit's net sales revenue from exports decreased 9.5%, or R\$610.3 million, to R\$5,794.0 million in 2017 from R\$6,404.3 million in 2016, reflecting the stronger demand for resins in the Brazilian market. Exports to South American countries remained strong, since they are priority markets for the Company.

Sales Volume from Exports.

Our Polyolefins Unit's volume of export sales decreased 8.8% to 1,449 kton from 1,590 kton in 2016 due to decision to prioritize to the Brazilian market, as described above.

The table below sets forth our Polyolefins Unit's export sales by volume for the periods indicated:

Polyolefins Unit's Export Sales Volume	Year Ended December 31,		
	2017	2016	% Change
	<i>(in tons)</i>		
Polyethylene	916,115	1,024,233	(10.6%)
Polypropylene	522,210	566,255	(7.8%)
Total	1,438,325	1,590,488	(9.6%)

Net Sales Revenue of Vinyls Unit

Net sales revenue of our Vinyls Unit increased by 1.7%, or R\$50.5 million, to R\$3,066.9 million in 2017 from R\$3,016.4 million in 2016, primarily as a result of an increase in the prices of PVC and caustic soda in the international market

Net Sales Revenue Generated by Sales in Brazil.

Net sales revenue of the Vinyls Unit generated by sales in Brazil increased 4.8%, or R\$129.5 million, to R\$2,825 million in 2017 from R\$2,695 million in 2016, primarily as a result of the increase in the average Northeast Asian spot market prices of PVC in U.S. dollars, as reported by IHS.

Sales Volume in Brazil.

Our Vinyls Unit's volume of sales in Brazil decreased 0.5% to 525.7 ktons in 2017 from 528.3 ktons in 2016.

Vinyls Unit's Domestic Sales Volume	Year Ended December 31,		% Change
	2017	2016	
	<i>(in tons)</i>		
PVC	525,683	528,314	(0.5)%
Total	525,683	528,314	(0.5)%

Net Sales Revenue Generated by Exports.

Our Vinyls Unit's net sales revenue generated by exports decreased by 24.6%, or R\$79 million, to R\$242 million in 2017 from R\$321 million in 2016, primarily due to a decrease in the export sales volume of PVC.

Sales Volume from Exports.

Our Vinyls Unit's volume of export sales decreased by 29.9%, to 82 kton in 2017 from 116.9 kton in 2016, despite the lower volume, Braskem continued to export PVC to offset the contraction in the Brazilian market.

Vinyls Unit's Export Sales Volume	Year Ended December 31,		% Change
	2017	2016	
	<i>(in tons)</i>		
PVC	82,008	116,919	(29.9)%
Total	82,008	116,919	(29.9)%

Net Sales Revenue of USA and Europe Unit

Net sales revenue of our USA and Europe Unit, which includes our polypropylene assets in the United States and Europe, increased by 10.8%, or R\$958.4 million, to R\$9,854.5 million in 2017 from R\$8,896.1 million in 2016, primarily as a result the increase in capacity and sales volume of the USA and Europe units and the firm PP demand in these regions.

Net Sales Revenue of Mexico Unit

Net sales revenue of the Mexico Unit increased by 126.9%, or R\$2,013.9 million, to R\$3,600.8 million in 2017 from R\$1,586.9 million in 2016 due to higher sales volumes. The USG price for PE was 6% higher than the previous year due to higher naphtha prices in the international market and the effects of Hurricane Harvey on the industry activity, including the delay in the entry of new PE capacity.

Cost of Products Sold and Gross Profit

Cost of products sold increased by 3.4%, or R\$1,191.8 million, to R\$36,177.4 million in 2017 from R\$34,985.6 million in 2016, primarily as a result of a 82.1% increase in the cost of products sold by our Mexico Unit and a 22.0% increase in the cost of products sold by or USA and Europe Unit. Reclassifications and eliminations of cost of sales and services rendered by our Units calculated as part of our consolidation, primarily reflecting the costs of chemicals purchases by our Polyolefins and Vinyls Units from our Chemicals Unit, increased by 5.2% in 2017.

Consolidated gross profit increased by 3.2%, or R\$404.8 million to R\$13,083.2 million in 2017 from R\$12,678.4 million in 2016. Gross margin (gross profit as a percentage of net sales revenue) remained stable at 26.6% during 2017 and 2016.

Cost of Products Sold of Chemicals Unit

Cost of products sold of the Chemicals Unit increased by 1.1% or R\$230.7 million, to R\$20,478.9 million from R\$20,248.2 million in 2016, primarily as a result of increase in sales volumes and increases in the prices of all raw materials.

Gross profit of the Chemicals Unit decreased by 2.4% to R\$ 4,700.4 million during 2017 from R\$4,814.4 million during 2016, and gross margin decreased to 18.5% during 2017 from 19.2% during 2016.

Cost of Products Sold of Polyolefins Unit

Cost of products sold of the Polyolefins Unit decreased by 3.4%, or R\$548.7 million, to R\$15,432.2 million in 2017 to R\$15,980.9 million in 2016, because the higher cost of raw materials associated with higher sales volumes was more than offset by the appreciation of the *real*.

Gross profit of the Polyolefins Unit decreased by 2.5% to R\$4,218.2 million during 2017 from R\$4,326.4 million during 2016, and gross margin was 21.5% during 2017 from 21.3% during 2016.

Cost of Products Sold of Vinyls Unit

Cost of products sold of the Vinyls Unit decreased by 8.6%, or R\$242.4 million, to R\$2,572.8 million in 2017 from R\$2,815.2 million in 2016, primarily as a result of lower sales volume.

Gross profit of the Vinyls Unit increased by 145.6% to R\$494.1 million during 2017 from R\$201.2 million during 2016, while gross margin increased to 16.1% during 2017 from 6.7% during 2016.

Cost of Products Sold of USA and Europe Unit

Cost of products sold of the USA and Europe Unit increased by 22.0%, or R\$1,338.6 million, to R\$7,419.3 million in 2017 from R\$6,080.7 million in 2016, explained by the higher propane prices and low inventory levels in the USA and higher oil prices and the growing share of gas used as feedstock by European crackers at the expense of naphtha, which reduced the supply of propylene in the region.

Gross profit of the USA and Europe Unit decreased by 13.5% to R\$2,435.2 million during 2017 from R\$2,815.4 million during 2016, and gross margin decreased to 24.7% during 2017 from 31.6% during 2016.

Cost of Products Sold by Mexico Unit

Cost of products sold by the Mexico Unit increased by 82.1%, or R\$945.4 million, to R\$2,097.5 million in 2017 from R\$1,152.0 million in 2016, because the USG price for ethane was 26% higher than in 2016, due to higher demand after the start of operation of the ethanol export terminals, the rise in LPG prices and the expectation of entering into operation of new crackers.

During 2017, the Mexico Unit recorded a gross profit R\$1,503.3 million and gross margin of 41.7%. During 2016, the Mexico Unit recorded a gross profit R\$434.9 million and gross margin of 27.4%.

Selling and Distribution Expenses

Selling and distribution expenses increased by 4.0%, or R\$55.9 million, to R\$1,459.6 million in 2017 from R\$1,403.7 million in 2016, primarily as a result higher expenses relating to sales in Mexico.

General and Administrative Expenses

General and administrative expenses increased by 11.6%, or R\$148.7 million, to R\$1,434.3 million in 2017 from R\$1,285.6 million in 2016, primarily as a result of strategic project expenditures in the United States and auditing and legal expenses in support of our corporate monitors.

Research and Development Expenses

Research and development expenses increased by 3.4%, or R\$5.5 million, to R\$167.5 million in 2017 from R\$162.0 million in 2016. Research and development expenses as a percentage of net sales revenue were 0.3% during 2017 and 2016.

Results from Equity Investments

Results from equity investments increased by R\$9.9 million to a gain of R\$40.0 million in 2017 from a gain of R\$30.1 million in 2016, as a result of an increase in the results of jointly-controlled investments, primarily RPR and Borealis. For more information related to our results of equity investments, see note 12 to our audited consolidated financial statements included elsewhere herein.

Other Income (Expenses), Net

Other expenses, net decreased by 78.1% or R\$3,051.1 million, to R\$854.9 million in 2017 from R\$3,906.00 million in 2016 primarily because the fines related to the Global Settlement entered into with the applicable governmental authorities in 2016 was provisioned in the fourth quarter of 2016.

Operating Profit

As a result of the foregoing:

- operating profit on a consolidated basis increased by 54.7%, or R\$3,255.7 million, to R\$9,206.9 million in 2017 from R\$5,951.2 million in 2016, and as a percentage of net sales revenue, operating profit increased to 18.7% during 2017 from 12.5% during 2016;
- operating profit of the Chemicals Unit increased by 0.1% to R\$3,729.7 million during 2017 from R\$3,724.4 million during 2016, and the operating margin of the Chemicals Unit decreased to 14.8% during 2017 from 14.9% during 2016;
- operating profit of the Polyolefins Unit declined by 4.3% to R\$2,719.1 million during 2017 from R\$2,842.7 million during 2016, and the operating margin of the Polyolefins Unit declined to 13.8% during 2017 from 14.0% during 2016;
- operating profit of the USA and Europe Unit decreased by 18.5% to R\$1,831.2 million during 2017 from R\$2,246.6 million during 2016, and the operating margin of the USA and Europe Unit decreased to 18.6% during 2017 from 25.3% during 2016;
- operating profit of the Vinyls Unit increased by 256.0% to R\$167.7 million during 2017 from an operating loss of R\$107.5 million during 2016; and the operating margin of the Vinyls Unit increased by 5.5% during 2017 compared to negative operating margin of 3.6% during 2016; and
- Operating profit of the Mexico Unit increased by 529.3% or R\$1,049.6 million to R\$1,247.9 million during 2017 from an operating profit of R\$198.3 million during 2016, and the operating margin of the Mexico Unit increased to 34.7% during 2017 from 12.5% during 2016.

Financial Results

Net financial expenses decreased by 35.3%, or R\$2,149.0 million, to R\$3,942.3 million in 2017 from R\$6,091.3 million in 2016, primarily as a result of our recording a R\$798.7 million loss in exchange rate variation, net in 2017 compared to R\$3,210.4 million loss in exchange rate variation, net in 2016, principally due to by the depreciation of the real in the period and by the transition from export hedge accounting.

Braskem holds net exposure to the U.S. dollar (i.e., more USD-pegged liabilities than USD-pegged assets). At the end of 2017, this net exposure was formed: (i) in the operations, by 56% of suppliers, which was offset by 66% of accounts receivable; and (ii) in the capital structure, by the higher exposure of net debt to the U.S. dollar. Since its operating cash flow is heavily linked to the U.S. dollar, maintaining this level of net exposure to the U.S. dollar in liabilities acts as a natural hedge. Virtually 100% of its revenue is pegged to the variation in the U.S. dollar and 80% of its costs also are pegged to this currency.

Therefore, in September 2016, Braskem launched a recurring currency hedge program to mitigate the exposure of its cash flows to liabilities denominated in Brazilian *reais* and not pegged to the U.S. dollar (e.g., electricity, payroll, etc.). With the sole purpose of protecting its cash flow, the program adopts two strategies using derivative instruments: (i) purchase of put options ("puts") and (ii) purchase of put options associated with the sale of call options ("collars"). Both alternatives protect Braskem in the event of appreciation in the local currency, with the difference being that the collar strategy can also result in losses for the Company if the USD/BRL exchange rate surpasses the strike price of the call options. With collars, however, the payment of the net premium for obtaining the puts is lower, since the Company receives a premium from the sale of the call options. Lastly, note that any losses from the collar strategy always are offset by gains in competitiveness from the reduction in costs denominated in BRL when translated into USD.

As of December 31, 2017, Braskem held put options in the amount of US\$1.4 billion, with an average strike price of 2.96 R\$/US\$. Braskem also held a total notional value of short options in call option contracts in the amount of US\$926 million, with an average strike price of R\$4.32. The operations have a maximum term of 18 months.

Such operations were designed for the hedge accounting of cash flows as from January 1, 2017, and seek to hedge future exports denominated in USD with maturities in months coinciding with the maturity of the derivatives.

Financial Income

Financial income decreased by 12.5%, or R\$86.5 million, to R\$603.6 million in 2017 from R\$690.1 million in 2016, primarily due to an R\$134.7 million decrease in interest income, which was partially offset by an R\$48.2 million increase in other financial income.

Financial Expenses

Financial expenses increased by 4.9%, or R\$176.2 million, to R\$3,747.2 million in 2017 from R\$3,571.0 million in 2016, primarily due to a R\$647.9 million increase in other expenses, which was partially offset by an R\$228 million decrease in interest expenses and R\$8.8 million decreased in loan transactions costs.

Income Tax and Social Contribution

Our income tax and social contribution expense increased by 120.4% to R\$1,357.7 million during 2017 from R\$616.0 million during 2016. The effective tax rate applicable to our profit before income tax and social contribution was 25.8% as compared to effective tax rate applicable to our profit before income tax and social contribution in 2016 of 439.7%. This effective rate for the fiscal year ended December 31, 2016 is related to the provision accrued for payment of the leniency agreement and consequent adjustments to the bases of IR and CSL. Excluding this provision from the calculation, the effective rate would be 36.90%.

Profit (Loss) for the year

As a result of the foregoing, we recorded a profit of R\$3,915.8 million, or 7.9% of net sales revenue, during 2017, compared to a net loss of R\$729.2 million, or 1.5% of net sales revenue, during 2016.

Liquidity and Capital Resources

Our principal cash requirements for 2018 consisted of the following:

- servicing our indebtedness;
- working capital requirements;
- capital expenditures related to investments in operations, construction of new plant facilities, and maintenance of plant facilities; and
- dividends on our shares, including in the form of interest attributable to shareholders' equity, and
- payments under the Global Settlement.

Our principal sources of liquidity have traditionally consisted of the following:

- cash flows from operating activities;

- short-term and long-term borrowings; and
- sales of debt securities in domestic and international capital markets.

During 2018, cash flow provided by operating activities was used primarily for investing activities, working capital requirements, to service our outstanding debt obligations and to distributed dividends to shareholders. At the annual and extraordinary shareholders' meeting held on April 30, 2018, our shareholders approved the distribution of the minimum mandatory dividends for the fiscal year ended December 31, 2017, in the amount of R\$1,500,000, which was made on May 10, 2018. The amount was sufficient to meet the minimum mandatory dividend of 25% of profit for the year calculated under Article 202 of the Brazilian Corporations Law.

In September 2018, to reduce interest expenses on borrowings, we partially redeemed US\$200 million of our outstanding 7.375% perpetual bonds at par value.

As of December 31, 2018, our consolidated cash and cash equivalents amounted to R\$5,547.6 million (US\$1,794.1 million), excluding the aggregate amount of R\$963.4 million (US\$248.6 million) of Braskem Idesa's cash and cash equivalents.

As of December 31, 2018, we had negative net working capital (defined as (1) current assets minus (2) current liabilities) of R\$1,732.3 million (US\$447.1 million), including the total assets and total liabilities of Braskem Idesa S.A.P.I.

Projected Sources and Uses of Cash

Considering our short-term contractual obligations and commitments as of December 31, 2018 and budgeted capital expenditures for 2019, we anticipate that we will be required to spend R\$23.6 billion during 2019 to meet our short-term contractual obligations and commitments and budgeted capital expenditures. We expect that we will meet these cash requirements for (1) our operations through sales of our products, and (2) our debt service through new financing activities, including new debt financings and the refinancing of our existing short-term indebtedness as it becomes due.

We have commitments from several financial institutions to provide us with financing in the future, including commitments from the Brazilian National Bank for Economic and Social Development (*Banco Nacional do Desenvolvimento*), or BNDES, to lend us funds under our revolving stand-by credit facilities (*Contrato de Abertura de Limite de Crédito*), or CALC facilities, described under “—Indebtedness and Financing Strategy—Credit Facilities with BNDES.” As of December 31, 2018, the full aggregate principal amount had been disbursed under these facilities. Such commitments are subject to conditions precedent. We pay commitment fees to these financial institutions in connection with their commitments, other than our BNDES revolving stand-by credit facilities.

In May 2018, in line with our commitment to maintain financial liquidity, we and several of our subsidiaries entered into an international revolving credit facility with several international financial institutions for a principal amount of US\$1,000.0 million, which matures in May 2023. This line of credit may be used without restrictions to improve our credit quality or in the event of a deterioration in the macroeconomic scenario. As of the date of this annual report, this credit line had not been used. The two facilities held by the Company until then in the amounts of US\$750 million with expiration in December 2019 and of R\$500 million with expiration in September 2019 were cancelled.

Cash Flows

The following table sets forth certain consolidated cash flow information for the periods indicated:

(In millions)	2018	2017	2016
	R\$	R\$	R\$
Net cash provided by (used in) operating activities	9,250.4	2,461.6	4,457.9
Net cash provided by (used in) investing activities	(2,488.3)	(2,406.4)	(2,552.5)
Net cash provided by (used in) financing activities	(4,603.4)	(2,988.5)	(2,757.3)
Effect of exchange rate changes on cash and cash equivalents	(386.1)	6.5	586.6
Increase (decrease) in cash and cash equivalents	1,772.5	(2,926.8)	(265.3)

Cash Flows generated by Operating Activities

Net cash provided by operating activities was R\$9,250.4 during 2018, R\$2,461.6 million during 2017 and R\$4,457.9 million during 2016.

Net cash provided by operating activities increased by R\$6,788.8 million during 2018 compared to 2017 as a result of:

- a R\$3,604.7 million increase in profit before tax and social contribution;
- Although we had a R\$130.1 million increase in trade accounts receivable during 2018, compared to a R\$1,598.4 million decrease during 2017, it was positively impacted by the decrease in working days, partially offset by the exchange rate depreciation; and
- a R\$1,343.4 million increase in trade payables during 2018, compared to a R\$1,642.6 million decrease during 2017.

During 2018 the effects of these factors were partially offset by:

- a R\$330.0 million decrease in amounts owed under our Leniency Agreement during 2018; and
- a R\$1,537.3 million decrease in inventories during 2018 compared to a R\$1,351.0 million decrease during 2017, primarily as a result of higher volumes and cost of stocks in finished products, higher volume of raw material, partially offset by lower cost of raw material, mainly naphtha.

Net cash provided by operating activities decreased by R\$1,996.3 million during 2017 compared to 2016 as a result of:

- a R\$1,343.8 million decline in amounts paid by us under our Leniency Agreement during 2017;
- a R\$1,598.4 million decline in trade accounts receivable during 2017 compared to a R\$1,007.9 million increase during 2016, which was negatively impacted by overall increase in sales prices of our products in U.S. dollars, the exchange depreciation and the increase in working days, mainly due to the increase in Braskem Idesa's average receivables maturity; and
- a R\$1,351.0 million decline in inventories during 2017 compared to an R\$862.3 million increase during 2016, primarily as a result of higher volumes in naphtha stocks and finished products in anticipation of scheduled maintenance shutdown.

During 2017 the effects of these factors were partially offset by:

- a R\$5,363.8 million increase in profit before income tax and social contribution and for the result with discontinued operations; and
- a R\$1,642.6 million decline in trade payables during 2017 compared to a R\$4,254.6 million decline during 2016, primarily as a result of an increase in raw material costs, mainly naphtha.

Cash Flows Used in Investing Activities

Net cash used in Investing activities was R\$2,488.3 million during 2018, R\$2,406.4 million during 2017 and R\$2,552.5 million during 2016.

During 2018, investing activities for which we used cash on a consolidated basis primarily consisted of (1) investments of R\$1,778 million, in Brazilian units, which were allocated primarily to industrial operations including the investments related to operating efficiency, health, environmental and safety, or HES, productivity and modernization (such as diversification of the feedstock profile of the cracker in Bahia); (2) investments of R\$993 million were invested in the USA and Europe Unit, equivalent to US\$269 million, allocated both to industrial operations and strategic projects, such as: (i) the new polypropylene plant; and (3) investments of R\$55 million in Mexico.

During 2017, investing activities for which we used cash on a consolidated basis primarily consisted of (1) investments of R\$1,576 million, in Brazilian units, which were allocated primarily to industrial operations including the investments related to operating efficiency, health, environmental and safety, or HES, productivity and modernization (such as diversification of the feedstock profile of the cracker in Bahia); (2) investments of R\$184 million (equivalent to US\$57 million) were invested in the USA and Europe Unit, allocated to strategic projects, such as: (i) the new polypropylene plant and (ii) productivity gains at our polypropylene plants in the United States and Germany; and (3) investments of R\$22 million in Mexico Complex.

During 2016, investing activities for which we used cash on a consolidated basis primarily consisted of (1) investments of R\$1,195.0 million for the construction of our Mexico Complex; (2) investments of R\$1,439.0 million, which were allocated primarily to industrial operations (R\$107 million of which were invested in the USA and Europe Unit), including the investments related to operating efficiency, HES, productivity and modernization; and (3) investments of R\$341 million (of which R\$244 million were invested in the USA and Europe Unit, equivalent to US\$72 million) allocated to strategic projects, such as: (i) the production of UTEC[®] resin in La Porte, Texas; (ii) diversification of the feedstock profile of the cracker in Bahia; and (iii) productivity gains at our polypropylene plants in the United States and Germany.

Cash Flows Used in Financing Activities

Net cash used in Financing Activities was R\$4,603.4 during 2018, R\$2,988.5 million during 2017 and R\$2,757.3 million during 2016.

During 2018:

- we entered into a contract with international financial institutions under which we borrowed an aggregate principal amount of R\$610.5 million (US\$158.1 million) of Euler Hermes, a German export credit agency and R\$1,117.3 million (US\$295.1 million) of the Italian export credit agency SACE; and
- we entered into certain agreements for advance on exchange contracts (*adiantamentos sobre contratos de câmbio*), or ACCs, with local financial institutions under which we borrowed an aggregate principal amount of R\$1,931.7 million (US\$531 million); and
- we entered into a Credit Export Note Facility in the amount of R\$406.3 million.

During 2018, we used cash to pay:

- R\$1,916.8 million, representing aggregate interest expenses;
- R\$1,649.7 million, representing all advance on exchange contracts (*adiantamentos sobre contratos de câmbio*), or ACC, with local financial institutions;
- R\$2,487.8 million, representing corporate loans (advance exports contracts, credit facility, promissory notes and others), with local and international institutions;
- R\$1,958.4 million, representing amortization of the market bond with maturity in 2018, 2020, 2021 and partial redemption of the perpetual bonds;
- R\$105.9 million, representing the exports prepayments which local and international institutions;
- R\$805.0 million, representing amortization of the Braskem Idesa Project Finance principal amount;
- R\$368.6 million, representing aggregate principal under a financing agreement with BNDES and certain governmental entities;

In addition, we used cash to pay dividends in the aggregate amount of R\$1,499.8 million.

During 2017:

- we received disbursements under a financing agreement with certain governmental entities, in the amounts of R\$420 million in September; and
- we entered into a certain bonds which maturity of five and ten years, we borrowed an aggregate principal amount of R\$5,470.1 million in the fourth quarter.

During 2017, we used cash to pay:

- R\$2,149.6 million, representing aggregate interest expenses;
- R\$307.7 million, representing all advance on exchange contracts (*adiantamentos sobre contratos de câmbio*), or ACC, with local financial institutions;
- R\$3,357.6 million, representing corporate loans (advance exports contracts, credit facility, promissory notes and others), with local and international institutions;
- R\$176.9 million, representing all principal outstanding of the market bond with maturity in 2017;
- R\$441.0 million, representing the exports prepayments which local and international institutions;
- R\$300.8 million, representing all principal outstanding under a certain credit facility agreements of Braskem Idesa;
- R\$581.9 million, representing amortization of the Braskem Idesa Project Finance principal amount;
- R\$2,298.4 million, representing aggregate principal under a financing agreement with BNDES and certain governmental entities;

In addition, we used cash to pay dividends in the aggregate amount of R\$998.9 million.

During 2016:

- we received disbursements under a financing agreement with BNDES and certain governmental entities, in the amounts of R\$21 million, R\$84.0 million and R\$56 million in the first, second and fourth quarter of 2016, respectively;
- we entered into an export pre-payment agreement, or EPP, with international financial institutions under which we borrowed an aggregate principal amount of R\$594.5 million in May, June and December, 2016;
- we entered into certain ACCs with local financial institutions under which we borrowed an aggregate principal amount of R\$358.5 million in 2016; and
- Braskem Idesa borrowed through the Braskem Idesa Working Capital Facility an aggregate amount of US\$92 million from local financial institutions September 2016.

During 2016, we used cash:

- to pay R\$1,924 million, representing aggregate financial expenses;
- to pay R\$250.0 million, representing all principal outstanding under a certain credit facility agreements with a certain local financial institutions;
- to pay R\$1,043.1 million, representing aggregate principal and interest outstanding under a financing agreement with BNDES; and
- to make other scheduled payments and prepayments under various of our outstanding debt instruments.

In addition, we used cash to pay dividends in the aggregate amount of R\$1,998.0 million.

Unless our board of directors deems it inconsistent with our financial position and the decision of our board of directors is ratified by our shareholders, payment of dividends is mandatory under Brazilian Corporations Law and our by-laws and also is required under agreements with two of our shareholders and, consequently, may give rise to significant cash requirements in future periods.

Share Repurchase Program

On August 13, 2012, our board of directors authorized a share repurchase program under which we were authorized to repurchase up to 13,376,161 class A preferred shares at market prices over the B3 S.A. – Brasil, Bolsa e Balcão, or B3, at any time and from time to time prior to August 28, 2013. Shares that were repurchased will be held in treasury and may be resold or cancelled. As of December 31, 2012, we had repurchased 262,300 class A preferred shares for an aggregate of R\$3.5 million.

We did not repurchase any shares in 2013 or 2014.

On February 11, 2015, our board of directors authorized a share repurchase program under which we are authorized to repurchase up to 3,500,000 class A preferred shares at market prices over the B3. The program started in February 19, 2015, and was effective until February 18, 2016. We repurchased 80,000 class A preferred shares for an aggregate of R\$0.9 million in 2015.

Contractual Commitments

The following table summarizes significant contractual obligations and commitments as of December 31, 2018 that have an impact on our liquidity.

Braskem has a calculation methodology to determine operating cash and minimum cash for the purpose of, respectively: (i) ensuring the liquidity needed to comply with obligations of the following month; and (ii) ensuring that we maintain liquidity during potential crises. These amounts are calculated mainly based on the projected operating cash generation, less short-term debts and working capital needs.

In May 2018, we and several of our subsidiaries entered into a revolving credit facility agreement with several international financial institutions for a principal amount of US\$1,000.0 million, which matures in May 2023. This line of credit may be used without restrictions to improve our credit quality or in the event of a deterioration in the macroeconomic scenario. As of the date of this annual report, this credit line had not been used.

On December 31, 2018, our subsidiary Braskem Idesa continued to record as current liabilities its financial obligations whose original maturities were long term. Such reclassification is due to the failure to comply with certain contractual covenants set forth in the financing contract of Braskem Idesa (note 16 to our audited consolidated financial statements). Braskem Idesa has been settling all of its obligations in accordance with the original debt maturity schedule, and none of its creditors has requested or showed any intention of accelerating such obligations or requesting the early amortization of such debt. See “Item 3. Key Information—Risk Factors—Risks Relating to Us and the Petrochemical Industry—If we are unable to comply with the restrictions and covenants in the agreements governing our indebtedness, there could be a default under the terms of these agreements, which could result in an acceleration of payment of funds that we have borrowed and could affect our ability to make principal and interest payments on our debt obligations.”

In case Braskem Idesa’s group of lenders decide to request the early amortization of this debt, Braskem’s financial liabilities by maturity, including the amounts due under the Leniency Agreement (note 23.3 to our audited consolidated financial statements), are as shown in the table below. These amounts are calculated from undiscounted cash flows and may not be reconciled with our balance sheet.

	Maturity				Total
	Until one year	Between one and two years	Between two and five years	More than five years	
Trade payables	8,435.2	37.3	—	—	8,472.5
Borrowings	806.4	6,469.3	5,479.5	26,182.8	38,938.0
Debentures	34.8	118.5	142.0	106.3	401.6
Braskem Idesa borrowings	10,504.6	—	—	—	10,504.6
Derivatives	76.4	55.4	128.8	—	260.6
Loan to non-controlling shareholder of Braskem Idesa	—	—	—	2,183.8	2,183.8
Leniency agreement (note 23.3 to our audited consolidated financial statements)	341.3	341.3	897.4	409.9	1,989.9
At December 31, 2018	20,198.7	7,021.8	6,647.7	28,882.9	62,750.9

Assuming that Braskem Idesa's group of lenders will not request the early amortization of this debt, Braskem's financial liabilities by maturity, including the amounts due under the Leniency Agreement (note 23.3 of our audited consolidated financial statements) and excluding the reclassification to current liabilities arising from the aforementioned Braskem Idesa's breach of contractual obligations, are as shown in the table below. These amounts are calculated from undiscounted cash flows and may not be reconciled with the balance sheet.

	Maturity				Total
	Until one year	Between one and two years	Between two and five years	More than five years	
Trade payables	8,435.2	37.3			8,472.5
Borrowings	806.4	6,469.3	5,479.5	26,182.8	38,938.0
Debentures	34.8	118.5	142.0	106.3	401.5
Braskem Idesa borrowings	995.7	2,482.6	2,835.2	7,353.8	13,667.3
Derivatives	76.4	55.4	128.8		260.6
Loan to non-controlling shareholder of Braskem Idesa				2,183.8	2,183.8
Leniency agreement (Note 23.3 of our audited financial statements)	341.3	341.3	897.4	409.9	1,989.9
At December 31, 2018	10,689.8	9,504.4	9,482.8	36,236.6	65,913.6

Indebtedness and Financing Strategy

As of December 31, 2018, our total outstanding consolidated indebtedness, net of transaction costs, was R\$25,192.7 million, consisting of R\$765.2 million of short-term indebtedness, including current portion of long term indebtedness (3.0% of our total indebtedness), and R\$24,427.5 million of long-term indebtedness (97.0% of our total indebtedness), in addition to an aggregate amount of R\$10,504.6 million (US\$2,711.0 million) outstanding as of December 31, 2018 in connection with the secured debt related to our Mexico Complex. As of December 31, 2018, we had no outstanding indebtedness to related parties on a consolidated basis. On a consolidated basis, our *real*-denominated indebtedness as of December 31, 2018, net of transaction costs, was R\$1,030.9 million (2.9% of our total indebtedness), and our foreign currency-denominated indebtedness was R\$34,666.3 million (97.1% of our total indebtedness).

Our financing strategy has been to maintain an adequate liquidity and a debt maturity profile that is compatible with our anticipated cash flow generation and anticipated capital expenditures. This is the same strategy for the next several years and in addition, we do not expect our capital expenditures to adversely affect the quality of our debt leverage ratios or our disciplined approach to capital allocation.

The following table presents information relating to our debt maturity profile as of December 31, 2018, excluding transaction costs and the reclassification to current liabilities arising from the aforementioned Braskem Idesa's breach of contractual obligations:

	2019	2020	2021	2022	2023	2024	Thereafter	Total
	(in millions of reais)							
Indebtedness	415.3	417.6	425.3	419.7	510.7	501.0	920.7	3,610.3
Capital Markets	412.7	1,436.8	3,613.2	1,937.4	1,937.4	2,906.1	9,687.0	21,930.6
Debt related to our Mexico Complex (Braskem Idesa Financing)	968.1	1,033.2	1,175.4	980.9	1,290.4	1,393.0	3,753.2	10,594.1
Total	1,796.0	2,887.6	5,213.9	3,338.0	3,738.5	4,800.1	14,360.9	36,135.0

Short-Term Indebtedness

Our consolidated short-term debt, including current portion of long-term debt, was R\$765.2 million as of December 31, 2018. This short-term indebtedness does not include the debt related to our Mexico Complex and derivatives.

We maintain short-term finance lines denominated in reais with a number of financial institutions in Brazil. Although we have no committed lines of credit with these financial institutions, we believe that we will continue to be able to obtain sufficient credit to finance our working capital needs based on our relationships with these financial institutions and current market conditions. As of December 31, 2018, the consolidated outstanding balance under our short-term finance lines in reais was R\$154.2 million.

Long-Term Indebtedness

Our principal sources of long-term debt are:

- fixed-rate notes issued in the international market;
- export credit notes;
- credit facilities with BNDES;
- bank credit facilities;
- project financing; and
- export prepayment facilities.

Some of these instruments contain other covenants that could restrict, among other things, our and most of our subsidiaries ability to incur liens or merge or consolidate with any other person or sell or otherwise dispose of all or substantially all of our assets. In addition, the instruments governing a substantial portion of our indebtedness contain cross-default or cross-acceleration clauses, such that the occurrence of an event of default under one of these instruments could trigger an event of default under other indebtedness or enable the creditors under other indebtedness to accelerate that indebtedness.

As of December 31, 2018, R\$193.7 million of our real-denominated debt was secured. In order to secure this debt, we have pledged certain of our property and equipment and certain of our accounts receivable. The security arrangements for our secured debt vary depending on the transaction.

As of December 31, 2018, all of our project finance debt related to our Mexico Complex was secured. In order to secure this debt, we have pledged our shares in Braskem Idesa, some of our rights to repayment under subordinated loans that Braskem S.A. has made to Braskem Idesa and all of the assets of Braskem Idesa.

Although our Mexico Complex is fully operational and Braskem Idesa has satisfied and continues to satisfy its debt service requirements and all other payment obligations under its US\$3,193 million senior secured syndicated facility on a timely basis, certain defaults not related to payment obligations have occurred and are continuing thereunder since at least 2016. See "Item 5. Operating and Financial Review and Prospects—Capital Expenditures—Joint Venture—Mexico Complex."

Fixed-Rate Notes

We have issued fixed-rate debt securities in the international market. All of these securities pay interest semi-annually in arrears, except for our perpetual bonds on which interest is payable quarterly in arrears. The table below sets forth our outstanding fixed-rate debt securities, the outstanding principal amount of these securities and their maturity dates.

Security	Outstanding Principal plus Interest (Amount as of December 31, 2018) (in millions of U.S. dollars)	Final Maturity
7.00% Notes due 2020 ⁽¹⁾	374.6	May 2020
5.75% Notes due 2021 ⁽¹⁾	943.7	April 2021
5.375% Notes due 2022 ⁽¹⁾	504.3	May 2022
3.50% Notes due 2023 ⁽²⁾	508.3	January 2023
6.45% Notes due 2024 ⁽¹⁾	769.9	February 2024
4.50% Notes due 2028 ⁽²⁾	1,276.7	February 2028
7.125% Notes due 2041 ⁽³⁾	773.5	July 2041
7.375% Perpetual Bonds ⁽¹⁾	508.8	—

- (1) Represents notes issued by Braskem Finance Limited and guaranteed by Braskem.
(2) Represents notes issued by Braskem Netherlands Finance and guaranteed by Braskem.
(3) Represents notes issued by Braskem America Finance and guaranteed by Braskem.

Export Credit Note Facilities

We have entered into several credit export note facilities. The table below sets forth our significant outstanding credit export note facilities, the amount outstanding under these facilities, the interest rate applicable to these facilities, the amortization schedule of these facilities and their maturity dates.

Issue Date	Outstanding Principal and Interest as of December 31, 2018 (in millions of reais)	Interest Rate	Amortization Schedule	Final Maturity
2018	406.3	CDI + 0.7%	2023 and 2024	2024

Credit Facilities with BNDES

We have entered into two revolving stand-by credit facilities with BNDES. Loans under these facilities are required to be used to fund specified capital expenditure projects, including:

- expansion and modernization of fixed assets;
- acquisition of new machinery and equipment produced in Brazil;
- programs related to technical training and management, and information technology;
- social investment programs;
- environmental investments; and
- investments in research, development and innovation.

The interest rates for loans drawn under these facilities are set at the time the loans are made and are based on a fixed rate defined at closing date. The outstanding principal and interest of each of these loans is payable in monthly installments following the expiration of the grace period for these loans, which is generally one year or 18 months, depending upon the terms of the relevant facility.

The table below sets forth selected information with respect to our BNDES revolving credit facilities as of December 31, 2018.

<u>Facility</u>	<u>Committed Principal Amount</u> <small>(in millions of reais)</small>	<u>Outstanding Principal and Interest</u> <small>(in millions of reais)</small>	<u>Weighted Average Interest Rate</u>	<u>Expiration of Commitment</u>
December 2009	RS500.0			
Fixed rate		38.4	4.0%	January 2021
November 2011	RS2,460.0			
Fixed rate		13.6	3.5%	November 2019

Each of these credit facilities is secured by mortgages on (1) two of our plants located in Southern Complex, (2) one of our plants located in the cities of Santo André in the state of São Paulo.

Revolving Credit Facility Agreements

In May 2018, we and several of our subsidiaries entered into a revolving credit facility agreement with several international financial institutions for a principal amount of US\$1,000.0 million, which matures in May 2023.

Bank Credit Facilities

In July 2018, we entered in a Loan Agreement with an international institution and we received a disbursement in an aggregate principal amount of US\$160.0 million. This facility bears interest at a rate of LIBOR plus 0.65% per annum, payable semi-annually until maturity in December 2028. The outstanding principal amount is payable in 16 successive semi-annual installments beginning in November 2020.

In November 2018, we entered in a Loan Agreement with an international institution and we received a disbursement in an aggregate principal amount of US\$ 295.1 million. This facility bears interest at a rate of LIBOR plus 0.90% per annum, payable semi-annually until maturity in November 2028. The outstanding principal amount is payable in 20 successive semi-annual installments beginning in May 2019.

<u>Issue Date</u>	<u>Outstanding Principal Amount as of December 31, 2018</u> <small>(in millions of U.S. dollars)</small>	<u>Interest Rate</u>	<u>Amortization Schedule</u>	<u>Final Maturity</u>
January 2013	80.0	LIBOR + 1.10%	Semi-annual ⁽¹⁾	November 2022
September 2017	127.5	LIBOR + 1.61%	Semi-annual ⁽²⁾	March 2027
July 2018	160.0	LIBOR + 0.65%	Semi-annual ⁽³⁾	December 2028
November 2018	295.1	LIBOR + 0.90%	Semi-annual ⁽⁴⁾	November 2028

(1) Amortization on this facility commenced in May 2013

(2) Amortization on this facility commenced in September 2018

(3) Amortization on this facility commenced in November 2020

(4) Amortization on this facility commenced in May 2019

Financing Agreements

In December 2012, Braskem Idesa entered into a common terms agreement with certain financial institutions to finance the development, design, construction and initial operation of the Mexico Complex. The Mexico Complex includes an ethane cracker with annual capacity of 1.05 million tons to produce ethylene, two high density polyethylene plants and a low density polyethylene plant. In connection with the common terms agreement, Braskem Idesa entered into eight separate financing agreements with international and Brazilian financial institutions and development banks in an aggregate principal amount of up to US\$3.2 billion, or the Braskem Idesa Financing. All amounts disbursed under these credit facilities are secured by our shares in Braskem Idesa. In addition, as a condition precedent to the initial disbursement and each subsequent disbursement, Braskem Idesa was required to have a maximum debt to base equity ratio of 70 to 30 after giving effect to such disbursement, as calculated pursuant to the common terms agreement. In September 2015, Braskem Idesa received the final disbursement pursuant to the common terms agreement, reaching an aggregate principal amount of US\$3.2 billion. The financing consists of fixed and floating tranches. The interest rates on the fixed tranche are within a range of 4.33% to 6.17%. The interest rates on the floating tranche are within a range of LIBOR plus 2.73% to LIBOR plus 4.65%. To reduce the interest rate risk, the second tranche is hedged through several swap agreements. Interest on both tranches is payable quarterly in arrears and principal is amortized quarterly. The final maturity date of these loans is February 15, 2029 with amortizations beginning in May 2016.

Capital Expenditures

In 2018, our total investments on property, plant and equipment and intangible assets totaled R\$2,770.4 million, consisting primarily of (1) a capital expenditure of R\$1,778 million, in Brazilian units, which were allocated primarily to industrial operations including the investments related to operating efficiency, HES, productivity and modernization; (2) investments of R\$993 million were invested in the USA and Europe Unit, equivalent to US\$269 million, allocated to strategic projects, such as: (i) the new polypropylene plant and (ii) productivity gains at our polypropylene plants in the United States and Germany; and (3) investments of R\$55 million in the Mexico Complex.

Capital Expenditure Budget

We plan to invest R\$3,315 million in 2019, of which R\$1,236 million (US\$331 million) is pegged to the U.S. dollar related to investments in the United States and Europe units.

Of the total investment, R\$300 million will be allocated to Health, Environment & Safety (HES) projects and R\$1,968 million to maintenance, productivity and operating efficiency projects, including the investment to be made in the scheduled shutdown of the cracker in Bahia, which is slated for 4Q19. The remainder will be allocated to other strategic projects, such as the new PP plant in the United States (US\$223 million).

Braskem Idesa plans to invest around US\$29 million (R\$107 million) in projects related to maintenance, productivity, HES and operating efficiency.

Joint Venture

Mexico Complex

Braskem and Idesa formed Braskem Idesa in April 2010 to develop, construct and operate the Mexico Complex, located in the Mexican state of Veracruz. The Mexico Complex includes an ethylene cracker that produces 1.05 million tons of ethylene per year from ethane based on technology licensed from Technip Italy S.p.A. or Technip, -two high density polyethylene plants based on Innovene S technology licensed from Ineos Commercial Services UK Limited (as successor to Ineos Europe Limited) and a low density polyethylene plant based on Lupotech T technology licensed from Basell Polyolefin GmbH. The three polyethylene plants have a combined annual production capacity of 1.0 million tons of HDPE and LDPE. As of December 31, 2018, we produced 808,388 tons of HDPE and LDPE.

Braskem Idesa is party to an ethane supply agreement with Pemex TRI dated February 19, 2010, pursuant to which Pemex TRI is obligated to provide, and Braskem Idesa to purchase, 66,000 barrels per day of ethane to the Mexico Complex for a period of 20 years at prices based on U.S. dollar-based international reference price of these feedstocks. Under this agreement, any daily amount rejected by Braskem Idesa must be purchased in installments in subsequent deliveries until the deficit has been resolved. This contract will expire in 2035 and is renewable for three five-year periods, with prior notice by a party at least two years prior to the expiration of the agreement that it intends to renew this agreement. Pemex TRI may terminate the contract in the event of: (1) a failure to pay that continues for more than 180 days after notice, or (2) an emergency stoppage in operations or force majeure event that continues for more than 48 months.

The ethane supply agreement contains a volume delivery long-term performance covenant that requires Pemex TRI to meet a volume delivery of ethane over a six-month period averaging 70% of the agreed-upon volume under the ethane supply agreement (the "Long-Term Performance Test"). As of January 2019, Pemex TRI volume deliveries under the Long-Term Performance Test remained close to the 70% threshold. In the event that Pemex TRI fails to meet the Long-Term Performance Test, in addition to the direct negative impact on the production volumes of our Mexico Complex, it may (i) render us unable to generate sufficient cash to service our indebtedness with creditors under the Braskem Idesa Financing, (ii) cause such creditors to accelerate this indebtedness, and/or (iii) require Braskem Idesa to exercise a termination and put option against Pemex TRI that would force Pemex TRI to purchase the Mexico Complex from us. In the event any such termination and put option is exercised by us, there can be no assurance that Pemex TRI will not challenge the exercise of this termination and put option or otherwise attempt to avoid purchasing the Mexico Complex from us. See "Item 3. Key Information—Risks Relating to Us and the Petrochemical Industry—We depend on ethane supplied by Pemex TRI in Mexico."

In February 2010, we and Idesa entered into the Braskem Idesa shareholders' agreement to govern our relationship with respect to Braskem Idesa, which was amended in November 2012, December 2012, April 2015, and April 2017. The Braskem Idesa shareholders' agreement, as amended, sets forth the understanding of the parties regarding the implementation of this project and the relationship of Braskem and Idesa as shareholders of Braskem Idesa. Under the Braskem Idesa shareholders' agreement, as amended:

- the parties agree to use their best efforts to use Braskem Idesa as their commercialization vehicle for polyethylene in Mexico;
- the parties agree that the polyethylene production of Braskem Idesa shall be strategically focused on supplying the Mexican market;
- we have the right to appoint five members and Idesa has the right to appoint two members of Braskem Idesa's board of directors; decisions considered at Braskem Idesa's ordinary shareholders' meetings or by Braskem Idesa's board of directors require the approval by a simple majority;
- upon the failure of Braskem and Idesa to agree to vote in favor of certain matters requiring a supermajority vote in an extraordinary shareholders' meeting, (1) we will have the right to seek approval of such matters by a simple majority vote of Braskem Idesa's shareholders, (2) in the event that such matters are approved by a simple majority vote of Braskem Idesa's shareholders, we will have the option to purchase all of the shares then held by Idesa, and (3) in the event that we do not exercise this right, Idesa will have the option to sell all of its shares of Braskem Idesa to us; and
- any disputes between Braskem and Idesa arising out of or in connection with the Braskem Idesa shareholders' agreement will be resolved through arbitration.

The Braskem Idesa shareholders' agreement also contains rights of first refusal, tag along rights and drag along rights in connection with the disposition of Braskem Idesa shares.

The original estimated total cost of the Mexico Complex of US\$4.5 billion, including financial costs during construction and initial working capital requirements, was revised in 2015 to US\$5.2 billion primarily as a result of (1) a change in the scope of the power generating unit in order to ensure the self-sufficiency of the complex and improve the reliability of energy supply, with the possibility of selling any surplus energy to the grid; and (2) additional costs arising from infrastructure and local services.

We and Idesa contributed an aggregate of 38% of the total costs as equity in proportion to our ownership interests in Braskem Idesa, and the remainder was borrowed by Braskem Idesa under project finance facilities secured by the assets of this project, with multilateral credit agencies, export credit agencies, development banks and private banks.

Construction of the Mexico Complex began in 2012 and it commenced operations with the production of the first batch of polyethylene in April 2016.

Although our Mexico Complex is fully operational and Braskem Idesa has satisfied and continues to satisfy its debt service requirements and all other payment obligations under its US\$3,193 million senior secured syndicated facility on a timely basis, certain defaults not related to payment obligations have occurred and are continuing thereunder since at least 2016. These defaults give the creditors thereunder the right to vote to accelerate their debt under this facility and exercise their remedies in respect of the collateral for the facility, including the Mexico Complex and the outstanding shares of Braskem Idesa. Braskem Idesa has submitted requests for waivers of these defaults to and is currently negotiating such waivers with the inter-creditor agent for this facility. However, there can be no assurance that the inter-creditor agent and the lenders will agree to extend such waivers, or if they agree to extend such waivers, whether the waivers will include additional obligations with which Braskem Idesa would be required to comply.

Equity Support Agreement Relating to the Mexico Complex

In December 2012, we, Braskem Idesa, Etileno XXI, S.A. de C.V., and Idesa entered into an equity support agreement pursuant to which Braskem Idesa's shareholders agreed to make and guarantee payment of certain equity contributions to Braskem Idesa. This contract was amended and restated in April 2015. Pursuant to the amended and restated equity support agreement, the parties assumed a base equity commitment of US\$2.0 billion in proportion to their percentage ownership, direct or indirect, in Braskem Idesa (Braskem 75% and Idesa 25%), which has been fully contributed into Braskem Idesa. The shareholders have also assumed the obligation of making certain contingent equity contributions to cover any additional amounts necessary to complete the project. The contingent equity commitment that remains available is in the amount of up to US\$200 million, and such commitment will be available until the occurrence of the contingent equity release date in accordance with the amended and restated equity support agreement; provided that the same will be reduced to the lesser of the amount then available and US\$100 million upon the achievement of financial completion of the project. Currently, we have not provided credit support for any of our obligations to fund base equity or primary or secondary contingent equity, but in the event that we cease to have an investment grade rating prior to the release of our base and contingent equity obligations, we will be required to provide cash collateral or in an amount equal to any such equity contributions that we may be required to make under the agreement.

Amendments to Braskem Idesa Shareholders' Agreement Relating to Project Ethylene XXI

In February 2010, Braskem and Idesa entered into a shareholders' agreement, which we refer to as the Braskem Idesa shareholders' agreement, to govern our relationship with respect to Braskem Idesa. In November 2012, Braskem and Idesa entered into the first amendment to the Braskem Idesa shareholders' agreement, under which our ownership interest in Braskem Idesa was increased to 75% minus one share of the equity interest in Braskem Idesa and Idesa's ownership interest in Braskem Idesa was reduced to 25% plus one share of the equity interest. In December 2012, we and Idesa entered into the second amendment to the Braskem Idesa shareholders' agreement to include the commitment of both Sponsors to fund certain primary and secondary contingent equity to the project. In April 2015, we and Idesa entered into the third amendment to the Braskem Idesa shareholders' agreement to include additional base equity contribution and reaffirm the new commitments of contingent equity, under which we agreed to fund up to 100% of the contingent equity commitment under the equity support agreement up to start-up date. The primary contingent equity commitment is US\$208 million. Finally, in April 2017, we and Idesa amended and restated the Braskem Idesa shareholders' agreement to update the terms to reflect the progress of the enterprise since the original signing in 2010 and to reflect the understanding among the shareholders as to the shareholders' rights and obligations in connection with the payment of fees and interest by Idesa related to any funding by Braskem of Idesa's portion of contingent equity or the working capital needs of Braskem Idesa, and the eventual dilution of Idesa's equity interests in Braskem Idesa as a result of the same.

Other Investments

UTE[®] Project

Our new production line of ultra-high molecular weight polyethylene (UHMWPE), commercially known as UTE[®] began its operation in January 2017.

Located in the city of La Porte, state of Texas, in the United States, the production from this plant will complement the capacity of the already existing line in Brazil, in the petrochemical complex of Camaçari. With 100% Brazilian technology, the UTE[®] resin has sophisticated applications in several industries, such as automotive and transportation, electronics, fibers and textiles, heavy industry and machines, material handling, oil and gas, pipelines and mining, porous plastics, recreation, and for the end consumer.

The main market for the production of the La Porte UTE[®] plant is the North-American market, but we expect in the future to export resin for destinations such as Europe, India and China. The beginning of this plant's operations strengthens our position as one of the biggest UHMWPE producers in the world.

Raw material flexibility project in Bahia

Aligned with our strategy, which looks for alternatives sources of raw materials to increase its global competitiveness, in November 2017, the flexibilization for production of up to 15% of ethylene using ethane as raw material began in the petrochemical complex in Bahia.

For the raw material supply, we signed an agreement for the purchase of ethane from the United States from an affiliated company of Enterprise Products. The term of the agreement is of 10 the years, and the price is based on the international reference of Mont Belvieu.

R\$380 million have been invested in the technological adaptation of the Chemicals Unit in Camaçari, in the pipeline and in the adaptation of the logistics infrastructure of the Dock-Terminal of Aratu, in Candeias.

Debottlenecking of the capacity in the Marcus Hook plant, USA

Aligned with the strategy of expanding to international markets and to meet its clients' needs, in 2016, we invested US\$21 million in the debottlenecking of the production capacity of the Marcus Hook/PA PP plant, increasing its nominal capacity in 64 thousand tons per year. The scope of the project included improvements to the propylene purifier and in the resin production areas of the plant.

New PP plant in the United States

Aligned with the strategy to diversify the raw materials matrix and geographic expansion in the Americas, reinforcing the leadership in the PP production in the United States, our Board of Directors approved, on June 21, 2017, the project to build a new PP plant of 450 thousand tons at the La Porte site, in the American state of Texas. The beginning of the project's operation is expected for the second quarter of 2020.

With an approved investment of up to US\$675 million, as of December 31, 2018 we already invested US\$382 million in the engineering project detailing and in the purchase of equipment. In 2018, the project had a 48.3% completion: 97.4% of the engineering detailing; 97.4% of equipment and material acquisitions; and 41.6% of the construction was completed. It is worth highlighting that Linde Group was hired to lead the EPC (engineering, procurement and construction) of the project and the choice of Grace's UNIPOL[®] technology.

As of the date of this annual report, Braskem already had invested US\$485 million, and overall construction had reached a completion rate of 65.5%, as follows:

- Engineering Detailing: 97.6% complete.
- Equipment and Material Acquisitions: 99.8% complete.
- Construction: 61.0% complete.

Braskem America entered into a credit facility in the amount of up to US\$225 million that is secured by Euler Hermes, a German export credit agency, which will be used to finance a portion of the investments in the new PP plant. The transaction, which matures on December 30, 2028, has a cost of 0.65% p.a. + semiannual LIBOR, with semiannual amortization as of December 30, 2020. The funds will be disbursed in accordance with the progress of the project's construction and the total amount is expected to be disbursed by December 30, 2020. As of this annual report, US\$172 million has been disbursed.

Off-Balance Sheet Arrangements

We do not currently have any transactions involving off-balance sheet arrangements.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

Directors and Senior Management

Our board of directors (*conselho de administração*) and our board of executive officers (*diretoria*) are responsible for operating our business.

Board of Directors of Braskem

Our by-laws provide for a board of directors of eleven members and eleven alternate members. During periods of absence or temporary unavailability of a regular member of our board of directors, the corresponding alternate member substitutes for the absent or unavailable regular member. Our board of directors is a decision-making body responsible for, among other things, determining policies and guidelines for our business and our wholly-owned subsidiaries and controlled companies. Our board of directors also supervises our board of executive officers and monitors its implementation of the policies and guidelines that are established from time to time by the board of directors. Under the Brazilian Corporations Law, our board of directors is also responsible for hiring independent accountants.

The members of our board of directors are elected at general meetings of shareholders for two-year terms and are eligible for reelection. The terms of all current members expire at our annual shareholders' meeting scheduled for 2020. Members of our board of directors are subject to removal at any time with or without cause at a general shareholders' meeting. Our by-laws do not contain any citizenship or residency requirements for members of our board of directors and the members of our board of directors need not to be our shareholder. Our board of directors is presided over by the president of the board of directors, and, in his absence, the vice president of the board of directors. The president and the vice president of our board of directors are elected at a general shareholders' meeting from among the members of our board of directors, serve for two-year terms and are eligible for reelection.

Our board of directors ordinarily meets eleven times a year and extraordinarily whenever necessary and called by the chairman, the vice-chairman or any two other members of our board of directors. Decisions of our board of directors require a quorum of a majority of the directors and are taken by majority vote, other than certain actions which require the consensus of the nominees of Odebrecht and Petrobras under the Braskem S.A. Shareholders' Agreement. See "Item 7. Major Shareholders and Related Party Transactions—Major Shareholders—Shareholders' Agreements—Braskem S.A. Shareholders' Agreement."

The following table sets forth certain information with respect to the current members of our board of directors and their alternates as of the date of this annual report:

Name	Member Since	Position Held	Age
Marcelo Moses de Oliveira Lyrio (1)	June 27, 2017	<u>Chairman of the Board</u>	56
João Cox Neto	June 8, 2016	<u>Vice-Chairman of the Board</u>	56
Ana Lúcia Poças Zambelli	June 19, 2019	Board Member	46
Roberto Lopes Pontes Simões	May 22, 2019	Board Member	62
Gesner José de Oliveira Filho (1)	June 27, 2017	Board Member	63
Pedro Oliva Marcilio de Sousa (1)	June 27, 2017	Board Member	46
Roberto Faldini	May 22, 2019	Board Member	71
João Pinheiro Nogueira Batista	April 22, 2019	Board Member	63
Fábio Venturelli (1)	October 16, 2018	Board Member	53
Julio Soares de Moura Neto (1)	April 22, 2019	Board Member	76
Mauro Motta Figueira	April 27, 2012	Board Member	49
Larry Carris Cardoso	October 16, 2018	Alternate	44
André Amaro da Silveira	June 8, 2016	Alternate	56
Marcelo Rossini de Oliveira	April 22, 2019	Alternate	41
Susan Barrio de Siqueira Campos	April 30, 2018	Alternate	38
Marcelo Mancini Stella	June 8, 2016	Alternate	56
João Carlos Trigo de Loureiro	April 7, 2016	Alternate	66
José Marcelo Lima Pontes	May 22, 2019	Alternate	65

(1) Independent director.

The following is a summary of the business experience, areas of expertise and principal outside business interests of our current directors and their alternates.

Directors

Marcelo Moses de Oliveira Lyrio. Mr. Lyrio is the Chairman of our Board of Directors, as an independent director and was appointed to our Board of Directors by Odebrecht. He is the founding partner of Princípio Assessoria Empresarial. Prior, during 12 years, from 2004 to 2016, he was a businessman, partner and co-founder of Signatura Lazard, and Managing Director (MD) of Lazard in Brazil. During this period, he acted as an advisor for large Brazilian and International Corporations. Mr. Lyrio also worked for 14 years, between 1990 and 2004, for ING Bank and ING Barings in several areas of the institution. From 2001 to 2004 he held the role of President of ING's operations in Brazil. Mr. Lyrio holds a bachelor's degree in economics from Pontifícia Universidade Católica - PUC of Rio de Janeiro.

João Cox Neto. Mr. Cox is the Vice-Chairman of our board of directors and was appointed to our board of directors as a nominee of Petrobras. He is currently a member of the boards of directors of Embraer S.A., Petrobras, S.A., Qualicorp S.A., Linx S.A. and Eldorado S.A.. He is the founding partner and managing director of Cox Investments & Advisory. Between 2006 and 2010, Cox served as CEO and vice-chairman of Claro. In 2005, he was the vice-chairman of the board of directors of Cellcom Israel. He served as CFO and investor relations of Telemig Celular Participações and Tele Norte Celular Participações from April 1999 to August 2004 and also as CEO of Telemig Celular and Amazonia Celular from August 2002 to August 2004. In addition, Cox has served as a member of boards of directors of other companies in Brazil, Argentina, the Netherlands and Israel. He served as consultant to CRSFN - National Financial System Resources Council, ABRASCA (Brazilian Association of Publicly Held Companies) and IBRI (Brazilian Institute of Investors' Relations). Cox holds a bachelor's degree in economics from Universidade Federal da Bahia and completed a graduate degree in economics at Université du Québec à Montreal and at the College of Petroleum Studies of Oxford University.

Ana Lúcia Poças Zambelli. Ms. Zambelli was appointed to our board of directors by Petrobras. She is a senior executive with 22 years of experience in the Oil & Gas industry (O&G). She holds a degree in Mechanical Engineering, a Master's Degree in Petroleum Engineering and a Graduate Degree in Leadership, Strategy and Innovation from MIT - Massachusetts Institute of Technology. Currently, Ms. Ana Lúcia Poças Zambelli is also a member of the board of directors at Petrobras.

Roberto Lopes Pontes Simões. Mr. Simões was elected to our board of directors as a nominee of Odebrecht. Mr. Simões has acted as chairman or member of the board of directors of large companies, such as Odebrecht Engenharia e Construção, Consórcio Baía de Sepetiba, Itaguaí Construções Navais, Petroquímica Paulínia, Ipiranga Química, Ipiranga Petroquímica, Refinaria Ipiranga, COPESUL, Petroflex and CETREL. He is currently the CEO of Ocyan, where he started working in 2012. From 2010 to 2012, he was the CEO of Odebrecht Defesa e Tecnologia. From 2008 to 2010, he was the president of Santo Antonio Energia. At Braskem, he held the position of Executive Vice President, from 2004 to 2008. From 2000 to 2004 he held the position of COO and, subsequently CEO of iG-Internet Group. He was the president of Opportrans Concessão Metroviária - Metro Rio, from 1999 to 2000. His career at Odebrecht began in 1994, as a Tenenge and CNO Agreements Officer. Mr. Simões holds a degree in Mechanical Engineering from Universidade Federal da Bahia (UFBA) obtained in 1978. He also attended the Petrochemical Projects and Maintenance Engineering Course - Cemant (a cooperation between Petrobras and UFBA). He is a member of Obras Sociais de Irmã Dulce (Charitable Works Foundation of Sister Dulce).

Gesner José de Oliveira Filho. Mr. Oliveira Filho is an independent director and was appointed to our board of directors by Odebrecht. Mr. Oliveira is certified by the Brazilian Institute of Cooperative Governance. He is currently a member of the board of directors of TIM, chairman of Estre, member of the board of directors of Iguá and Instituto Iguá, a member of the Self-regulation Council of FEBRABAN, member of the Advisory Board of ETCO, CIEE and the Muktistakeholder Council of the Less Loss, Less Water Movement. Partner of GO Associados, Professor at EAESP/FGV, Coordinator of the Economics Group of Infrastructure & Environmental Solutions of FGV. Between 2007 and 2010, he was the President of Sabesp - Sanitation Company of the State of São Paulo. He has also acted as a Consultant in a project for the World Bank, for institutional analysis of a sanitation company in Dhaka, Bangladesh, in 2012. Mr. Gesner Oliveira graduated with a degree in Economics from the School of Economics and Administration of Universidade de São Paulo - FEA/USP, with a Master's degree in Economics from the Economics Institute of Universidade Estadual de Campinas (UNICAMP) and Ph.D. in Economics from University of California, Berkeley.

Pedro Oliva Marcilio de Sousa. Mr. Sousa is an independent director and was appointed to our board of directors by Odebrecht. Currently, he is a member of the board of directors of Klabin S.A. and from 2011 to 2017 he acted as a Resources Management Office at GR Partners Gestão de Recursos Ltda. In 2011, he acted as an M&A Officer. From 2009 to 2010, he acted as M&A officer at Banco Standard de Investimentos S.A. As of 2013, he has been acting as a member of the Audit Committee at Companhia Brasileira de Distribuição and B3 S.A. - Brasil, Bolsa e Balcão. Between 2013 and 2014, he was a member of the fiscal board of Hypermarcas. Mr. Sousa holds a bachelor's degree in law from Faculdade de Direito da Universidade Federal of the State of Bahia.

Roberto Faldini. Mr. Faldini was elected to our board of directors as a nominee of Odebrecht. He holds a degree in Business Administrator from the Getulio Vargas Foundation obtained in 1972. He also holds specialization degrees in (i) Advanced Management from Dom Cabral Foundation and INSEAD, obtained in 1991; (ii) Entrepreneurship from Babson College, obtained in 2004 and (iii) Corporate Governance (IFC and IBGC), obtained in 2009, 2011, 2013 and 2016. Mr. Faldini is the president and partner of Faldini Estratégia Empresarial, and the CEO of MBF, Administração e Serviços. He currently holds the position of Chairman of the Board of Metalúrgica Golin S.A., and he is a member of the Boards of Vulcabrás-Azaleia, Marfrig General Foods, CHP Group (Celulose Irani and Cia. Habitasul) and Odebrecht S.A.. He is a volunteer member of the Board of Trustees of Dorina Nowill Foundation for Blind People and Crespi Prado Foundation. He is an officer of the Ema Gordon Klabin Cultural Foundation. Mr. Faldini is an invited professor at Dom Cabral Foundation and an arbitrator at the Arbitration Chamber of the B3. He has been a member of the Board of Directors and Advisory Boards of several companies in Brazil and abroad, including, Metal Leve, Maráu, Livrarias Siciliano, CPFL, Inpar, Klicknet and Sadia. Mr. Faldini is a co-founder of IBCG - Brazilian Institute for Corporate Governance in 1995, and he remains active in many of its committees. He is an associated member of IBEF - Brazilian Institute for Financial Executives, and FBN - Family Business Network. For more than 20 years he was the CEO, a shareholder and member of the Board of Directors of Metal Leve S.A., and he held the position of President of CVM in 1992. He was the coordinator in the State of São Paulo, of the Family Business Core - PDA of the Dom Cabral Foundation, from 2002 to 2007.

João Pinheiro Nogueira Batista. Mr. Batista was elected to our board of directors as a nominee of Odebrecht. He has served for more than ten years on Boards of Directors of companies in Brazil. In the Odebrecht Group, he was an independent member of the Boards of Directors of Odebrecht Engenharia e Construção since June 2017 and Ocyan since April 2018, where he remained until January 2019, and joined the Board of Directors of Odebrecht S.A. in November 2018. In addition, currently he is a CEO of Evoltz S.A.. He was the CEO of Swiss Re, Bertin S.A. and Suzano Petroquímica, as well as a director at companies such as Petrobras, Dresdner Bank, Citibank, Radiobras and Siderbras. Mr. Batista holds a degree in Economics from PUC-RJ and an MBA degree in Economic Engineering from Universidade Gama Filho, Rio de Janeiro.

Fábio Venturelli. Mr. Venturelli is an independent director and was appointed to our board of directors by Petrobras. He has more than 25 years of experience in corporate management, global business management and commercial management, with vast experience in management of national and international companies. Currently, he is a member of the boards of directors of CTC – Centro de Tecnologia Canavieira S.A. and COINFRA – Conselho Superior de Infraestrutura da FIESP. Mr. Venturelli has been the CEO of São Martinho since 2007. He began his career at Dow Chemical, where he held several positions both in Brazil and in the United States, including as Global Business Officer and Corporate and Strategic Development Officer, between 1989 and 2007. In addition, Mr. Venturelli was the recipient of the Businessman of Value - Executivo de Valor prize, granted by the newspaper *Valor Econômico*, in 2012, 2013, 2016, 2017 and 2018, and he was named one of the best CEOs in Brazil by Forbes Magazine in 2017. Mr. Venturelli holds a bachelor's degree in production engineering at the Engineering School of the University of São Paulo, an MBA degree from FIA-FEA and participated in the Young Management Program at INSEAD, in France.

Julio Soares de Moura Neto. Mr. Moura is an independent director and was appointed to our board of directors by Petrobras. He is a Fleet Admiral and has experience on the Strategic Consulting Board of Fundação EZUTE, on the Consulting Board of Cia Brasileira de Cartuchos (CBC) and on the Consulting Board of Sindicato Nacional das Indústrias de Materiais de Defesa (SIMDE). Mr. Moura holds a degree in Command and General Staff from the *Escola de Guerra Naval*, Navy War Higher Course from the *Escola de Guerra Naval* and Navy War Higher Course from *Instituto Superior Naval de Guerra* in Portugal.

Mauro Motta Figueira. Mr. Figueira was elected to our board of directors as a nominee of Odebrecht. Mr. Figueira currently serves as the Investment and Strategic Planning director of Odebrecht. Previously, he was a management associate at Citibank and strategic planning manager at OPP Petroquímica until 2002; senior consultant at management consulting firm A.T. Kearney from 2004 to 2006, marketing controller at J&J Pharmaceutical Division (Janssen) from 2006 to 2008 and senior manager at strategic consulting firm Monitor Group from 2008 to 2010. Mr. Figueira holds a degree in production engineering from the University of São Paulo and an MBA degree from the Darden School of Business of the University of Virginia.

Alternate Directors

Larry Carris Cardoso. Mr. Cardoso was elected as an alternate member of our board of directors as a nominee of Petrobras. He has worked at Petrobras since 2003 and currently serves as the General Manager of Loans and Financing, and previously served as a Corporate Finance Manager from 2013 to 2014, Manager of Financial Resources from 2011 to 2013, Manager of Sector Financial Operations from 2003 to 2011 and Exchange Coordinator at Petrobras from 2001 to 2002. In addition, he was a member of the Audit Committee of FCC – Fábrica Carioca de Catalizadores from 2012 to 2014. Previously, Mr. Cardoso was a member of the Investment Committee at Petros. Between 1998 and 2004, he was a professor of economics at Faculdade Moraes Júnior and at University Estácio de Sá. Mr. Cardoso holds a bachelor's degree, a master's degree and a Ph.D. in Economics from the Federal University of the State of Rio de Janeiro.

André Amaro da Silveira. Mr. Silveira was elected an alternate member of our board of directors as a nominee of Odebrecht. He worked with Odebrecht Group from 1989 to 2018. Currently, he is a member of the boards of directors of Odebrecht Engenharia e Construção, Ocyan, Odebrecht Transport and Atvos, acting also on its respective Compliance Committees. He began his career in heavy infrastructure projects and led Odebrecht investments in the concession of public services in Brazil, Argentina and Portugal. During this period, he was also Director of Project Finance and Export at Construtora Norberto Odebrecht, Vice-President of Planning and People at Braskem, Director of Human Resources at Odebrecht S.A., President of Odebrecht Properties and Odebrecht Defesa e Tecnologia. Mr. Silveira holds a degree in Civil Engineering from Universidade Federal de Minas Gerais and a Master of Business Administration degree from IMD.

Marcelo Rossini de Oliveira. Mr. Oliveira was elected as an alternate a member of our board of directors as a nominee of Odebrecht. Mr. Oliveira currently serves as the Treasury and IR Officer of Odebrecht S.A. From 2005 to 2018, he worked as a financial analyst, Capital Market and Operations Structure Manager and Treasury Manager of Braskem S.A.. He previously worked as senior auditor and financial analyst at Deloitte - Auditores e Consultores. Mr. Rossini holds a degree in Economics from Universidade Católica do Salvador, a graduate degree in Finance from Fundação Getúlio Vargas and an MBA degree in Finance from Insper.

Susan Barrio de Siqueira Campos. Ms. Campos was elected an alternate member of our board of directors as a nominee of Odebrecht. She is currently an attorney of Odebrecht S.A. A professional with 17 years' experience in the areas of finance, Mergers and Acquisitions, and Investment Projects of legal departments. She started her career as an attorney in the financial area of the legal department of Braskem in 2005. She was also manager of the areas of finance, Mergers and Acquisitions and Investment Projects of the legal department of Braskem, between 2006 and 2010. In 2011 she held the position of international associate of the corporate area of Simpson Thacher & Bartlett LLP, New York, USA. At the Odebrecht Organization, she started in 2012 as legal responsible for Odebrecht Properties S.A. Ms. Campos holds a Law degree from Fundação Armando Alvares Penteado, in São Paulo, obtained in 2004, a certificate in Financial Management from Insper Instituto de Ensino e Pesquisa, in São Paulo, obtained in 2010, and completed an LLM at the University Of Michigan Law School, Michigan, USA, in 2011.

Marcelo Mancini Stella. Mr. Mancini was elected as an alternate member of our board of directors as a nominee of Odebrecht. He has served as the Vice-President of Marketing and Sales of Ethanol, Sugar and Energy, Logistics, Supply and Business Development at Atvos since 2010. Previously, he held several positions at Braskem from 2002 to 2010, leading the Business Directorships of Polyethylene, Vinyls and Polypropylene. He worked for Pilkington Brasil Ltd. as Sales and Marketing Director from 1990 to 2002. Mr. Mancini holds a bachelor's degree in production engineering from the Polytechnic School of the University of São Paulo and an MBA degree from the University of São Paulo - FIA. He also participated in the INSEAD Finance Program and the Marketing Program at Cranfield University.

João Carlos Trigo de Loureiro. Mr. Loureiro was elected as an alternate member of our board of directors as a nominee of Petrobras, Mr. Loureiro has 40 years of professional experience, including more than six years in France, with vast management experience. Since 2015, he holds the position of Manager of Interests in Petrochemical and Biofuel Companies at Petrobras. Mr. Loureiro holds a degree in economics from Universidade Cândido Mendes and an executive MBA degree in oil and gas from Coppe – UFRJ.

José Marcelo Lima Pontes. Mr. Pontes was elected as an alternate member of our board of directors as a nominee of Odebrecht. Mr. Pontes is a professional journalist, with 34 years of experience at some of the main media outlets in Brazil, and 21 years of experience in corporate communication, six of which at Odebrecht.

Board of Executive Officers of Braskem

Our board of executive officers is our executive management body. Our executive officers are our legal representatives and are responsible for our internal organization and day-to-day operations and the implementation of the general policies and guidelines established from time to time by our board of directors.

Our by-laws require that the board of executive officers consist of a chief executive officer and between three and nine additional members, each responsible for business areas that our board of directors assigns to them. The members of our board of executive officers, other than our chief executive officer and the general counsel, have no formal titles (other than the title of executive officer or "Director") but have the informal titles set forth in the table below.

The members of our board of executive officers are elected by our board of directors for three-year terms and are eligible for reelection. The current term of all of our executive officers ends at the first board of directors meeting held immediately after our annual shareholders' meeting to be held in 2021. Our board of directors may remove any executive officer from office at any time with or without cause. According to the Brazilian Corporations Law, executive officers must be residents of Brazil but need not to be our shareholders. Our board of executive officers holds meetings when called by our chief executive officer.

The following table lists the current members of our board of executive officers as of the date of this annual report:

Name	Year of First Appointment	Position Held	Age
Fernando Musa	2016	Chief Executive Officer	54
Pedro van Langendonck Teixeira de Freitas	2016	Chief Financial Officer, Investor Relations and External Affairs Officer	43
Cristiana Lapa	2019	General Counsel and Corporate Governance Officer	42
Edison Terra Filho	2016	Executive Officer and Head of the Polyolefins South America and Europe Unit	47
Marcelo Arantes de Carvalho	2015	Executive Officer and Head of People, Communication, Marketing and Sustainable Development	51
Marcelo de Oliveira Cerqueira	2013	Executive Officer and Head of the Chemicals and Vinyl Unit	54
Luiz Eduardo Valente Moreira	2019	Executive Officer and Head of Investments & Portfolio	62

Summarized below is information regarding the business experience, areas of expertise and principal outside business interests of our current executive officers:

Fernando Musa. Mr. Musa is currently our chief executive officer. From April 2012 to April 2016, Mr. Musa was in charge of our business in the United States and Europe. Before that, in 2011, Mr. Musa was planning and business development officer for Braskem, leading the areas of strategic planning, procurement and information technology and also in charge of quantiQ, Braskem's distributor of chemical products. Mr. Musa joined Braskem in January 2010 as planning and integration officer at Quattor (at the time of the acquisition by Braskem), where he was responsible for the integration into Braskem, leading the financial, procurement, polymer logistics and SAP project areas. Previously, Mr. Musa held leadership positions at McKinsey, Editora Abril and Monitor Group. Mr. Musa holds a degree in mechanical engineering from the Aeronautic Technological Institute (*Instituto Tecnológico da Aeronáutica*), or ITA, in São José dos Campos, Brazil and an MBA degree from Insead.

Pedro Van Langendonck Teixeira de Freitas. Mr. Freitas is currently our chief financial officer, investor relations and external affairs officer. He previously served in our strategic planning area from 2011 to 2016. Prior to this, he was a strategy consultant, having participated in the construction of business strategies and mergers and acquisitions projects in various industries, including petrochemicals, agribusiness, consumer goods and pharmaceuticals. Mr. Freitas holds a degree in production engineering from the Polytechnic School of the University of São Paulo and an MBA degree from Insead.

Cristiana Lapa. Ms. Lapa is currently our General Counsel and Corporate Governance officer. Ms. Lapa joined the Company in November 2006 as a Legal Manager responsible for the labor, pension and environmental areas, where she worked until 2013, when she became a Legal Director for the South America and Europe Polyolefins Unit. Previously, she was an intern and lawyer at the law firm Pinheiro Neto Advogados, from 1997 to 2006. She holds a bachelor's degree, master's degree and doctorate from the Law School of the University of São Paulo (USP), completed a non-degree program in Labor Law from COGEAE at the Pontifical Catholic University of São Paulo (PUC-SP) and conducted research at Montesquieu University in France.

Edison Terra Filho. Mr. Terra is currently our head of polyolefins South America and Europe Unit. Mr. Terra joined Braskem in 2002 and has held positions in several areas, including marketing, supply chain and export and as leader of Small Enterprise Polyethylene, UNIB and quantiQ. Previously, he served in several positions at Rhodia from 1993 to 2002. Mr. Terra holds a bachelor's degree in production engineering from Escola Politécnica da USP and a master's degree in business administration from EAESP-FGV/SP. He also completed extension courses in Global Leadership at Wharton Business School and in Disruptive Technologies at Singularity University.

Marcelo Arantes de Carvalho. Mr. Carvalho is currently our head of people, communication, marketing and sustainable development. He has implemented organizational and human resources training programs, cultural change and leadership development programs and developed and implemented global strategies in the areas of human resources, information technology and procurement. Previously, Mr. Carvalho worked in global companies such as ABB, Unilever, Fiat Chrysler Automotive and Braskem. He has over 28 years of experience in the human resources, information technology and procurement areas in industries such as metallurgy, automation and power technology, telecommunications, automotive, consumer goods and petrochemical/chemical industries. Mr. Carvalho holds a degree in business administration, with specialization in business management, from Fundação Dom Cabral and a degree in global leadership from Wharton.

Marcelo de Oliveira Cerqueira. Mr. Cerqueira is currently the head of the Chemicals and Vinyl Business. Mr. Cerqueira previously served as head of our Vinyls Unit from 2010 until October 2013, as industrial vinyls director from 2009 until 2010 and as production manager of our PVC production unit in the State of Bahia from 2003 until 2008. Previously he worked at Trikem in various capacities, including production manager of the PVC production unit in the State of Alagoas from 1997 until 2002. At Companhia Petroquímica Camaçari, he worked with the production logistics, health, safety and the environment and procurement engineering areas from 1989 until 1996. He began his career at Companhia Alcoolquímica Nacional and COPERBO (now Lanxess), where he worked from 1987 until 1989. Mr. Cerqueira holds a bachelor's degree in chemical engineering from the University of Pernambuco and an MBA degree from FGV.

Luiz Eduardo Valente Moreira. Mr. Moreira is currently our head of Investments & Portfolio. Mr. Moreira has 38 years of experience at Petrobras, in the following positions: Industrial Executive Manager from April 2018 to March 2019; Safety, Environment and Health Executive Manager from 2015 to 2018; Director of the Comperj Petrochemical Project from 2013 to 2015; Gas and Chemical Energy and Liquefaction Manager (GE-GQL) from 2009 to 2013; General Manager of the Bahia Nitrogen Fertilizers Plant (FAFEN-BA) from 2008 to 2009; General Manager of the Henrique Lage Refinery (REVAP) from 2005 to 2008; General Manager of Refining Technology for Supply (AB-RE/TR) from 2001 to 2005; and Superintendent of the Presidente Getúlio Vargas Refinery (REPAR) from 1999 to 2000. Mr. Moreira holds a bachelor's degree in chemical engineering from the Federal University of Rio de Janeiro (UFRJ) and a graduate degree in Petroleum Processes Engineering from the same university, as well as an Executive MBA degree from COPPEAD (UFRJ).

Fiscal Council

The Brazilian Corporations Law requires us to establish a permanent or non-permanent fiscal council (*conselho fiscal*). Our by-laws provide for a permanent fiscal council composed of five members and their respective alternate members. The fiscal council is a separate corporate body, independent of our management and our independent accountants.

The members of our fiscal council are elected by our shareholders at the annual general shareholders' meeting for one-year terms and are eligible for reelection. The terms of the members of our fiscal council expire at the next annual general shareholders' meeting, which will be held in 2019. Under the Brazilian Corporations Law, the fiscal council may not contain members who are members of our board of directors or our board of executive officers or are employees or spouses or relatives of any member of our management. To be eligible to serve on our fiscal council, a person must be a resident of Brazil and either be a university graduate or have been an officer or fiscal council member of another Brazilian company for at least three years prior to election to our fiscal council. Holders of (1) preferred shares without voting rights and (2) non-controlling common shareholders that together hold at least 10.0% of our voting share capital are each entitled to elect one member and his or her respective alternate to the fiscal council.

The responsibilities of a fiscal council are established by the Brazilian Corporations Law. In accordance with the Brazilian Corporations Law, our fiscal council has the right and obligation to, among other things:

- supervise, through any of its members, the actions of our managers and to verify their fulfillment of their duties;
- give an opinion on the annual report of our management, including the supplementary information deemed necessary or useful for deliberation at a general meeting;
- at least every three months examine the trial balance sheet and other financial statements periodically prepared by the company;

- examine the accounts and financial statements for the financial year and give an opinion on them;
- opine on any management proposals to be submitted to a vote of our shareholders related to:
 - changes in our share capital;
 - issuances of debentures or rights offerings entitling the holder to subscribe for equity securities;
 - distributions of dividends; and
 - transformation of our corporate form and any corporate restructuring, such as takeovers, mergers and spin-offs;
- inform our management of any error, fraud or misdemeanor detected and suggest measures we should take in order to protect our primary interests. If our management fails to take the measures required to protect our interests, inform our shareholders at a shareholders' meeting of these facts; and
- call general shareholders' meetings if management delays the general shareholders' meeting for more than one month and call special shareholders' meetings in the event that important matters arise.

As described in "Item 16D. Exemptions from the Listing Standards for Audit Committees," we are relying on the general exemption from the listing standards relating to audit committees contained in Rule 10A-3(c)(3) under the Exchange Act. In order to comply with the requirements of this exemption, our board of directors has delegated to our fiscal council certain additional responsibilities and our fiscal council adopted rules under which our fiscal council has the duties and responsibilities of a U.S. audit committee to the extent permitted under Brazilian Corporations Law. Because Brazilian Corporations Law does not permit the board of directors to delegate responsibility for the appointment, retention and compensation of the external auditors and does not provide our board of directors or fiscal council with the authority to resolve disagreements between management and our external auditors regarding financial reporting, our fiscal council cannot fulfill these functions. Our fiscal council may only make recommendations to our board of directors and shareholders with respect to the appointment, retention and compensation of the external auditors, and with regard to resolution of disagreements between management and the external auditors, our fiscal council may only make recommendations to our board of directors and shareholders. Under the rules governing our fiscal council, our fiscal council has the following rights and obligations, among others, in addition to those established by the Brazilian Corporations Law:

- to follow and analyze the process of hiring independent auditors, observing applicable Brazilian rules and legislation, and considering the technical expertise, independence, efficiency, experience and costs of the independent auditors, and recommend to our board of directors the selection and remuneration for the work of independent auditors and their possible replacement;
- to approve the annual list of pre-approval services that may be provided in a given year by the independent auditors, as well as ensure that the policy is observed by our management and independent auditors;
- to supervise the work of our independent auditors, as well as to discuss the scope of audit services to be performed by them;
- to analyze the recommendations report prepared by our independent auditors and the internal control over financial reporting, including items that may impact our financial statements;
- to request from our independent auditors, if necessary, any clarification or information that is deemed to be necessary for the verification of specific facts;
- to meet with our management and independent auditors, whenever required, for the analysis of adoption of significant accounting policies and practices, including analysis of alternative treatments of policies, practices and disclosures related to material items, giving preferential treatment to the guidelines of our independent auditors;

- to intermediate possible discussion and conflicts arising between our independent auditors and our management related to the draft of financial reports, providing, if necessary, opinions regarding such conflicts;
- to discuss the content of all material and relevant communication made in writing by our independent auditors to our management which come to its knowledge;
- to hire, as appropriate, in accordance with § 8 of Article 163 of the Brazilian Corporations Law, independent experts and advisers, including but not limited to legal counsel, to advise and give opinions on matters related to the performance of its duties;
- to meet regularly and privately with the head of internal audit to discuss any issues and/or concerns; and
- to receive information and oversee the evaluation process regarding complaints received by us, whether through our confidential, anonymous ethics hotline or otherwise, with respect to our financial statements, internal accounting controls and auditors (whether internal or independent).

The following table lists the current members of our fiscal council and their alternates:

Name	Year of First Appointment
Ismael Campos de Abreu	2003
Gilberto Braga	2017
Carlos Alberto Rechelo Neto	2018
Viviana Cardoso de Sá e Faria	2019
Patricia Gracindo Marques de Assis Bentes	2019
Ivan Silva Duarte (alternate)	2016
Tatiana Macedo Costa Rego Tourinho (alternate)	2018
Bruno Passos da Silva Melo (alternate)	2019
Bruno Carvalho Baruqui (alternate)	2018
Fábio Vianna (alternate)	2019

The following is a summary of the business experience, areas of expertise and principal outside business interests of the current members of our fiscal council and their alternates.

Members of Fiscal Council

Ismael Campos de Abreu. Mr. Abreu was elected a member of our fiscal council as representative of Odebrecht in 2003. He served in the period of April 2011 until May 2017, as director of Kieppe Participações and Administration Ltda., and as Controller of Odebrecht S.A., between 1995 and March 2011. Served as the manager of the tax Consulting Division of PricewaterhouseCoopers from 1978 to 1985, as controller of Corrêa Ribeiro S.A. Comércio e Indústria from 1986 to 1988, as manager of the consulting area of Arthur Andersen from 1989 to 1991 and as partner of Performance Auditoria e Consultoria from 1992 to 1995. Previously, he served as a member of the fiscal council of Petroflex Indústria e Comércio S.A. until the sale of our interest in Petroflex in April 2008. Between March 2006 and March 2008, he served as member of the fiscal council of Companhia Petroquímica do Sul. Mr. Abreu holds a degree in accounting from Fundação Visconde de Cairú and a graduate degree in economic engineering from the Inter-American Development Center.

Gilberto Braga. Mr. Braga was elected as a member of the Fiscal Council as representative of Odebrecht Serviços e Participações S.A. in August 2017. Mr. Braga is a business consultant with specialization in the areas of finance, capital market, corporate and tax; offering consulting services specialized in lawsuits. He is also a member of the fiscal, administrative and audit committees of companies listed in the stock Exchange and professional associations. He was a member of the Advisory Committee on Accounting Standards for CVM's investment funds, and is a graduate teacher of corporate governance. He teaches the courses: Fundação Dom Cabral, IBMEC, PUC and FGV; and is a columnist for the newspaper O Dia. He holds a degree in economics from UCAM Ipanema, a degree in Accounting from UGF, a post-graduate from the IAG-PUC Rio in financial administration and a masters in administration (finance and capital markets) from IBMEC-Rio.

Carlos Alberto Rechelo Neto. Mr. Neto was elected a member of our fiscal council as representative of Petrobras. Mr. Neto currently holds the position of Assistant to the Financial and Investors' Relations Officer. As head of the Risk area for over two years, he has coordinated the structuring process of the Risk Corporate Management at Petrobras. He also worked as Governance team leader at the end of 2016, in which occasion he coordinated the corporate effort to adjust the internal policies and procedures to Law No. 13,303/2016, making it possible for Petrobras to be certified by B3 in the Highlight in Governance of State Companies Program. He has a degree in engineering, a Master's Degree in Energy from USP, an MBA degree in Finance from UFRJ and a Risk International Certification / FRM.

Viviana Cardoso de Sá e Faria. Mrs. Faria was elected as a member of our fiscal council as representative of Petrobras. At Petrobras, she is an economist and holds a coordination position of the tax department since 2008, working on tax assessment and planning for the gas and energy segments. Ms. Faria has experience in investment and acquisition projects and divestiture and strategic initiatives in connection with tax matters. She currently leads the tax area at Petrobras. Ms. Faria holds a degree in Economics from UFF, a Master's degree in Energy Planning from PPE/COPPE/UFRJ, a post graduate degree in Tax Management from PUC-Rio and an extension degree in Comparative Tax Policy and Administration from Harvard Kennedy School.

Patricia Gracindo Marques de Assis Bentes. Ms. Bentes was elected a member of our fiscal council as a representative of minority shareholder Geração Futuro L. Par de Fundo de Investimento em Ações. Ms. Bentes has served as a Director at Cemig, Light and Renova. She is a Managing Partner at Estatic Holdings, a consulting firm that structures and raises funds for corporate clients through FIDCs, FII, CRA and CRI and other structured securities. Previously, she served as Managing Partner at Hampton Solfise, Executive Officer at Citigroup and Vice-CEO at Banco Bracce. She started her career as an auditor at Latin America Gillette and PwC. Ms. Bentes holds a bachelor's degree in Business Administration from the Federal University of Rio de Janeiro (UFRJ) and a master's degree in Finance and Marketing from the University of São Paulo (USP).

Alternate Members of Fiscal Council

Ivan Silva Duarte. Mr. Duarte was elected as an alternate member of our fiscal council in 2016. He has served as director of Kieppe Participações e Administração LTDA since January 2016. Previously, he served as manager of KPMG - Auditores Independentes from 1995 to 2001 and senior manager at PricewaterhouseCoopers Auditores Independentes from 2001 until 2008. Between 2008 and 2015, Mr. Duarte was an executive officer at EAO Empreendimentos Agropecuários e Obras S.A., an Odebrecht Group company operating in the Agricultural and Food and Beverage segments. Mr. Duarte holds a degree in accounting from the University of Salvador (UNIFACS), an MBA degree in corporate finances from the Fundação Getúlio Vargas and an MBA degree in entrepreneurship from Babson College.

Tatiana Macedo Costa Rego Tourinho. Mrs. Tourinho was elected as an alternate member of Braskem's fiscal council as a representative of Odebrecht in April 2018. Since April 2014, she is the Corporate Controller of Construtora Norberto Odebrecht. From May 2007 to March 2014, she served as Director of Tax Planning at CNO. From 2000 to April 2007, she worked in the tax department of VIVO as Tax Planning Division Manager. Previously, she worked for two years at Arthur Andersen. Ms. Tourinho holds a B.A. in Public and Private Business Administration from the Federal University of Bahia (UFBA) and an MBA degree in Management from IBMEC.

Bruno Passos da Silva Melo. Mr. Melo was elected as an alternate member of our fiscal council as representative of Petrobras. Mr. Melo has worked at Petrobras for over 16 years, since 2017 as Accounting Planning Manager and the person in charge of process management involving studies, analyses and implementation of new accounting rules. He is currently the Chairman of the Fiscal Council of BR distribuidora. Mr. Melo holds a degree in Accounting from Universidade Federal do Rio de Janeiro – UFRJ and has a MBA degree in Accounting Management from FIPECAFI – USP.

Bruno Carvalho Baruqui. Mr. Baruqui was elected as an alternate member of our fiscal council as representative of Petrobras. He has been a Governmental Interest Sector Manager since April 2010 in the Accounting and Tax Executive Management area, and also worked as Tax Systemic Solutions Sector Manager between July 2008 and March 2010. He was an alternate member of the Fiscal Board of e-Petro. Mr. Baruqui holds a degree in Administration from Universidade Estadual do Rio de Janeiro (UERJ), an MBA degree in Tax Management from PUC-RJ and an MBA degree in Business Management from FIA-USP.

Fábio Vianna. Mr. Vianna was elected as an alternate member of our fiscal council as a representative of minority shareholder Geração Futuro L. Par de Fundo de Investimento em Ações. Mr. Vianna is currently the CEO at RiMO Entertainment, Brazil's leading producer and distributor of physical media in the gaming, movie and music segments, a position he has held since November 2013. Previously, he was the CEO of Gradiente – CBTD Cia Brasileira de Tecnologia Digital from 2011 to 2013, the Vice-President for Latin America at Paramount Pictures – Viacom, from 2001 to 2011, a Commercial Director at Parmalat Ltda., from 1994 to 2001, a Product Manager at PepsiCo – Elma Chips, from 1991 to 1994, a Product Manager at LPC Danone/General Biscuits, from 1990 to 1991, and a Trainee/Product Manager at Santista / Petybon – Bunge & Born Group, from 1988 to 1989. Mr. Vianna holds a bachelor's degree in Business Administration from University Center FMU (SP), a bachelor's degree in Marketing from the Higher School of Advertising and Marketing (ESPM) and a bachelor's degree in Foreign Trade from CEAG/Getúlio Vargas Foundation (FGV). He is a Director certified by the Brazilian Institute of Corporate Governance (IBGC).

Board Committees

On August 8, 2018 our board of directors approved its internal operating rules, as well as the board committees bylaws. An English translation of the internal operating rules of our board of directors and its committees is available on our investor relations website at www.braskem-ri.com.br. Under these rules, our board of directors has established four permanent committees and has the power to establish ad-hoc committees. Permanent committees must have no fewer than three and no more than five members. Ad-hoc committees may be convened for a limited period to consider temporary issues and are dissolved when their purpose has been achieved or when the term established upon the creation of such committees expires. The number of members of the ad-hoc committees is defined upon the creation of such committees.

In April 2015, our board of directors approved the constitution of an ad hoc committee to accompany the Investigation surrounding allegations of improper payments made to Petrobras for beneficial terms in connection with certain raw material supply contracts we have with Petrobras. Such ad hoc committee was formed by members independent from our shareholders, and its main objectives are (i) to ensure that the Investigation is carried out independently, thoroughly and in strict compliance with its approved scope, mitigating as much as possible the impact on our operations and (ii) to take all necessary measures to ensure that all required resources are devoted to the Investigation. Our board of directors dissolved the ad hoc committee in August 2016.

In May 2016, our board of directors approved the constitution of a compliance committee, or the Compliance Committee, to monitor internal controls and risk exposure and to supervise the preparation of financial reports, without prejudice to the legal duties designated to our fiscal council.

We currently have the following four permanent committees: (1) the Finance and Investments Committee, (2) the Personnel and Organization Issues Committee, (3) the Strategy and Communication Committee, and (4) the Compliance Committee. The duties of each permanent committee are established in their respective bylaws, all approved by our board of directors. The coordinators and the members of each permanent committee are appointed by the chairman of the board and approved by our board of directors, solely from among its members and alternate members. Our board of directors does not delegate the power to take actions on behalf of our company to the permanent committees; rather the role of the permanent committees is to examine certain matters in order to assist in deliberations under the board of directors' responsibility.

Finance and Investments Committee

Our Finance and Investments Committee meets quarterly and has the following duties: (1) to evaluate new policies relating to financial management, insurance and guarantees and analyze existing policies, (2) to evaluate new risk management policies and analyze existing policies, (3) to analyze opportunities related to financing and investment transactions that may improve our capital structure, (4) to propose to the chairman the criteria for the annual assessment of the board and its support committees, and of the board secretariat and (5) to analyze guidelines and protocols for our business planning execution cycle. Our Finance and Investments Committee is currently composed of João Pinheiro Nogueira Batista, Larry Carris Cardoso and Marcelo Rossini.

Personnel and Organization Issues Committee

Our Personnel and Organization Issues Committee conducts work meetings at least five times per year and has the following duties: (1) to evaluate new policies and review existing policies relating to personnel matters and organizational issues, (2) to analyze processes relating to identification, training, development and succession of executives for or in strategic positions, (3) to analyze processes relating to the determination of fixed and variable compensation for executives in strategic positions, and (4) to evaluate new policies and review existing policies relating to the maintenance and strengthening of our corporate culture. Our Personnel and Organization Issues Committee is currently composed of Ana Lúcia Poças Zambelli, André Amaro da Silveira and Roberto Faldini.

Strategy and Communication Committee

Our Strategy and Communication Committee meets quarterly and has the following duties: (1) to evaluate determinations relating to the foundation of our business plan, (2) to evaluate the business direction being pursued to achieve objectives defined by our board of directors, (3) to evaluate new policies and review existing policies relating to the capital markets and social responsibility, (4) to evaluate our image projected to and perceived in the market and make recommendations to our board of directors to maintain or to redefine our social communications programs, and (5) to analyze guidelines and protocols for our business planning and execution cycle. Our Strategy and Communication Committee is currently composed of Roberto Simões (coordinator), Pedro Oliva Marcilio de Sousa and João Carlos Trigo de Loureiro.

Compliance Committee

In May 2016, our board of directors approved the establishment of the Compliance Committee, which ultimately replaced the ad hoc committee that had been created in April 2015 to monitor the Investigation. The Compliance Committee is formed by independent members of our board of directors, and its main objectives are to (1) evaluate internal controls, risk exposure and compliance with applicable laws and regulations, (2) monitor investigations related to ethics complaints, (3) approve and periodically update the Policy on Ethics, Compliance and Transparency, which addresses anti-corruption measures and related party transactions, and (4) develop training programs for board members, senior managers and certain employees. Our Compliance Committee is currently composed of João Cox Neto (coordinator), Gesner José de Oliveira Filho, Julio Soares de Moura Neto and Marcelo Lyrio.

Our chief compliance officer, or CCO, reports directly to the coordinator of the Compliance Committee, and exercises independent judgment. Our CCO is responsible for developing a compliance system, assist the CEO in implementing the compliance system and continually monitor developments in this respect.

The following is a summary of the business experience, areas of expertise and principal outside business interests of our CCO.

Everson Bassinello. Mr. Bassinello has served as our CCO since August 2016 and has led our global initiatives related to risk management, internal controls, compliance and internal audit. He served in leadership positions at Companies of the Votorantim Group, including VCP and Fibria between June 2000 and July 2016. Mr. Bassinello holds a degree in mechanical engineering from Universidade Federal de Itajubá (UNIFEI), a graduate degree in business administration from Fundação Getúlio Vargas (FGV), an MBA degree from the Business School São Paulo (BSP) and a specialization degree in corporate governance from the Kellogg School of Management.

Ethics Committee

Our Ethics Committee supports our Compliance Committee with matters involving the violation of the commitment to Ethics, Compliance and Transparency. Our Ethics Committee is formed by our Chief Compliance Officer and three additional members (preferable vice-presidents in our Legal, Human Resources and Finance areas). The main objectives of our Ethics Committee are to (1) evaluate the results of investigations of ethics complaints, (2) submit to the Compliance Committee proposed revisions to the Policy on Ethics, Compliance and Transparency, and (3) provide guidance on questions of ethical conduct and ensure consistent evaluation and treatment of ethical matters.

Compensation

According to our by-laws, our shareholders are responsible for establishing the aggregate compensation we pay to the members of our board of directors, our board of executive officers and our fiscal council. Our shareholders determine this aggregate compensation at the general shareholders' meeting each year. Once aggregate compensation is established, the members of the board of directors are responsible for distributing such aggregate compensation individually to the members of our board of directors, our board of executive officers and our fiscal council in compliance with our by-laws.

Compensation and Benefits

The aggregate compensation paid by us to all members of our board of directors, board of executive officers and our fiscal council for services in all capacities was R\$53.8 million in 2018 and R\$47.6 million in 2017. On April 16, 2019, at our annual general shareholders' meeting our shareholders established the compensation for our board of directors, our board of executive officers and the member of our fiscal council for the year 2019 of R\$84.1 million.

The members of the board of directors receive a fixed monthly compensation, which is not affected by the numbers of meetings that take place each month. The coordinators and members of the committees, according to the responsibilities and participation in each committee receive differentiated monthly fees.

The members of the fiscal council receive a fixed monthly compensation, which is not affected by the numbers of meetings that take place each month. The alternate members of the board of directors and of the fiscal council do not receive any compensation.

Our executive officers receive a fixed monthly, an annual variable compensation and the same benefits generally provided to our employees, such as medical (including dental) assistance, private pension plan and meal vouchers. Members of our board of directors and fiscal council are not entitled to these benefits.

Members of our board of directors, board of executive officers and fiscal council are not parties to contracts providing for benefits upon the termination of employment other than, in the case of executive officers, the benefits described above.

Long-Term Incentive Plan

At an extraordinary general meeting held on March 21, 2018, or the March 21 Meeting, our shareholders approved the Restricted Share Award Plan, or the Incentive Plan. The Incentive Plan establishes the general terms and conditions for the granting of certain restricted shares in our company to eligible employees.

Eligibility

Persons who are legally employed by us or the companies controlled by us, including officers and professionals of any kind approved by our board of directors, may participate in the Incentive Plan upon execution of an award agreement (such persons, the "participants").

Administration

Our board of directors administers the Incentive Plan. Our board of directors has, subject to the general conditions of the Incentive Plan and the yearly programs that may be created, approved and / or cancelled by our board of directors and by the governing bodies of the companies controlled by us, as applicable, in observance of the terms and conditions of the Incentive Plan (such programs, the "Programs"), and the guidelines fixed by the March 21 Meeting, and to the extent fully permitted by law and under our by-laws, full powers to take all measures required and convenient for management of the Incentive Plan and such Programs, including (i) approving the eligible persons, and authorizing the grant of Restricted Shares on such persons' behalf on the terms and conditions set forth in the corresponding award agreements; (ii) authorizing the disposal or grant of treasury shares to satisfy the delivery of the Restricted Shares under the Incentive Plan, the applicable award agreements and applicable laws and regulations, and (iii) approving objective criteria for the acquisition, by us or companies controlled by us of the Restricted Shares to be delivered to the participants. Our board of directors and the governing bodies of the companies controlled by us, as applicable, may annually approve the grant of Restricted Shares within the scope of each Program, and will determine the eligible persons on whose behalf the Restricted Shares may be granted under the Incentive Plan and such respective Program.

Restricted Shares

The grant of Restricted Shares will be made upon and subject to the execution of award agreements pursuant to the Incentive Plan. Participants may receive shares and/or depositary receipts representing shares issued by us negotiated abroad, representing at most one and a half percent (1.5%) of our entire share capital on the date of the Incentive Plan, subject to adjustment as set forth in the Incentive Plan.

The grant of Restricted Shares is contingent upon the (i) voluntary acquisition by the participants of shares or depositary receipts issued by us (the "Owned Shares") at the participants' own expense, from the stock exchanges where such shares are traded within a period of time set out in the applicable award agreements for the acquisition of such Owned Shares and (ii) participants' continuous employment with us for three years and maintaining uninterrupted ownership of Owned Shares during such time (such three year period, the "Waiting Period"). The minimum investment amount is 10% of the planned gross amount of participants' short-term income pursuant to our annual profit sharing program, and the maximum investment amount is 20% of such amount.

The goal of the Incentive Plan is to award for each one (1) Owned Share two (2) Restricted Shares. However, our board of directors may define, in an exceptional and justified manner as set forth in the Incentive Plan and pursuant to the terms and conditions of the applicable award agreements, for each Program, a different number of Restricted Shares to be delivered for each Owned Share, in compliance with the minimum of one (1) Restricted Share and the maximum of three (3) Restricted Shares for each one (1) Owned Share, based on an analysis by our board of directors in its sole discretion.

Change of Control

In the event of (i) a Change of Control of the Company (as defined in the Incentive Plan), (ii) a holding of a public offer of closing of our capital (i.e., a "going private" transaction), or (iii) a corporate restructuring that results in a significant decrease of the liquidity of the Restricted Shares, in comparison with the average price and volume traded over the six (6) months prior to the corporate restructuring, the participants will be entitled to receive within sixty (60) days from the occurrence of any of the events set forth in clauses (i) through (iii): (a) all vested Restricted Shares whose rights have vested in the participants, even if the Restricted Shares have not been effectively transferred by us or companies controlled by us; and (b) all unvested Restricted Shares which will become fully vested as a result of automatic vesting acceleration.

Vesting

Under the Incentive Plan, full vesting of the Restricted Shares is contingent upon participants continuously remaining employed by us and maintaining uninterrupted ownership of Owned Shares, in each case, during the Waiting Period.

Termination from the Company

In the event of a termination of a participant for (i) dismissal by us and / or by the companies controlled by us without cause, (ii) removal from the manager position without violation of their duties and responsibilities, or (iii) transfer of the participant to occupy a position in a company in the same group as ours, which is not a participant in the Incentive Plan, the participant will be entitled to receive (a) the vested Restricted Shares, and (b) a pro rata number of unvested Restricted Shares, calculated based on the number of complete months in which such participant worked for us or a company controlled thereby relative to the number of months in the Waiting Period, with the remaining Restricted Shares being automatically terminated on such participant's termination date, by operation of law, regardless of prior notice or warning, and with no right whatsoever of indemnification to such participant.

In the event of a termination of a participant (i) upon dismissal for cause or removal from office due to a violation of the duties and responsibilities of a manager, (ii) upon request from such participant (including redundancy / voluntary solicitation or resignation) or (iii) any event of retirement that is not a mutually agreed retirement, such participant will lose any and all rights connected to the Restricted Shares under the Incentive Plan or under any program or award agreement in connection therewith, which will be automatically terminated on the termination date of such participant.

In the event of a termination of a participant by reason of a retirement mutually agreed by such participant and us or companies controlled by us, such participant will be entitled to receive (a) the vested Restricted Shares; and (b) the entirety of the unvested Restricted Shares. The delivery of the Restricted Shares to such participant will be made on the original delivery dates (unless delivered earlier in our exclusive direction to the extent permitted under the applicable award agreement).

In the event of a termination of a participant due to (i) death or (ii) permanent disability, the legal heirs or successors or the legal representative will be entitled to receive, within sixty (60) days from such event: (a) the vested Restricted Shares of such participant; and (b) all unvested Restricted Shares.

Adjustments of Awards

In the event of change to the number, nature or class of our shares as a result of bonus, splitting, reverse split, or conversion of shares into other nature or class, or conversion of other securities issued by us into shares, our board of directors will assess the need to make adjustments to the Incentive Plan, the applicable and the award agreements in connection therewith, so that the relationship between the parties remains balanced without any material windfall or detriment to the participants.

Amendments and Termination

Our board of directors may propose any amendments to the Incentive Plan and, in case necessary, submit such amendments for approval in an extraordinary general meeting. The Incentive Plan will remain in force until the delivery of the Restricted Shares granted pursuant to award agreements under the Incentive Plan that are executed in the fifth year of the Incentive Plan.

The right to receive the Restricted Shares under the Incentive Plan and applicable program and award agreement in connection therewith will automatically terminate with no right to indemnification, ceasing all effects, if we are wound up, liquidated or adjudicated bankrupt.

Corporate Governance Practices

The significant differences between our corporate governance practices and the standards of the NYSE are described in “Item 16G. Corporate Governance.”

Share Ownership of Directors and Officers

As of the date of this annual report, no member of Braskem’s board of directors or executive officer owned more than 0.1% of Braskem’s share capital. All shares owned by our directors and executive officers were purchased at market prices through the B3.

Employees

The following table sets forth the number of our employees by geographic location at the dates indicated.

Number of Employees by Geographic Location	2018	2017	2016
State of Bahia	1,692	1,650	1,653
State of Rio Grande do Sul	1,589	1,601	1,615
State of São Paulo	1,978	1,823	1,774
State of Alagoas	512	508	514
State of Rio de Janeiro	397	408	415
Other Brazilian states	5	6	6
Brazil	6,173	5,996	5,977
United States	754	699	711
Germany	188	173	174
Mexico	812	785	752
Other countries	81	60	43
Total	8,008	7,713	7,657

We do not employ a material number of temporary employees.

Employees in Brazil

In Brazil, both employees and employers have the right to organize unions. Employees belonging to a specific “professional category” and employers constituting a specific “economic category” may each be represented by a single union in a particular geographic area. Individual unions generally belong to state-wide union federations, which in turn belong to nationwide union confederations. We are a member of the Petrochemicals and Synthetic Resins Industries Union of the States of Bahia, Alagoas, Rio Grande do Sul and São Paulo, and our employees belong to the Petrochemicals Industries Workers’ Unions in each of these states. As of December 31, 2018, 6.4% of our employees in Brazil were union members.

We maintain good relations with our employees and the unions that represent them. We have not experienced a strike in Brazil since Trikem was privatized in 1995. The current collective bargaining agreements with our unions have one-year to two year terms and are subject to annual renegotiation. We have traditionally applied the terms of bargaining agreements entered into with the unions equally to unionized and non-unionized employees.

Post-Employment Benefits

Vexty Defined Contribution Plan

The majority of our employees (86%) participate in the Vexty Pension Plan (former Odebrecht Previdência). We pay part of the monthly payments made by our employees to Vexty. This pension fund is a defined contribution plan that pays pension and retirement amounts that supplement those paid by the Brazilian government's pension system and are intended to provide its members with income upon retirement. In 2018, we paid R\$50.6 million into this fund.

Other Benefits in Brazil

Our employees in Brazil and their dependents receive medical and dental assistance through a network of accredited doctors in an insurance company. We pay most of the costs for these services, with a small monthly portion being paid by our employees. A small fee is also charged to our employees according to the use of some medical services (copayment system). In 2018, we spent R\$90.7 million on this benefit.

Employees in the United States

The employees of Braskem America are not represented by any union, other than employees of Braskem America Neal, West Virginia plant. As of December 31, 2018, 57% of the employees of this plant were represented by the United Steel, Paper & Forestry, Rubber, Manufacturing, Energy Allied-Industrial & Service Workers International Union. The collective bargaining agreement with this union expires in May 3, 2020.

Post-Employment Benefits in the United States

Braskem America administers a closed defined benefit pension plan that, as of December 31, 2018, had 38 active participants, compared to 39 participants in 2017. Braskem America made a cash contribution to the plan of US\$5.3 million (R\$20.5 million) in 2018. There were no participant contributions in 2018.

We offer a 401(k) savings plan that, as of December 31, 2018, had total assets of US\$106 million, including US\$7.3 million in participant contributions made in 2018.

Other Benefits in the United States

Braskem America offers its employees the ability to participate in a variety of health and welfare benefit plans, including medical, dental vision, life and disability coverage.

Employees in Germany

Employees of Braskem Europe GmbH in Germany are not represented by any union. However, they are represented by local works councils (*Betriebsrat*).

Post-Employment Benefits in Germany

Pension Plan Germany

In October 2011, the obligations of Dow under German pension plans were assumed by Braskem Europe as a result of the Dow Polypropylene Acquisition. In 2013, Braskem Europe implemented a new defined contribution pension plan. As of the date of this annual report, we have 59 active participants in this new pension plan.

Other Benefits in Germany

Braskem GmbH offers its employees the ability to participate in benefit plans, including pension, life and disability coverage.

Pension plan Netherlands

In the Netherlands, Braskem started a pension plan in 2009 with Delta Lloyd in a defined contribution scheme. Participation is mandatory for locals that reside in NL. As of the date of this annual report, we have 28 people active in the plan.

Other Benefits in Netherlands

Braskem BV offers its employees the ability to participate in benefit plans, including pension, life and disability coverage, health insurance (by reimbursement).

Employees in Mexico

Post-Employment Benefits in Mexico

Braskem Idesa employees are granted a government retirement benefit plan when they retire or reach retirement age. On December 31, 2018, all 812 employees of Braskem Idesa were active participants in this government retirement plan. On May 2018, Braskem Idesa implemented a private pension plan (defined benefit obligation); by the end of that year we had the participation of 339 employees out of 812.

Other Benefits in Mexico

Braskem Mexico offers its employees the ability to participate in benefit plans, including a savings plan, food plan, life insurance and health insurance.

Performance-Based Employee Compensation Plan

We have adopted and applied a personnel management philosophy which emphasizes a performance related pay structure and a decentralized management structure. Employees in each of our business units participate in setting and achieving their business unit's annual objectives. As a result, employees in those business units that meet or exceed their goals share in our financial performance through performance-based employee compensation plans. During 2018 and 2017, we recorded expenses of R\$375.4 million and R\$399.8 million, respectively, related to this program with respect to 8,000 employees and former employees, including our executive officers. The members of our board of directors do not participate in this program.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

Major Shareholders

As of October 16, 2019, we had an outstanding share capital of R\$8,043,222, equal to 797,218,554 total shares consisting of 451,668,652 common shares, 345,049,672 class A preferred shares and 500,230 class B preferred shares. As of October 16, 2019, all of our authorized shares were issued and outstanding, other than 1,226,599 class A preferred shares held in treasury. All of our share capital is fully paid. All of our shares are without par value.

Generally, only our common shares have voting rights. Our preferred shares have voting rights only in exceptional circumstances.

As permitted by the Brazilian Corporations Law, our by-laws specify that 25% of our adjusted net profits for each fiscal year must be distributed to shareholders as dividends or interest attributable to shareholders' equity. Under our by-laws, our preferred shareholders are entitled to a minimum annual non-cumulative preferential dividend, or the Minimum Preferred Dividend, equal to 6% of their *pro rata* share of our capital before dividends may be paid to our common shareholders. Distributions of dividends in any year are made:

- first, to the holders of preferred shares, up to the amount of the Minimum Preferred Dividend for such year;
- then, to the holders of common shares, until the amount distributed in respect of each common share is equal to the amount distributed in respect of each preferred share; and
- thereafter, to the holders of our common shares and our class A preferred shares on a *pro rata* basis.

Our class B preferred shareholders are not entitled to receive any additional dividend amounts after they have received the Minimum Preferred Dividend. If the Minimum Preferred Dividend is not paid for a period of three years, holders of preferred shares will be entitled to full voting rights.

The following table sets forth information concerning the ownership of our common shares and class A preferred shares as of October 16, 2019 by each person whom we know to be the owner of more than 5.0% of our common shares and our class A preferred shares, and by all of our directors and executive officers as a group. Our principal shareholders have the same voting rights with respect to each class of our shares that they own as other holders of shares of that class.

	Common Shares		Class A Preferred Shares		Total	
	Number of Shares	%	Number of Shares	%	Number of Shares	%
Odebrecht	226,334,623	50.1	79,182,498	22.9	305,517,121	38.3
Petrobras	212,426,952	47.0	75,761,739	22.0	288,188,691	36.1
BlackRock, Inc.	0	*	17,411,659	5.0	17,411,659	2.2
Alaska Inverimentos Ltda.	5,000	*	17,784,300	5.2	17,789,300	2.2
All directors, fiscal council members, their alternates and executive officers as a group (35 persons)	0	*	161,566	*	161,566	*

* less than 1%

We currently have no management or employee option plans or management or employee options outstanding, we have only the Long-Term Incentive Plan described above. See "Item 6. Directors, Senior Management and Employees—Compensation—Long-Term Incentive Plan."

Shareholders' Agreements

Braskem S.A. Shareholders' Agreement

Odebrecht, OSP Inv., Petrobras and Petroquisa, with Braskem and BRK as intervening parties, entered into the Braskem S.A. Shareholders' Agreement, effective February 8, 2010, which has a term of 35 years. The Braskem S.A. shareholders' agreement superseded the Shareholders' Agreement that formerly governed the relationship between Petrobras, Petroquisa, Odebrecht and Norquisa regarding our shares.

Under the Braskem S.A. Shareholders' Agreement Petrobras has the right to designate:

- four members of our board of directors and their alternates for so long as they own, directly or indirectly, an aggregate of 30% or more of our voting share capital;
- three members of our board of directors and their alternates for so long as they own, directly or indirectly, an aggregate of 18%, but less than 30%, of our voting share capital;
- two members of our fiscal council and their alternates, one of which will serve as president, for so long as they own, directly or indirectly, an aggregate of 30% or more of our voting share capital; and
- two members of our fiscal council and their alternates for so long as they own, directly or indirectly, an aggregate of 18%, but less than 30%, of our voting share capital and for so long as Odebrecht has the right to elect more than a majority of the members.

For so long as Petrobras has the right to designate three or four members of our board of directors, one of these designees will serve as vice president of our board of directors.

Under the Braskem S.A. Shareholders' Agreement, Odebrecht is entitled to nominate our chief executive officer. Our chief executive officer must choose our chief financial officer from among three nominees submitted by Odebrecht and the executive officer responsible for our investment and portfolio area from among three nominees submitted by Petrobras. Our chief executive officer has the power to nominate the other members of our board of executive officers. After these nominations, the officers will be elected at a board of directors' meeting.

Under the Braskem S.A. Shareholders' Agreement, Odebrecht has the sole power to approve our business plan. However, for so long as Petrobras owns, directly or indirectly, an aggregate of less than 30% and more than 18% of our voting share capital, we are prohibited from taking certain strategic actions unless a consensus regarding those actions is reached between Odebrecht and Petrobras, including, among others:

- actions affecting our share capitalization or the rights of holders of our shares;
- mergers, spin-offs or similar transactions;
- investments and purchases of non-current assets with a value in excess of 30% of our non-current assets;
- dispositions of non-current assets with a value in excess of 10% of our non-current assets;
- creation of liens on our non-current assets with a value in excess of the lesser of R\$350 million and 20% of our non-current assets; and
- actions that would result in our violating specified net debt to EBITDA and EBITDA to total interest ratios.

Under the Braskem S.A. Shareholders' Agreement, we have agreed that investments that we make to increase our capacity must be supported by an evaluation demonstrating profitability under standards such as net present value or internal rate of return. Petrobras has granted a right of first refusal to us with respect to development of any petrochemical project that Petrobras proposes to pursue. In the event that we decide not to participate in any such proposed project, Petrobras has agreed that we will have the right to market the products produced by the proposed project on conditions satisfactory to us and Petrobras.

Under the Braskem S.A. Shareholders' Agreement, Petrobras has the right to sell a pro rata portion of their common shares of us in connection with any direct or indirect sale of our common shares by the Odebrecht Group to a third party.

Under the Braskem S.A. Shareholders' Agreement, each of the parties has agreed:

- subject to certain exceptions, not to grant any liens on any of its Braskem shares held by each of them; to grant a right of first refusal and tag along rights to the other parties to the Braskem S.A. Shareholders' Agreement with respect to any sale of its Braskem shares;
- in the event that a party's interest in our voting share capital is diluted in a transaction involving one or more of the other parties to the Braskem S.A. Shareholders' Agreement, the diluted party will have the right to purchase shares of Braskem from the diluting parties in an amount that would, after giving effect to such purchase, result in the diluted party holding the same percentage interest in our voting share capital that it held immediately prior to the dilution event; and
- in the event that any party acquires or receives a right to acquire common shares of Braskem from a third party, to offer to sell to the other parties to the Braskem S.A. Shareholders' Agreement an amount of common shares of Braskem that would, after giving effect to such sale, result in each of the parties to the Braskem S.A. Shareholders' Agreement holding the same direct and/or indirect proportion of the common shares of Braskem that the parties held prior to the acquisition of common shares of Braskem from the third party.

In 2016, OSP Inv. entered into agreements with certain financial institutions, through which OSP Inv. granted all shares issued by Braskem and held thereby in guarantee.

On July 18, 2017, our shareholders, Petrobras and Odebrecht, have entered into negotiations to revise the terms and conditions of the Braskem S.A. Shareholders' Agreement to improve our corporate governance and the ownership relationship among the parties, with the goal of creating value for all our shareholders.

On May 25, 2018, we became aware that OSP Inv. gave all of the shares issued by Braskem and held by it as a guarantee in connection with financing operations, by means of a fiduciary assignment (*alienação fiduciária*).

On October 24, 2018, we were informed by OSP Inv. about the execution of an amendment to the shareholders' agreement of February 8, 2010, to extend tag along rights pursuant to clause 7.12 of such agreement to preferred shares held by Petrobras S.A.

On January 31, 2019, we were informed by Odebrecht S.A., our indirect controlling shareholder, of the corporate reorganization approved by the Odebrecht Group on December 31, 2018, with the main purpose of segregating its businesses, whereby all common and preferred shares issued by Braskem and held by OSP Inv., and all liabilities (comprised of the purchase and Sale agreement of debentures no. 16.2.0023.1, entered into on March 16, 2016 between BNDES Participações S.A. – BNDESPAR and OSP Inv., and other intervening parties, as amended) and the other operating activities of OSP Inv. have been merged into OSP Investimentos S.A. Considering that the corporate reorganization took place within the Odebrecht Group, Odebrecht S.A. continues to be Braskem's indirect controlling shareholder.

Termination of BNDESPAR Shareholders' Agreement

In February 2016, we received a letter from BNDESPAR informing us of its sale of preferred shares of our capital stock on the B3. As a result of these sales, BNDESPAR held preferred shares and total share capital of 6.61% and 2.86%, respectively. The shareholders' agreement to which BNDESPAR was a party automatically terminated as a result of BNDESPAR holding less than 5.0% of our total share capital.

Related Party Transactions

As provided for in our bylaws, our board of directors has the exclusive power to decide on any contract with related parties that exceeds the amount of R\$20 million per transaction or R\$60 million in the aggregate, per fiscal year. This is valid for contracts between Braskem and its subsidiaries and: (i) direct or indirect subsidiaries of Braskem in whose capital an interest is held by the controlling shareholder, by any direct or any of their indirect subsidiaries or by key personnel of such entities; (ii) affiliates of Braskem and subsidiaries of such entities; and (iii) joint ventures in which Braskem participates and any of their subsidiaries.

Pursuant to the Brazilian Corporations Law, officers and directors are prohibited from: (i) entering into any transaction using the Company's assets and in its detriment; (ii) intervening in any operations in which these officers and directors have a conflict of interest with the Company or in resolutions in which they participate; and (iii) receiving, based on their position, any type of personal advantage from third parties, directly or indirectly, without first obtaining an authorization pursuant to our bylaws or at a shareholders' meeting.

As part of our controls to identify related parties, we require key personnel to annually inform whether they, or their close relatives, hold full or shared control of any company.

Under the Brazilian Corporations Law, each of our directors, their alternates and our executive officers cannot vote on any matter in which they have a conflict of interest and such transactions can only be approved on reasonable and fair terms and conditions that are no more favorable than the terms and conditions prevailing in the market or offered by third parties. In addition, pursuant to our Policy on Ethics, Compliance and Transparency none of our shareholders or any other individual with authority over our activities may participate in the negotiation and decision-making process of a transaction in which they have a conflict of interest.

We have engaged in extensive transactions with our principal shareholders and their affiliates and we expect to continue to do so in the future. We also have commercial relationships with some of our affiliates and, as a result, record trade accounts receivable and current and long-term liabilities mainly from purchases and sales of goods and services at prices and on terms equivalent to the average terms and prices of transactions that we enter into with third parties. In addition, we have entered into financial and other transactions with our principal shareholders and their affiliates, including, among others, as a party to three shareholders' agreements or memoranda of understanding with our shareholders. See “—Major Shareholders—Shareholders' Agreements.”

The following summarizes the material transactions that we have engaged in with our principal shareholders and their affiliates since January 1, 2018.

The Odebrecht Group

Alliance Agreement

In May 2014, we entered into an Alliance Agreement with CNO under which we have appointed CNO as a non-exclusive provider with respect to maintenance services and efficiency enhancement projects at each of our plants. This agreement was unanimously approved by our board of directors. The services are contracted through Specific Activity Agreements (*Termo de Atividade Específica*), or TAE, which are signed for each specific service or project. The amount of each TAE includes all costs to be incurred with the performance of the services to be rendered by CNO, including any costs with third parties that may be contracted to provide materials and services, as well as CNO's compensation. CNO's compensation for the execution of the TAE's under the Alliance Agreement is capped at R\$121 million, calculated as a percentage of the value of the agreement, subject to bonuses and discounts in accordance with certain metrics.

The aggregate amount of services we purchased under the Alliance Agreement was R\$58.1 million in 2018.

The Alliance Agreement was terminated in May 2018. Specific activity agreements entered into until this date will continue to produce effects until the fulfillment of their scope.

Sublease

In August 2013, we entered in a R\$226 million sublease agreement with CNO and Abiatar SPE Empreendimentos Imobiliários (as intervening party) for the floors in the building where the offices of Braskem are located in São Paulo. In January 2014, this contract was updated by IPCA/IBGE to a new amount of R\$239 million. This agreement expires on December 31, 2028.

The aggregate amount we paid under this agreement was R\$26.7 million in 2018.

Industrial Maintenance, Operation and Loads Machines Maintenance Services

In December 2017, we signed an industrial maintenance services agreement with CNO that encompassed boilers and the welding of tubing and static equipment, as well as operational and maintenance services on cargo machinery to be performed at the Braskem Units located in Rio Grande do Sul. The agreement has an estimated maximum amount of R\$120 million and is valid through December 2021.

The aggregate amount of services purchased under this agreement was R\$19 million in 2018.

Movement and Storage Services

In May 2018, we entered into an agreement for caustic soda movement and storage services with Liquiport Vila Velha S.A., a wholly owned subsidiary of Odebrecht Transport S.A. The agreement has an estimated maximum value of R\$93 million and is valid for 10 years. Sales in the period amounted to R\$5.8 million.

Acquisition of Cetrel

In October 2012, we entered into an agreement with Cetrel for the purchase of 4 million cubic meters per year of recycled water by sites located in the Industrial Pole of Camaçari. The agreement expires in April 2028 and has a total value of R\$120.0 million. In July 2016, we entered into a services agreement with Cetrel under which we appointed Cetrel as an exclusive service provider for the treatment of liquid effluents produced in our industrial units located at the Camaçari petrochemical complex. The agreement has a cap of R\$77 million and expires in December 2019. The aggregate amount of services we purchased under this agreement was R\$18 million in 2018. In March 2013, we entered into an agreement for the supply of industrial water with Distribuidora de Águas de Camaçari S.A, incorporated by Cetrel, a subsidiary of Odebrecht. This agreement expires in March 2043, and has an estimated total value of R\$2,250 million. The aggregate amount we purchased under this agreement was R\$86 million in 2018.

In December 2017, we entered into a services agreement with Cetrel as a service provider for incineration of hazardous industrial waste produced in our industrial units located at the Camaçari/BA petrochemical complex. Service expenses under the agreement are capped at R\$61 million, and the agreement expires in December 2020. The aggregate amount of services we purchased under this agreement in 2018 was R\$15 million.

On January 27, 2017, our board of directors authorized the execution of a purchase agreement with Odebrecht Utilities S.A., through which Braskem undertook to purchase all shares held by the seller in Cetrel S.A., which represented 63.7% of its voting capital, for the aggregate amount of R\$610 million, to be paid upon the consummation of the transaction. The acquisition was approved by relevant shareholders, in accordance with Article 256 of Brazilian Corporations Law in the meeting held on September 29, 2017. This acquisition closed on October 2, 2017, when Braskem acquired 1,269,290 shares, or 63.7%, of the voting capital stock of Cetrel S.A.

Supply Agreement for Hydrous Ethanol

In March 2017, we entered into an agreement for supply of hydrous ethanol with UCP and USL. Ethanol is the feedstock consumed by Braskem to produce green ethylene. The agreement was guaranteed by Atvos and Rio Claro. The agreement also provided for a commercial discount and other flexibilities in the process of Braskem's acquisition of the product. It also included an advance of R\$150.0 million, to be restated at market rates. The advance was guaranteed by a pledge of the sugarcane crop, its products and subproducts at net market value in an amount greater than the value of the advance, with the pledged asset insured through a policy contracted from a premium insurer and with a provision for subrogation. The agreement was valid through April 30, 2018.

In December 2017, we entered into an amendment to the agreement for supply of hydrous ethanol with UCP and USL that changed the billing for raw material acquisitions to future delivery, so as to bring forward the billing of the volume of the goods to be delivered between January 2018 and March 2018 in the aggregate amount of R\$50.0 million. The amendment determines that the price practiced at time of delivery is the lesser of the ceiling established in the amendment and the reference established in the original contract. The agreement was valid until April 30, 2018.

In December 2017, an agreement was entered into with Agro Energia Santa Luzia S.A. – USL, Usina Conquista do Pontal S.A. – UCP, Atvos and Brenco Companhia Brasileira de Energia Renovável, with the purpose of ensuring the supply of hydrous ethanol volumes, which included a commercial discount on the supply and established contractual flexibilities for acquisition. The contract includes an advance of R\$200.0 million, which is guaranteed by a pledge of the sugarcane crop, its products and sub-products at a net market value greater than the amount of the advance, with the pledged asset insured by a policy contracted from a premium insurer and with a provision for subrogation to us, valid through April 30, 2019. The balance of the advance as of December 31, 2018 was R\$8.7 million.

Agreement for Transportation and Storage of Caustic Soda

In May 2018, Braskem entered into an agreement for transportation and storage of caustic soda with Liquiport Vila Velha S.A., a wholly-owned subsidiary of Odebrecht Transport S.A. The agreement has an estimated maximum value of R\$93 million and is valid for 10 years. Sales under this agreement amounted to R\$5.8 million in 2018.

Petrobras

Commercial Transactions with Petrobras

We have entered into the following supply contracts with Petrobras:

- On December 23, 2015, we and Petrobras entered into a new five-year naphtha purchase agreement. This contract replaced the naphtha supply contract between Petrobras and us for the supply of naphtha to our basic petrochemicals plants located in the Northeastern Complex and superseded the naphtha supply contract between Petrobras and us for the supply of naphtha to our basic petrochemicals plants located in the Southern Complex. The new contract will expire in December 2020.

- An ethane and propane supply agreement that we and Petrobras entered into in December 2000. See “Item 4—Information on the Company—Supply Contracts and Pricing of the Chemicals Unit—Ethane and Propane” for more information.
- An agreement for the purchase and sale of a chain of refinery off gas that Quattor Química S.A. which was merged into Quattor Participações S.A., formerly known as Braskem Qpar, before it merged into us on December 1, 2014 and Petrobras entered into in January 2005. See “Item 4—Information on the Company—Supply Contracts and Pricing of the Chemicals Unit—Refinery Off Gas” for more information.
- A 20-year propylene supply contract we and Petrobras entered into in May 2008 for our Paulínia plant. See “Item 4—Information on the Company—Raw Materials of Our Polyolefins Unit—Propylene Contracts with Petrobras and its Subsidiaries” for more information.
- Five propylene supply agreements that Braskem Petroquímica (formerly known as Quattor Petroquímica, which was merged into the Company in November 2017) and Petrobras signed between September 1997 and February 2006. See “Item 4—Information on the Company—Raw Materials of Our Polyolefins Unit—Propylene Contracts with Petrobras and its Subsidiaries” for more information.
- In April 2008, Polietilenos União S.A. a former subsidiary of Quattor Participações S.A. (which merged with and into Braskem on December 1, 2014) entered into an agreement for the supply of steam with Petrocoque S.A. Indústria e Comércio, as amended in March 2014. We began purchasing thermal energy produced by steam pursuant to this agreement in September 2009. This agreement has a 10-year term, expiring in September 2019, and an estimated value of R\$200 million.
- In October 2015, Braskem and Petrobras entered into a monthly basis agreement for the sale of Gasoline A to Petrobras.
- Braskem has handed down a contract from Petrobras and joint-venture Petroquímica Paulínia S/A (PPSA) pursuant to which Petrobras will supply steam and provide services in connection with the treatment and transport of water, clarified water and hydrogen. This contract is for a term of 20 years and has no global value clause. The aggregate amount of services we purchased under this contract was R\$12.5 million in 2018.
- A long term contract for logistic services related to naphtha transportation in pipelines in the Southern Complex between Braskem, Transpetro and Petrobras. The aggregated amount of services related to this contract in 2016 was R\$17.8 million.
- Since June 2016, Braskem has had agreements for the sale of gasoline to BR Distribuidora, a subsidiary of Petrobras, renewable on a monthly basis. Sales in the year amount to R\$422.6 million.
- A two-year contract for logistics services related to feedstock discharge, storage and transportation in the Southern Complex between Braskem and Transpetro, entered into in November 2018. The aggregate amount of services related to this contract in 2018 was R\$114 million (for a full-year).
- A two-year contract for logistics services (pipeline operation and maintenance) related to feedstock in the Southern Complex between Braskem and Transpetro, entered into in November 2018. The aggregate amount of services related to this contract in 2018 was R\$5.5 million (for a full-year).
- A two-year contract for logistics services related to feedstock storage in the Southern Complex between Braskem and Petrobras, entered into in November 2018. The aggregate amount of services related to this contract in 2018 was R\$29 million (for a full-year).
- A two-year contract for tanks and pipeline leasing related to feedstock storage in the Southern Complex between Transpetro and Braskem, entered into in November 2018. The aggregate amount of services related to this contract in 2018 was R\$17.7 million (for a full-year).

We purchased raw materials, finished goods services and utilities from Petrobras and its subsidiaries in the aggregate amount of R\$12,291.2 million in 2016, R\$ 12,795.8 million in 2017 and R\$15,540.1 million in 2018, and sold products to Petrobras and its subsidiaries in the aggregate amount of R\$2,023.8 million in 2016, R\$1,810.8 million in 2017 and R\$1,225.4 million in 2018.

Other Related Party Transactions

Our Jointly Controlled Company

Refinaria de Petróleo Rio-grandense S.A.

The revenue of gasoil and gasoline to RPR amounted to R\$368.6 million in 2017 and R\$440.8 million in 2018. Gasoil is a product used as feedstock in the diesel oil production process, and the agreements were entered into on a spot basis. Since March 2016, Braskem has had agreements for the sale of gasoline to RPR, renewable on a monthly basis.

Our Associated Companies

Borealis Brasil S.A.

We sell polypropylene and polyethylene to Borealis, in which we have a 20.0% interest. We recorded revenue to Borealis of R\$193.6 million in 2017 and R\$242.7 million in 2018. We account for Borealis under the equity method of accounting.

Related Party Transactions Policy

In December 2018, we adopted a related party transactions policy, or the Related Party Transactions Policy, which is revised periodically and lays out the procedures for approving transactions with our controlling shareholder, controlled entities and certain other parties. Pursuant to our bylaws and the Related Party Transactions Policy, (i) our Board of Directors is responsible for approving certain related party transactions and revisions to the the Related Party Transactions Policy, (ii) our Compliance Committee is responsible for evaluating related party transactions prior to submission for approval to our Board of Directors, if applicable, as well as ensuring that the provisions contained in the Related Party Transactions Policy are observed by our other areas, and (iii) our Ethics Committee is responsible for evaluating related party transactions that do not require approval by our Board of Directors. Pursuant to this policy, we have, and may in the future, engage in transactions with our controlling shareholder or controlled entities with respect to our services or products, or other related party transactions, as defined in our Related Party Transactions Policy.

ITEM 8. FINANCIAL INFORMATION

Consolidated Statements and Other Financial Information

Reference is made to Item 19 for a list of all financial statements filed as part of this annual report.

Legal Proceedings

We are, and may be in the future, involved in numerous tax, civil and labor disputes, among others, involving monetary claims. If any of these legal proceedings were decided adversely to us, we do not believe that our results of operations or financial condition would be materially and adversely affected.

For some of these lawsuits, we have not established any provision on our balance sheet nor have we established provisions only for part of the amounts claimed, based on our judgments as to the outcomes of these lawsuits.

Tax Proceedings

We are engaged in several legal proceedings with Brazilian tax authorities for which we have established provisions in an aggregate amount of R\$607.1 million as of December 31, 2018. In addition, there are currently certain legal proceedings pending in which we are involved for which we have not established provisions, since there is no trigger in accordance to IAS 37 to record such provisions. If any of these legal proceedings were decided adversely to us, we do not believe that our results of operations, cash flows or financial condition would be materially and adversely affected.

In 2013, 2014 and 2017, we received tax assessment notices from the Federal Brazilian Revenue Service claiming that the amortization of the goodwill recorded in 2001 and 2002 in connection with the purchase of shares of certain companies related to the formation of Braskem was not deductible for purposes of calculating our income tax and social contribution. The amount claimed is R\$1.2 billion, including interest and fines. We challenged these assessment notices because we believe that these claims are based on a misinterpretation of both the applicable law and facts by the tax authorities and that the statute of limitations has expired. In May 2018, one of the claims regarding the tax assessment notices was decided partially in our favor by the Administrative Court, thereby reducing our liabilities by R\$166 million. We believe that a loss in these claims is possible and our consultants expect that the administrative discussions will end in 2022. As of December 31, 2018, we have made no provision with respect to these claims and there is no deposit or guarantee related to them.

In December 2013, we received tax assessment notices from the Federal Brazilian Revenue Service claiming that the interest expenses and exchange variation losses recorded by Braskem relating to indebtedness of Ipiranga Petroquímica S.A. was not deductible for purposes of calculating our income tax and social contribution.

In 2009, 2013 and 2017, we received deficiency notices from the Brazilian federal tax authority claiming that the tax losses offset in the taxable year were in excess of the limitation of 30% of the taxable profits of a given year, as imposed by Brazilian tax law. The amount under discussion is R\$348 million, including interest and fines. We challenged these assessment notices because we believe that the 30% limitation is not applicable in the event of the merger of the taxpayer and that the statute of limitations for one of these claims has expired. We believe that a loss in these claims is possible and our consultants expect that the administrative discussions will end in 2020, and the judicial discussion will end in 2027. As of December 31, 2018, we have made no provision with respect to these claims and there is no deposit or guarantee related to the processes that are in administrative discussion phase. Collection is suspended during the discussions due to an injunction that we obtained in our favor.

We received a tax assessment notice from the Federal Brazilian Revenue Service claiming income tax and social contribution debts due to the following: (i) commissions paid by Braskem in 2011 were not considered deductible for purposes of calculating income tax and social contribution; (ii) commissions paid by Braskem INC in 2013 and 2014 were also not considered deductible for purposes of calculating income tax and social contribution; (iii) we did not withhold the income tax over the payments of the commissions mentioned before; (iv) marketing expenses were not considered deductible for purposes of calculating income tax and social contribution. We challenged this assessment notice in Administrative Court due to the following reasons: (i) the statute of limitations have expired for the year of 2011, and tax authorities are claiming the payment of income tax and social contribution without taking into consideration that the right to deduct some expenses for purposes of calculating income tax and social contribution is still under discussion in other tax proceedings; (ii) Braskem INC has already recalculated its income tax what only resulted in the decrease of its tax losses; (iii) the net interest paying company is non-resident in Brazil; (iv) marketing expenses are related to our activities. The amount under discussion is R\$122 million, including interest and fines. We believe that a loss in this claim is possible and our consultants expect that the administrative discussion will end in 2022. As of December 31, 2018, we have made no provision with respect to this claim and there is no deposit or guarantee related to it.

In December 2017, we received tax assessment notice from the Federal Brazilian Revenue Service claiming unpaid income tax and social contribution in connection with exchange variation losses recorded by Braskem in the elapsed time between the due date of naphtha import invoices and their payments. The Federal Brazilian Revenue Service considered that these losses, recorded in 2012, were not deductible for purposes of calculating income tax and social contribution which resulted in the recalculation of our tax losses and social contribution negative tax base. The amount claimed is R\$104 million. We believe that a loss in this claim is possible and our consultants expect the administrative discussion to be finished until 2022. As of December 31, 2018, we have made no provision with respect to this claim and there is no deposit or guarantee related to it.

We are discussing, at the administrative level, the rejection by the Federal Brazilian Revenue Service of Clearing Statements that aimed at the discharge of federal taxes with credits arising from negative balance of IR and CSLL. The amount under discussion, corresponding to taxes whose compensation was not ratified, is R\$182 million, including interest and fines. We believe that a loss in this claim is possible and our consultants expect the administrative discussion to be finished until 2022. As of December 31, 2018, we have made no provision with respect to this claim and there is no deposit or guarantee related to it.

IOF

We are involved in judicial and administrative proceedings due to tax assessment notices issued by the Federal Brazilian Revenue Service claiming that the following operations are subject to Financial Operations Tax (IOF): (i) the transfers of financial resources under cash pooling and current account agreements made between Quattor Participações S/A, Quattor Química S/A and Braskem and between Braskem and CPN Incorporated (ii) the advances for future capital increases made by Quattor Participações S/A and Quattor Química S/A. The amount claimed is R\$175 million. We believe that these operations do not characterize loan under Brazilian legislation and, as such, are not subject to IOF. We believe that a loss in this claim is possible and our consultants expect that the judicial discussion will end in 2022. We presented a guarantee for the debt under judicial litigation in the amount of R\$59 million.

ICMS Tax Assessment Notice

From 1999 to 2018, the internal revenue department of the States of Bahia, Alagoas, São Paulo, Rio Grande do Sul and Rio de Janeiro issued tax assessment notices against Braskem claiming unpaid ICMS taxes in the amount of R\$644 million, retrospectively revised by inflation and the benchmark rate, in connection with several alleged violations of certain provisions of the ICMS tax legislation, including, among others: (1) inappropriately claiming ICMS credits for the acquisition of goods that the internal revenue department considers for use and consumption; (2) inappropriately claiming ICMS credits for the acquisition of assets not related to production; (3) transfer of goods below the cost of production; (4) differences in stock of final products; (5) lack of evidence that we exported goods; (6) failure to pay taxes on the sale of products subject to tax substitution and inappropriately claiming ICMS tax credits on the purchase of products subject to tax substitution; (7) failure to register invoices; (8) unpaid ICMS taxes on charges for electricity transmission; and (9) for the use of a calculation basis relating to ICMS tax lower than that required by law, in connection with internal transfers of the product crude dichlorethane to another unit in the State of Alagoas, from January 2013 to May 2016, which were not subject to deferral. We challenged these assessment notices in the administrative court because we believe that there are reasonable grounds on which we can successfully defend against these assessments. The cases are expected to be finished until 2023. If an unfavorable decision is rendered in our favor, it is expected that the debts would be paid at 50% of the current value, based on the favorable precedents at judicial and administrative level. A guarantee was offered in the amount of R\$62 million for the debts under discussion in the Judiciary. We believe that a loss in these claims is possible and as of December 31, 2018, we have not recognized any provision with respect thereto.

In 2009, tax assessment notices were issued by the internal revenue department of the State of São Paulo against Braskem Qpar claiming unpaid ICMS taxes and related fines in connection with several alleged violations of certain provisions of the ICMS tax legislation, including:

- (1) Inappropriately claiming ICMS credits: (i) in the amount of R\$53.5 million from February/2004 to August 2005, November/2005 to February/2006 and September/2006 to January/2008 related to the acquisition of "acrylonitrile" sold by Acrinor Acrilonitrila do Nordeste S/A (ii) in the amount of R\$1.6 million from December/2004 to August/2005 related to unduly credits informed in invoices issued by Proquigel Química S/A; (iii) in the amount of R\$3.1 million from August/2004 to November/2005, related to unduly credits informed in invoices issued by Proquigel Química S/A for exportation, not submitted to ICMS payment;
- (2) A fine of 100% of the taxes assessed was imposed in all cases above.
- (3) Error in the issuance of invoices under CFOP code 6.905 without the circulation of goods – a fine of 30% of the amount of the invoices (R\$480.4 million) was assessed.
- (4) Fine assessed due to the default in answering to notification of tax authorities to present documents to a tax audit.

The administrative proceedings were closed in the administrative court in 2015, the remaining debt is under discussion in the Judiciary. Due to favorable preliminary orders, the State Treasury of São Paulo has rectified the amount of the debt to apply default interest and monetary restatement limited to the SELIC rate, which reduced the debt in 20%. Regarding this amount, the chances of loss are remote, and for the remaining debt we believe the loss is possible. As of December 31, 2018, we have established related provisions in the amount of R\$280.6 million. We offered a guarantee to the debts and our consultants expect the cases to be finished until 2025.

In 2016, we received a tax assessment notice from the revenue department of the state of Bahia alleging that we had inappropriately used ICMS credits on the acquisition of goods used in the production of gasoline, which sales are not submitted to ICMS payment, during the period of 2012 to 2015. As of December 31, 2018, the amount claimed is R\$47 million. Our consultants expect the case to be finished until 2020. We believe that a loss in these claims is possible and we have made no provision with respect to this claim and there is no deposit or guarantee related to it.

In 2017, we received a tax assessment notice issued by the department of the state of Alagoas, claiming ICMS debts, in the period of August 2012 to April 2016, alleging violation of PRODESIN legislation – tax incentive issued by the state of Alagoas. As of December 31, 2018, we have established related provisions in the amount of R\$45 million. We believe that a loss in this claim is likely and our consultants expect the case to be finished until 2021. There is no deposit or guarantee related to this claim.

PIS and COFINS Non-Cumulative Tax Assessment Notice

We received assessment notices from the federal internal revenue department alleging that we had inappropriately claimed certain PIS and COFINS credits in relation to: (1) wastewater treatment, (2) charges for electricity transmission, (3) freight related to the storage of finished goods and (4) credits claimed at inappropriate times, relating to the acquisition of fixed assets between 2006 and 2011. As of December 31, 2018, the amount in dispute of these claims was R\$1.2 billion. We challenged these assessment notices in an administrative court because we believe that there are reasonable grounds on which we can successfully defend against these assessments. We believe that a loss on these claims is possible and our consultants expect that the administrative discussion will end in 2022. There are no deposits or guarantees related to these claims and we have not recognized any provision with respect thereto.

The Federal Brazilian Revenue Service did not recognize the compensation of PIS and COFINS because the amount of the credits informed in the compensation files were higher than the amount informed in the PIS and COFINS declaration (DACON). In October, 2017, we included certain tax debts in installment payment program such as: (i) the differences in the values informed in the PIS and COFINS declaration (DACON) and in the electronic files of the invoices; (ii) the values not reflected in the balance sheets, credits over untaxed purchases, credits over IPI, lack of presentation of documents, and (iii) failure to pay PIS and COFINS informed to the tax authorities in the DACON. A loss in this claim is likely and our consultants expect that the administrative discussion will end in 2020. As of December 31, 2018, we have established related provisions in the amount of R\$154.7 million. There are no deposits or guarantees related to these claims.

PIS and COFINS Tax Assessment Notice

Braskem is involved in several judicial and administrative proceedings related to the payment of PIS and COFINS, including (1) unpaid COFINS from March 1999 to December 2000, February 2001 to March 2002, May 2002 to July 2002 and during September 2002, (2) inappropriately claimed credits due to the additional 1% in the COFINS rate and PIS Decree-Law No. 2,445 and 2,449, and (3) undue compensation of PIS and COFINS debts with PIS credits (Decree-Laws Nos. 2,445 e 2,449) which were considered to have expired by the tax authorities; and (4) an omission in the base revenue resulting from exchange gains earned due to successive reductions of our associated capital. As of December 31, 2018, the amount in dispute of these claims was R\$90 million. We challenged these assessment notices because we believe that there are reasonable grounds on which we can successfully defend against these assessments. We believe that a loss in these claims is likely and our consultants expect the cases to be finished until 2020. As of December 31, 2018, we have established related provisions in the amount of R\$59.7 million. We offered guarantee in the amount of the judicial litigations.

In 2014, we received a tax assessment notice from the Federal Brazilian Revenue Service claiming that the tax losses and social contribution negative tax base used to pay debts under the MP No. 470/2009 installments program, as well as interest, fines exonerated in installments of the MP No.470/09 are taxable. The amount of PIS and COFINS claimed is R\$842 million. We challenged this assessment notice because we believe that these claims are based on a misinterpretation of both the applicable law and facts by the tax authorities. We believe that a loss in this claim is possible and our consultants expect that the administrative discussion will end in 2020. As of December 31, 2018, we have made no provision with respect to this claim.

We and our affiliates are involved in several other judicial and administrative proceedings related to the alleged undue compensation of PIS and COFINS debts with the following credits: (1) Corporate Income tax; (2) FINSOCIAL; (3) Tax on net profits; (4) PIS (Decree-Laws Nos. 2,445 and 2,449); (5) Cofins. The proceeding are also related to debts of COFINS levied on interest calculated on equity. As of December 31, 2018, the amount in material disputes relating to PIS and COFINS was R\$144 million. We offered guarantee in the amount of the judicial litigation. We believe that a loss in this claim is possible and our consultants expect that the administrative discussion will end in 2022. As of December 31, 2018, we have not recognized any provision with respect to these proceedings.

Isolated Fine Tax Assessment Notices

From 2016 to 2018, we received tax assessment notices from the federal internal revenue department imposing fines of 50% on the amount of the credits relating to: (i) non-cumulative PIS/COFINS; (ii) negative Balance of IRPJ/CSLL; (iii) REINTEGRA and (iv) other credits, all offset with federal taxes and not homologated. As of December 31, 2018, the amount claimed was R\$215 million. We believe that a loss in these claims is possible and our consultants believe that the administrative proceedings will end in 2022. There are no deposits or guarantees related to these claims.

IPI and Import Duty Tax Assessment Notice

In 2002, the merged company Ipiranga Petroquímica received a tax assessment notice from the Federal Brazilian Revenue Service due the contracting of two separate companies, one to supply the parts and technology and a second to supply the specialized labor to provide technical assistance in the construction of an industrial plant in the State of Rio Grande do Sul, claiming that it would have been done only to reduce the price of the parts and technology used and, as a consequence, reduce the value of IPI and II to be paid. As of December 31, 2018, the amount claimed was R\$68 million. We believe that a loss in this claim is possible and our consultants expect the case to be finished until 2022. There is no deposit or guarantee related to this claim.

SUDENE – Income Tax Reduction

Since 2015, we have obtained favorable decisions in lawsuits claiming the reduction of 75% of IR on income from the following industrial units: (i) PVC and chlor-alkali (*cloro soda*) units, established in the state of Alagoas; and (ii) Chemicals, PE, PVC and chlor-alkali units, established in the city of Camaçari (BA). The realization period is 10 years. In 2018, the operations in Brazil recorded tax losses, therefore it was not possible to claim any deductions as tax incentives.

PRODESIN – ICMS Tax Incentive

Braskem has ICMS tax incentives by the state of Alagoas, through the state of Alagoas Integrated Development Program, or PRODESIN, which aimed at implementing and expanding a plant in that state. This incentive is considered an offsetting entry to sales taxes. In 2018, the amount was R\$81.9 million (R\$95.7 million in 2017). As PRODESIN is considered an investment subsidy, it was allocated to the our tax incentive reserve, pursuant to the Brazilian Corporations Law.

REIQ – PIS/COFINS Tax Incentive

The Brazilian chemical and petrochemical sector enjoyed an important achievement in 2013. The government, in response to one of the proposals elaborated by the Chemical Industry Competitiveness Council, approved the PIS and COFINS tax rates relief on raw material purchases by first and second generation producers, which serve various sectors of the economy. The measure aimed to restore some of the industry's competitiveness, which was weakened by factors related to infrastructure, productivity, feedstock and energy costs and the exchange rate that pressured the chemical industry's trade deficit, according to ABIQUIM, which ended 2018 at US\$29.6 billion. By 2018, we had a tax rebate of 3.65% (PIS and COFINS) on the acquisition of petrochemical raw materials.

On May 30, 2018, the Brazilian government issued Provisional Measure No. 836/18, which revoked the tax rebate of 3.65%, beginning on September 1, 2018. However, in early October, 2018, the Provisional Measure failed to be converted into law, which kept the rebate of PIS and COFINS on the acquisition of petrochemical raw materials unchanged at 3.65%.

Other Tax Proceedings

Social Security Contributions – withholding of 11%

We were assessed by the Federal Revenue Service for allegedly withholding social security at the rate of 11% on the gross amount of invoices, bills or trade notes related to services executed through assigned labor, in the period from February 1999 to June 2002, amounting to R\$52 million as of December 31, 2018.

Our legal advisors, in view of prior decisions by the Administrative Council of Tax Appeals (CARF) and the evidence provided by us, assess as possible the chances of loss at the administrative level. The conclusion is supported, among other things, by the following: (i) the Tax Assessment Notice is null and void and collection of the tax is time-barred; (ii) the mismatch between the service provided and the tax substitution system under Article 31 of Federal Law No. 8,212/1991; and (iii) the lack of the requirements to characterize assignment of labor, and other matters that would have to be evidenced through a tax diligence.

Our external legal advisors estimate that the administrative proceeding should be concluded in 2019.

There are no deposits or any other type of guarantee for such procedures, since they are still being discussed at the administrative level.

Class Action Proceedings

In July 2015, two putative class action lawsuits were filed against us and certain of our then-current and former officers and directors, or the Defendants, in the United States District Court for the Southern District of New York. The lawsuits were subsequently consolidated under the caption *In re Braskem, S.A. Securities Litigation*, No. 15-cv-5132. In November 2015, Boilermaker-Blacksmith National Pension Trust, or the Lead Plaintiff, filed a consolidated class action complaint, which asserted claims under Section 10(b) and Section 20(a) of the Exchange Act, on behalf of a putative class of purchasers of our ADSs, from June 1, 2010 to March 11, 2015. In the operative complaint, the Lead Plaintiff alleges that the Defendants made misrepresentations or omissions that inflated the price of our stock in violation of U.S. securities laws. We filed a motion to dismiss on July 6, 2016. On March 31, 2017, the court ruled on the motion to dismiss, granting it in part and denying it in part. The parties have signed a proposed settlement agreement on September 14, 2017 and the U.S. court granted final approval to the settlement and entered a judgment to dismiss the action and discharge the claims of the class members on February 21, 2018. Under the terms of the settlement, we paid US\$10 million to resolve all claims of the settlement class consisting of purchasers of our ADRs during the period from July 15, 2010 through March 11, 2015, that arise out of or relate to the subject matter of the class action. We paid the settlement amount into an Escrow Account (which is subject to the jurisdiction of the Court) on October 2, 2017 and the Claims Administrator shall arrange its distribution after the entry by the court of a class distribution order. We have made no admission of any wrongdoing or liability as part of the settlement.

Global Settlement

In the context of allegations of improper payments in connection with the so-called Operation Car Wash (*Operação Lava Jato*) in Brazil, we engaged independent expert firms to conduct an investigation into such allegations (the "Investigation") and report their findings. We have cooperated with governmental authorities in several jurisdictions, including the U.S. Department of Justice, or the DoJ, the U.S. Securities and Exchange Commission, or the SEC, Brazil's Federal Prosecutor's Office (*Ministério Público Federal*), or the MPF, and Switzerland's Office of the Attorney General, or the OAG. On December 14, 2016, we entered into a leniency agreement with the MPF, or the Leniency Agreement, which was ratified by the competent Brazilian court on June 6, 2017. On December 21, 2016, we filed a plea agreement in the United States District Court for the Eastern District of New York under which we agreed to plead guilty to a one-count criminal information charging us with conspiracy to violate the anti-bribery provisions of the U.S. Foreign Corrupt Practices Act, or the FCPA. On the same date, we consented to the entry of a final judgment in a civil action brought by the SEC based on civil violations of the anti-bribery, books and records and internal accounting controls provisions of the FCPA. The competent federal courts in the United States approved the DoJ and SEC resolutions on January 26, 2017 and February 28, 2017, respectively. In addition, on December 21, 2016, the OAG closed its investigation of these matters. We refer to these actions as the Global Settlement. Under the Global Settlement, we agreed to pay to the governmental authorities in these jurisdictions an aggregate amount of US\$957 million (equivalent to R\$3.1 billion), based on the exchange rate of R\$3.27 per U.S. Dollar, applicable at the time of the negotiation.

The MPF will distribute the majority of the amount it receives as restitution to third parties for damages caused by the misconduct. Pursuant to the Global Settlement, the MPF agreed to communicate with other public authorities or entities, as well as stated-owned companies and mixed-capital companies with which Braskem enters into discussions to address the facts under the Global Settlement and avoid making duplicate restitution payments. In this context, as announced to the market on July 10, 2018 and disclosed in a material fact on May 27, 2019, we have cooperated and engaged in negotiations with the Ministry of Transparency and Controllershship (CGU) and the Office of the Attorney General (AGU) in Brazil, and our Board of Directors approved the signing of a leniency agreement with the CGU and the AGU (the "CGU/AGU Agreement").

The CGU/AGU Agreement, in the amount of R\$2.9 billion, to be adjusted by the SELIC rate, addresses the same facts that are the object of the Global Settlement executed in December 2016 with the Brazilian Federal Prosecution Office (MPF), the U.S. Department of Justice (DoJ), the U.S. Securities and Exchange Commission (SEC) and the Swiss Office of the Attorney General ("Global Settlement"). Of this amount, R\$2.5 billion will be offset by the amount that Company already had undertaken to pay under the scope of the Global Settlement, resulting in an additional disbursement of R\$410 million.

As of the date of this annual report, we have paid R\$2 billion of the total fine established in the Global Settlement in the following manner:

- US\$94.9 million (R\$296.6 million) to the DoJ on February 8, 2017;
- US\$65.0 million (R\$206.5 million) to the SEC on April 27, 2017;
- CHF30.2 million (R\$104.3 million) to the OAG on June 27, 2017;
- R\$736.4 million to the MPF on July 6, 2017;
- R\$267.9 million to the MPF on January, 30 2018;
- CHF16.1 million (R\$62.0 million) to the OAG on June 28, 2018;
- R\$278.0 million to the MPF, on January 30, 2019; and
- CHF16.1 million (R\$58 million) to the OAG on June 27, 2019

The outstanding amount of R\$1.6 billion related to the Global Settlement and also the CGU/AGU Agreement will be paid in the following manner:

- CHF32.1 million to the OAG, related to two remaining annual installments of CHF16.1 million due on June 30 of each year as from 2020; and
- R\$1.1 billion to the MPF in four remaining annual installments due on January 30 of each year as from 2020. To guarantee payment of future installments, Braskem pledged collateral assets from its property, plant and equipment sufficient to cover one annual installment; and
- R\$409.9 million in connection with the CGU/AGU Agreement in two annual installments due on January 30, 2024 and 2025.

The MPF will distribute the majority of the amount it receives as restitution to third parties for damages caused by the misconduct. Pursuant to the Global Settlement, the MPF agreed to communicate with other public authorities or entities, as well as stated-owned companies and mixed-capital companies with which Braskem enters into discussions to address the facts under the Global Settlement and avoid making duplicate restitution payments. In this context, as announced to the market on July 10, 2018 and disclosed in a material fact on May 27, 2019, we have cooperated and engaged in negotiations with the Ministry of Transparency and Controllershship (CGU) and the Office of the Attorney General (AGU) in Brazil, and our Board of Directors approved the signing of a leniency agreement with the CGU and the AGU (the "CGU/AGU Agreement").

The Global Settlement does not prevent Braskem from responding to any legitimate third party, which may seek indemnification against us from damages for the facts subject to the Global Settlement. As a result, we cannot assure you that the aggregate amount disbursed as a requirement pursuant to the agreement will be sufficient to cover indemnification claims of all of the victims. We may be required to make additional disbursements to cover such claims.

Other authorities with jurisdiction over us may seek to impose monetary sanctions or fines on, or to initiate investigative proceedings against, Braskem. As a result of entering into the Global Settlement, Braskem may be prevented from entering into certain agreements with government entities and may be subject to increased operating costs for being under the obligation to improve its governance and anti-corruption practices and procedures, including the cost of external monitorships.

Under the terms of the Global Settlement, we are required to cooperate with these governmental authorities and improve our governance and anti-corruption compliance practices. We will also be subject to external monitorship for a period of three years as from 2017, during which time the monitor will assess compliance with the Global Settlement, including the effectiveness of our internal controls, policies and procedures to reduce the risk of any anti-corruption violations. The monitorship period may be terminated early or extended for up to one year at the authorities' discretion depending on our compliance with the Global Settlement. We have retained monitors pursuant to the provisions of the Global Settlement, and they have been approved by the relevant authorities. The monitors may recommend changes to our policies and procedures, which we must adopt unless they are unduly burdensome or otherwise inadvisable, in which case we may propose alternatives that the authorities may choose to accept. Operating under the oversight of the monitors will likely require the assumption of additional responsibilities by members of our management. The costs that we are likely to incur in connection with compliance with the Global Settlement, including the implementation of the recommended changes could be significant and could negatively impact us by requiring the efforts of our management team and diverting their attention from our ordinary business operations.

In connection with the execution of the CGU/AGU Agreement, Braskem originally took a tax deduction in its 2019 quarterly financial statements for the full amount of the payments to be paid under the CGU/AGU Agreement, as under Brazilian tax law the execution of such agreement provides a right to take a tax deduction on the compensation amount that is due to be paid in Brazil under this type of agreement. The plea agreement entered into with the DoJ as part of the Global Settlement prohibits Braskem from seeking tax deduction in connection with the payment of any part of the aggregate amount of the total criminal penalty contained in the plea agreement, which includes a credit for a portion of the payments to be made in Brazil. After further consideration, in light of the language in the plea agreement, Braskem voluntarily decided to reverse such tax deduction so that no part of the prior tax deduction would be inconsistent with the plea agreement entered into with DoJ. Under the Plea Agreement, it is the DoJ's sole discretion to determine whether the Company has breached the Plea Agreement and to determine the consequences of such breach. Currently, based on the advice of its counsel, the Company believes that it is unlikely that it will incur in losses as a result of this matter.

We are fully in compliance with our obligations under the Global Settlement.

Labor Proceedings

Employment and Occupational Health and Safety Proceedings

We have provisioned R\$177.8 million, as of December 31, 2018, with respect to employment and occupational health and safety proceedings, relating to 477 labor proceedings, including cases of occupational health and safety (in 2017, there were 599 proceedings). Our legal advisors estimate that the time for completion of each of such proceedings in Brazil is more than 5 years. Estimates related to the completion of the proceedings and the possibility of future disbursement may change as result of new decisions of higher courts.

Social Security

As of December 31, 2018, we were involved in several social security proceedings in connection with which the aggregate amount claimed was R\$31 million. We believe that our chance of loss is possible and therefore have not established a provision for these claims.

Civil Proceedings

Caustic soda transportation

We are the defendant in civil lawsuits filed by the owner of a former distributor of caustic soda and by the shipping company that provided services to this former distributor, which, as of December 31, 2018, totaled R\$99.2 million. The claimants seek indemnity for damages related to the alleged non-performance of the distribution agreement. Management's evaluation, supported by the opinion of external legal advisors, is that the lawsuits will possibly be dismissed within an eight-year period as of December 2018. No judicial deposit or other form of guarantee was constituted for these lawsuits. No provision has been made by us for this proceeding.

Excess weight

A civil class action was filed by the Federal Prosecutor's Office in Brasilia seeking to hold us liable for damages caused to federal roads by trucks carrying excess weight. The action claims damages to the federal government arising from material damages and collective pain and suffering, in the amount of R\$71 million, as of December 31, 2018. The lawsuit was dismissed in the lower court, and the decision dismissing it was confirmed by a higher court. A special appeal has been filed by the Federal Prosecutor's Office and is currently pending before the Superior Court of Justice (STJ).

Resale of solvents

In January 2017, we became defendant in a civil lawsuit filed by former reseller of solvents, claiming alleged breach of a distribution agreement. On December 31, 2018, the damages claimed in the lawsuit amounted to R\$185.6 million. Based on the opinion of external legal counsel, our management believes that the lawsuit has a possible risk of loss within an eight-year period as of January 2017. As a result no provision has been made by us. No judicial deposit or other form of guarantee was constituted for these lawsuits.

Redress proceeding

A compensatory lawsuit was filed by the insurer of one of our customers. The insurer seeks the reimbursement of the amount paid to a customer pursuant to an insurance agreement entered into with the customer. As of December 31, 2018, the amount involved in this proceeding was R\$73.8 million. According to the insurer, the losses incurred by the customer, for which it was reimbursed, were caused by the supply of non-conforming products by Braskem. Our management, based on the opinion of external legal counsel, considers that the lawsuit may be dismissed in a period of up to 8 years. No judicial deposit or other form of guarantee was constituted for this lawsuit.

Civil Claim for Recovery of Overpaid Amounts Related to CIDE Contributions

A lawsuit was filed by a customer of ours claiming (i) the repayment of the amount allegedly withheld by Braskem for the payment of CIDE's share due for fuel supply and (ii) compensation for damages arising from the misuse of said amount. The lawsuit was dismissed at a lower court and the decision was confirmed by the a higher court. Currently, there is a special appeal filed by the customer pending before the Superior Court of Justice (STJ). As of March 8, 2019, the amount in dispute was R\$16.9 million. Our management, based on the opinion of external legal counsel, considers that the lawsuit will possibly be dismissed in a period of up to 3 years. No judicial deposit or other form of guarantee was constituted for this lawsuit.

Corporate Related Proceedings

As of December 31, 2018, one of our most significant corporate claims is related to an ordinary collection claim combined with a request for damages for losses, requesting the payment of dividends and a share bonus arising from the class "A" preferred shares of the dissolved company Salgema Indústrias Químicas S.A. Dividends and bonus related to fiscal years prior to 1987 were considered to have become time-barred by lower courts and therefore not owed by Braskem. However, the Alagoas state Court of Appeals reviewed the decision and considered that amounts prior to such period also as owed. Braskem filed an appeal against the decision with the Superior Court of Justice (STJ), which was partially granted. It is possible that the statute of limitations could be applied to part of the claim once the request for liquidation is reviewed by the Superior Court of Justice (STJ). During fiscal year 2018, Braskem established a provision of R\$59.6 million for this litigation and there is no guarantee related to this claim.

We are also currently subject to the liquidation of an award related to a lawsuit filed in 1988, which ordered Polialden Petroquímica S.A., which merged into Braskem on May 31, 2006, to pay to its non-controlling preferred shareholders certain remaining profits. The purpose of the liquidation proceeding is to determine the value of the award calculated in accordance with the judicial order issued on April 15, 2016, which will occur through an arbitration procedure, as determined by the court, and was appealed. The procedure is awaiting the beginning of the expert analysis.

Based on the understanding of our external legal advisors, as of December 31, 2018, the nominal amount in dispute was R\$16 million, with a possible loss of R\$186 million.

Reverse Logistic System

Braskem is directly or indirectly (through associations that filed proceedings on behalf of certain groups of individuals or entities) involved in public civil actions and proceedings currently pending before the municipality of São Paulo, the municipality of Porto Alegre, 31 municipalities in the state of Mato Grosso do Sul and the state of Parana related to the execution of a National Sectorial Agreement for the reverse logistic system of general packages, seeking amendments to the terms of such agreement or the implementation of reverse logistics, as well as payment of damages to municipalities and indemnification for environmental damage. Several companies and associations that have entered into the National Sectorial Agreement are involved in such claims, which are all in their early stages. The total net value involved in these claims is R\$12.4 million, considering all defendant companies and associations (if the amount is divided among all companies and associations involved as defendants, Braskem would be responsible for R\$0.45 million). These lawsuits have a possible chance of loss and, as a result, no provision has been made by Braskem.

Hashimoto Civil Action

A civil class action was filed in June 2018 by the Public Prosecutor's Office of the State of São Paulo against us and other companies that operate in the Capuava Petrochemical Complex, seeking the reparation and/or remediation of environmental damages supposedly arising from the emission of air pollutants, as well as a joint judgement against companies that comprise such complex, seeking environmental moral damages in the amount of R\$107.6 million. Based on the opinion of external legal counsel, our management believes that the lawsuit will possibly be dismissed within a period of eight years. No judicial deposit or other form of guarantee was constituted for this lawsuit.

Alagoas - Mining Activities

In April 2019, the Alagoas State Attorney's Office (*Ministério Público do Estado de Alagoas*) and the State Public Defender's Office (*Defensoria Pública do Estado de Alagoas*) filed a lawsuit seeking to freeze our assets in an amount of up to R\$6.7 billion to secure funds allegedly required to ensure remediation and compensation for environmental, property and personal damages potentially resulting from a geological incident related to our mining activities in the city of Maceió. A preliminary decision ordered the freezing of R\$100 million in our banks accounts.

In addition, the Alagoas state court of appeals (Tribunal de Justiça do Estado de Alagoas) ordered the suspension of the distribution of dividends for the fiscal year 2018 that had been proposed in the amount of R\$2.7 billion, or, alternatively, the freezing of assets in the same amount of the proposed dividend distribution. This decision was subsequently reversed by a decision of the Superior Court of Justice (Superior Tribunal de Justiça, or STJ), which authorized the distribution of dividends upon posting of a judicial bond in the same amount. The Alagoas State Attorney's Office and the Alagoas State Public Defender's Office amended their claim to exclude the request for indemnification for the alleged environmental damages and reduce the amount of assets to be frozen to R\$3.7 billion, which according to their allegations would be equivalent to the actual damages caused to the residents of the districts affected by the geological event. On June 26, 2019, the presiding judge of the Alagoas state court of appeals (Tribunal de Justiça do Estado de Alagoas) issued a decision ordering an amount of R\$3.7 billion to be frozen. This decision was also subsequently reversed by the Superior Court of Justice (STJ), which ordered the frozen amount of R\$3.7 billion to be returned to our bank accounts after posting another judicial bond in an equivalent amount.

On July 25, 2019, we were informed of another civil lawsuit filed against us by the Labor Prosecutor's Office of the State of Alagoas, or MPT-AL, requesting injunctive relief to freeze the amount of R\$2.5 billion to guarantee payment of any actual damages that workers affected by the geological event may suffer. In that lawsuit, MPT-AL further requested the payment of compensation to workers for pain and suffering. On October 10, 2019, the trial court denied the injunctive relief request.

On August 19, 2019, we became aware of the filing of another civil lawsuit by the Federal Prosecutor's Office (Ministério Público Federal) against us and other parties, requesting the following injunctive reliefs: (i) the set-up of a fund of R\$3.1 billion for the benefit of social and environmental programs and emergency measures to be carried out, and the maintenance in said fund of working capital in the amount of at least R\$2.0 billion or, after a financial schedule is approved for such fund, an amount equivalent to 100% of the expenses projected for the subsequent 12 months; (ii) the posting of bonds in the amount of R\$20.5 billion; (iii) prohibition on us to encumber or dispose of any of our fixed assets and to distribute profits, in the form of dividends, interest on shareholders' equity or any other form; (iv) freezing of any profits not yet distributed; and (v) suspension of receipt of government financings and government incentives, as well as acceleration of existing indebtedness with BNDES (a federal development bank).

As of the date of this annual report, the plaintiff's requests for injunctive relief have not yet been ruled upon.

We are taking all relevant measures to defend against these lawsuits.

We have also been continuously cooperating with relevant authorities to identify the causes of the incident, with the support of independent experts.

Dividends and Dividend Policy

Payment of Dividends

Our dividend distribution policy has historically included the distribution of periodic dividends, based on annual balance sheets approved by our board of directors. When we pay dividends on an annual basis, they are declared at our annual shareholders' meeting, which we are required by the Brazilian Corporations Law and our by-laws to hold by April 30 of each year. When we declare dividends, we are generally required to pay them within 60 days of declaring them unless the shareholders' resolution establishes another payment date. In any event, if we declare dividends, we must pay them by the end of the fiscal year for which they are declared. Any holder of record of shares at the time that a dividend is declared is entitled to receive dividends. Our payment of annual dividends is based on our audited financial statements prepared for our preceding fiscal year.

Our Finance and Investments Committee will review, prior to the review by our board of directors, any management proposal regarding the distribution of dividends or interest on capital stock.

Our board of directors may declare interim dividends based on the accrued profits recorded or the realized profits in our annual or semi-annual financial statements approved by our common shareholders. In addition, we may pay dividends from net income based on our unaudited quarterly financial statements. These quarterly interim dividends may not exceed the amounts included in our capital reserve accounts. We may set off any payment of interim dividends against the amount of the mandatory distributable amount for the year in which the interim dividends were paid.

The following table sets forth the dividends and/or interest attributable to shareholders' equity paid to holders of our common shares, class "A" preferred shares and "class B" preferred shares since January 1, 2016 in *reais* and in U.S. dollars translated from *reais* at the commercial market selling rate in effect as of their respective payment date.

Year	Payment Date	Nominal Brazilian Currency per			US\$ equivalent per		
		Common shares	Class A Preferred Shares	Class B Preferred Shares	Common shares	Class A Preferred Shares	Class B Preferred Shares
2016	April 15, 2016	1.26	1.26	0.61	0.36	0.36	0.17
2016	October 11, 2016	1.26	1.26	1.26	0.39	0.39	0.39
2017	December 12, 2017	1.26	1.26	0.61	0.38	0.38	0.38
2017	May 10, 2018	1.89	1.89	—	0.53	0.53	—

The following discussion summarizes the principal provisions of the Brazilian Corporations Law and our by-laws relating to the distribution of dividends, including interest attributable to shareholders' equity.

Calculation of Adjusted Net Profits

At each annual shareholders' meeting, our board of directors is required to recommend how to allocate our net profits for the preceding fiscal year, which recommendation our board of executive officers initially submits to our board of directors for approval. This allocation is subject to approval by our common shareholders. The Brazilian Corporations Law defines "net profits" for any fiscal year as our net income after income taxes for that fiscal year, net of any accumulated losses from prior fiscal years and any amounts allocated to employees' participation in our net profits in that fiscal year. Under the Brazilian Corporations Law, our adjusted net profits available for distribution are equal to our net profits in any fiscal year, reduced by amounts allocated to our legal reserve and other applicable reserves, and increased by any reversals of reserves that we constituted in prior years.

Reserve Accounts

Under the Brazilian Corporations Law and our by-laws, we are required to maintain a legal reserve. In addition, we are permitted by the Brazilian Corporations Law to establish the following discretionary reserves:

- a contingency reserve for an anticipated loss that is deemed probable in future years. Any amount so allocated in a previous year must be reversed in the fiscal year in which the loss had been anticipated if the loss does not occur as projected or charged off in the event that the anticipated loss occurs;
- a reserve for investment projects, in an amount based on a capital expenditure budget approved by our shareholders;
- an unrealized profit reserve described under “—Mandatory Distributions” below; and
- a tax incentive investment reserve, included in our capital reserve accounts, in the amount of the reduction in our income tax obligations due to government tax incentive programs. See note 23 to our audited consolidated financial statements elsewhere in this annual report.

Allocations to each of these reserves (other than the legal reserve) are subject to approval by our common shareholders voting at our annual shareholders’ meeting.

Legal Reserve Account

Under the Brazilian Corporations Law and our by-laws, we must allocate 5% of our net profits for each fiscal year to our legal reserve until the aggregate amount of our legal reserve equals 20% of our paid-in capital. However, we are not required to make any allocations to our legal reserve in a fiscal year in which our legal reserve, when added to our other reserves, exceeds 30% of our shareholders’ equity. As of December 31, 2018, we had a balance of R\$577.5 million in our legal reserve account.

Dividend Preference of Preferred Shares

Under our by-laws, our preferred shareholders are entitled to a Minimum Preferred Dividend, equal to 6% of the book value of such shares, before dividends may be paid to our common shareholders. Distributions of dividends in any year are made:

- first, to the holders of preferred shares, up to the amount of the Minimum Preferred Dividend for such year;
- then, to the holders of common shares, until the amount distributed in respect of each common share is equal to the amount distributed in respect of each preferred share; and
- thereafter, to the holders of our common shares and our class A preferred shares on a pro rata basis.

Our class B preferred shareholders are not entitled to receive any additional dividend amounts after they have received the preferential dividend. If the Minimum Preferred Dividend is not paid for a period of three years, holders of preferred shares will be entitled to full voting rights.

Mandatory Distributions

As permitted by the Brazilian Corporations Law, our by-laws specify that 25% of our adjusted net profits for each fiscal year must be distributed to shareholders as dividends or interest attributable to shareholders’ equity. We refer to this amount as the mandatory distributable amount.

Under the Brazilian Corporations Law, the amount by which the mandatory distributable amount exceeds the “realized” portion of net income for any particular year may be allocated to the unrealized profit reserve, and the mandatory distribution may be limited to the “realized” portion of net income. The “realized” portion of net income is the amount by which our net income exceeds the sum of (1) our net positive results, if any, from the equity method of accounting for earnings and losses of our subsidiaries and certain associated companies, and (2) the profits, gains or income obtained on transactions maturing after the end of the following fiscal year. As amounts allocated to the unrealized profit reserve are realized in subsequent years, such amounts must be added to the dividend payment relating to the year of realization.

The Brazilian Corporations Law permits us to suspend the mandatory distribution if our board of directors reports to our annual shareholders’ meeting that the distribution would be incompatible with our financial condition at that time, provided that this does not affect the payment of the Minimum Preferred Dividend. Our fiscal council must opine on any suspension of the mandatory distribution. In addition, our management must report the reasons of any suspension of the mandatory distribution to the CVM. We must allocate net profits not distributed by us as a result of a suspension to a special reserve and, if not absorbed by subsequent losses, we must distribute these amounts as soon as our financial condition permits. In case our profits reserves, as defined in the Brazilian Corporations Law, exceed our share capital, the excess must be credited to shareholders’ equity or used for the payment of distributions.

Interest Attributable to Shareholders’ Equity

Brazilian companies, including us, are permitted to pay interest attributable to shareholders’ equity as an alternative form of payment of dividends to our shareholders. These payments may be deducted when calculating Brazilian income tax and social contribution tax. The interest rate applied to these distributions generally cannot exceed the TLP for the applicable period. The amount of interest paid that we can deduct for tax purposes cannot exceed the greater of:

- 50% of our net income (after the deduction of the provision for social contribution tax and before the deduction of the provision for corporate income tax) before taking into account any such distribution for the period for which the payment is made; and
- 50% of the sum of our retained earnings and profit reserves.

Any payment of interest attributable to shareholders’ equity to holders of common shares, preferred shares or ADSs, whether or not they are Brazilian residents, is subject to Brazilian withholding tax at the rate of 15%, except that a 25% withholding tax rate applies if the recipient is a resident of a tax haven jurisdiction. A tax haven jurisdiction is a country (1) that does not impose income tax or whose income tax rate is lower than 20% or (2) which does not permit disclosure of the identity of shareholders of entities organized under its jurisdiction. See “Item 10. Additional Information—Taxation—Brazilian Tax Considerations.” Under our by-laws, we may include the amount distributed as interest attributable to shareholders’ equity, net of any withholding tax, as part of the mandatory distributable amount.

Significant Changes

Other than as disclosed in this annual report, no significant change has occurred since the date of the audited consolidated financial statements included in this annual report.

ITEM 9. THE OFFER AND LISTING

Markets for Our Equity Securities

The principal trading market for our common shares, class A preferred shares and class B preferred shares is the B3, where they are traded under the symbols “BRKM3,” “BRKM5” and “BRKM6,” respectively. Our common shares and class A preferred shares began trading on the B3 (formerly the BM&FBOVESPA) on November 11, 1980, and our class B preferred shares began trading on the B3 on August 19, 1983.

On December 21, 1998, ADSs representing our class A preferred shares began trading on the NYSE. Our ADSs are traded under the symbol “BAK.” As we disclosed on a Form 6-K furnished to the SEC on May 13, 2019, the New York Stock Exchange suspended trading of our ADSs and commenced proceedings to delist us due to our delay in filing the annual report on Form 20-F for the year ended December 31, 2017 and this annual report. We have appealed the decision. Our ADSs have been available for trading on the over-the-counter (OTC) market in the United States since May 15, 2019. As of December 31, 2018, there were 24,390,036 ADSs outstanding, representing 48,780,072 class A preferred shares, or 14.1% of our outstanding class A preferred shares. Each ADS represents two class A preferred shares.

On October 8, 2003, we listed our class A preferred shares on the LATIBEX, a stock market for Latin American issuers that is quoted in euros on the Madrid Stock Exchange, under the symbol “XBRK.” Our class A preferred shares are traded on the LATIBEX in lots of one share.

Regulation of Brazilian Securities Markets

The Brazilian securities markets are regulated by the CVM, which has regulatory authority over the stock exchanges and the securities markets generally, the National Monetary Council and the Central Bank, which has, among other powers, licensing authority over brokerage firms and which regulates foreign investment and foreign exchange transactions. The Brazilian securities markets are governed by (1) Law No. 6,385, as amended and supplemented, which is the principal law governing the Brazilian securities markets and which we refer to as the Brazilian Securities Law; (2) the Brazilian Corporations Law; and (3) the regulations issued by the CVM, the National Monetary Council and the Central Bank.

Trading on the B3

Overview of the B3

In 2000, the *Bolsa de Valores de São Paulo S.A. – BVSP* (the São Paulo Stock Exchange), or BOVESPA was reorganized through the execution of memoranda of understanding by the Brazilian stock exchanges. Following this reorganization, the BOVESPA was a non-profit entity owned by its member brokerage firms and trading on the BOVESPA was limited to these member brokerage firms and a limited number of authorized nonmembers. Under the memoranda, all securities are now traded only on the BOVESPA, with the exception of electronically traded public debt securities and privatization auctions, which are traded on the Rio de Janeiro Stock Exchange.

In August 2007, the BOVESPA underwent a corporate restructuring that resulted in the creation of BOVESPA Holding S.A., a public corporation, whose wholly owned subsidiaries were (1) the BOVESPA, which is responsible for the operations of the stock exchange and the organized over-the-counter markets, and (2) the Brazilian Settlement and Custodial Company (*Companhia Brasileira de Liquidação e Custódia*), or CBLC, which is responsible for settlement, clearing and depository services. In the corporate restructuring, all holders of membership certificates of the BOVESPA and of shares of CBLC became shareholders of BOVESPA Holding S.A. As a result of the corporate restructuring, access to the trading and other services rendered by the BOVESPA is not conditioned on stock ownership in BOVESPA Holding S.A. In May 2008, the BOVESPA merged with the Commodities and Futures Exchange (*Bolsa de Mercadorias & Futuros*) to form the BM&FBOVESPA. In November 2008, the CBLC merged with the BM&FBOVESPA. As a result, the BM&FBOVESPA performed its own settlement, clearing and depository services.

On March 30, 2017, the BM&FBOVESPA merged with CETIP, a provider of financial services for the organized over-the-counter market, to form the B3 – Brasil Bolsa Balcão S.A., or B3.

Regulation of Foreign Investments

Trading on the B3 by a holder not deemed to be domiciled in Brazil for Brazilian tax and regulatory purposes, or a non-Brazilian holder, is subject to certain limitations under Brazilian foreign investment regulations. With limited exceptions, non-Brazilian holders may trade on the B3 only in accordance with the requirements of Resolution No. 4,373 of the National Monetary Council. Resolution No. 4,373 requires that securities held by non-Brazilian holders be maintained in the custody of, or in deposit accounts with, financial institutions that are authorized by the Central Bank and the CVM. In addition, Resolution No. 4,373 requires non-Brazilian holders to restrict their securities trading to transactions on the B3 or qualified over-the-counter markets. With limited exceptions, non-Brazilian holders may not transfer the ownership of investments made under Resolution No. 4,373 to other non-Brazilian holders through private transactions. See “Item 10. Additional Information—Exchange Controls” for further information about Resolution 4,373, and “Item 10. Additional Information—Taxation—Brazilian Tax Considerations—Taxation of Gains in Brazil” for a description of certain tax benefits extended to non-Brazilian holders who qualify under Resolution No. 4,373.

ITEM 10. ADDITIONAL INFORMATION

Description of Our By-laws

The following is a summary of the material provisions of our by-laws and of the Brazilian Corporations Law. In Brazil, a company’s by-laws (*estatuto social*) is the principal governing document of a corporation (*sociedade por ações*).

Corporate Purposes

Article 2 of our by-laws establishes our corporate purposes to include:

- the manufacture, trading, import and export of chemical and petrochemical products and petrochemical derivatives;
- the production, distribution and trading of utilities such as: steam, water, compressed air, industrial gases, as well as the provision of industrial services;
- the production, distribution and trading of electricity for its own consumption and that of other companies;
- holdings of equity stakes in other companies, pursuant to the Brazilian Corporations Law No. 6,404/76, as a holder of quotas or shares;
- the manufacture, distribution, trading, import and export of gasoline, diesel oil, LPG and other oil derivatives.
- the transportation, representation and consignment of petrochemical products and by-products, compounds and derivatives, such as polypropylene, polypropylene films, polyethylene, elastomers and their respective manufactured products;
- the free lease or loan of assets that are owned or possessed thereby because of a commercial leasing agreement, provided that this is carried out as an ancillary activity to the main corporate purpose of the Company; and
- the provision of services related to the activities above

Board of Directors

Under the Brazilian Corporations Law, any matters subject to the approval of our board of directors can be approved by a simple majority of votes of the members present at a duly convened meeting, unless our by-laws otherwise specify. Under our by-laws, our board of directors may only deliberate if a majority of its members are present at a duly convened meeting. Any resolutions of our board of directors may be approved by the affirmative vote of a majority of the members present at the meeting; provided, however, that certain matters may only be approved by mutual agreement between the parties under the Braskem S.A. Shareholders’ Agreement. See “Item 7. Major Shareholders and Related Party Transactions—Major Shareholders—Shareholders Agreements—Braskem S.A. Shareholders’ Agreement.” The majority of the members of our board of directors are elected by the Odebrecht Group. However, at least 20% of the members of our board of directors must be independent directors. In addition, any director appointed by a shareholder pursuant to a shareholders agreement is bound by the terms of such agreement. See “Item 7. Major Shareholders and Related Party Transactions—Major Shareholders—Shareholders Agreements.” The members of our board of directors are elected at general meetings of shareholders for concurrent two-year terms. Our by-laws do not require the members of our board of directors to be a resident in Brazil or become our shareholders. The Brazilian Corporations Law requires each of our executive officers to be residents of Brazil. Under our by-laws, the shareholders of our common shares approve the aggregate compensation payable to our directors, executive officers and members of our fiscal council. Subject to this approval, our board of directors establishes the compensation of its members and of our executive officers. See “Item 6. Directors, Senior Management and Employees—Compensation.” Neither the Brazilian Corporations Law nor our by-laws establish any mandatory retirement age for our directors or executive officers.

Compliance

Our by-laws provide for a Compliance Committee comprised of at least three independent members of our board of directors, which members are appointed by our board of directors. In addition, our compliance department, led by our Chief Compliance Officer, reports directly to the Compliance Committee and is not subordinated or connected to any other department or officer of our company. See “Item 6—Directors, Senior Management and Employees—Directors and Senior Management—Board Committees—Compliance Committee.”

Share Capital

Under the Brazilian Corporations Law, the number of issued and outstanding non-voting shares or shares with limited voting rights, such as our class A preferred shares and class B preferred shares, may not exceed fifty percent of total outstanding share capital; however, our by-laws state that such amount shall not exceed two thirds of total outstanding share capital. Each of our common shares entitles its holder to one vote at our shareholders’ meetings. Holders of our common shares are not entitled to any preference in respect of our dividends or other distributions or otherwise in case of our liquidation. Our class A preferred shares and class B preferred shares are non-voting, except in limited circumstances, and have priority over our common shares in the case of our liquidation. See “—Voting Rights”] for information regarding the voting rights of our preferred shares, “—Liquidation” for information regarding the liquidation preferences of our preferred shares, and “Item 8. Financial Information—Dividends and Dividend Policy—Calculation of Adjusted Net Profits” and “Item 8. Financial Information—Dividends and Dividend Policy—Dividend Preference of Preferred Shares” for information regarding the distribution preferences of our preferred shares.

Shareholders’ Meetings

Under the Brazilian Corporations Law, we must hold an annual shareholders’ meeting by April 30 of each year in order to:

- approve or reject the financial statements approved by our board of directors and board of executive officers, including any recommendation by our board of directors for the allocation of net profits and distribution of dividends; and
- elect members of our board of directors (upon expiration of their two-year term) and members of our fiscal council, subject to the right of minority shareholders to elect members of our board of directors and our fiscal council.

In addition to the annual shareholders’ meetings, holders of our common shares have the power to determine any matters related to changes in our corporate purposes and to pass any resolutions they deem necessary to protect and enhance our development whenever our interests so require, by means of extraordinary shareholders’ meetings.

Under the Brazilian Corporations Law, the holders of our common shares have the power, among other powers, to vote at shareholders' meetings to:

- amend our by-laws;
- approve any capital increase in excess of the amount of our authorized capital;
- approve any capital reduction;
- accept or reject the valuation of assets contributed by any of our shareholders in exchange for the issuance of our share capital;
- suspend the rights of any of our shareholders in default of their obligations established by law or by our by-laws;
- authorize the issuance of convertible debentures;
- approve any reorganization of our legal form or any merger, consolidation or spin-off involving us;
- authorize our dissolution and liquidation, the election and dismissal of liquidators appointed in connection with any dissolution or liquidation of our company, and the examination of the liquidators' accounts;
- participate in a centralized group of companies (as defined under the Brazilian Corporations Law);
- approve the aggregate compensation payable to our directors and executive officers;
- authorize management to declare us insolvent or bankrupt and to request a *concordata* (a procedure involving our protection from our creditors similar in many respects to a reorganization under the U.S. bankruptcy code);
- elect and substitute members of our board of directors and fiscal council;
- modify the number of members on our board of directors;
- alter our dividend policy; and
- authorize the delisting of our shares.

We convene our shareholders' meetings, including our annual shareholders' meeting, by publishing a notice in the *Diário Oficial do Estado da Bahia*, in at least one additional newspaper designated by our shareholders with general circulation in Bahia, where we maintain our registered office. On the first call of any meeting, the notice must be published no fewer than three times, beginning at least 15 calendar days prior to the scheduled meeting date. The notice must contain the meeting's place, date, time, agenda and, in the case of a proposed amendment to our by-laws, a description of the subject matter of the proposed amendment.

In order for a valid action to be taken at a shareholders' meeting, shareholders representing at least 25% of our issued and outstanding voting share capital must be present on first call. However, shareholders representing at least two-thirds of our issued and outstanding voting share capital must be present at a shareholders' meeting called to amend our by-laws. If a quorum is not present, our board of directors may issue a second call by publishing a notice as described above at least eight calendar days prior to the scheduled meeting. The quorum requirements do not apply to a meeting held on the second call, and the shareholders' meetings may be convened with the presence of shareholders representing any number of shares (subject to the voting requirements for certain matters described below). A shareholder without a right to vote may attend a shareholders' meeting and take part in the discussion of matters submitted for consideration.

Voting Rights

Under the Brazilian Corporations Law and our by-laws, each of our common shares entitles its holder to one vote at our shareholders' meetings. Our preferred shares generally do not confer voting rights, except in the limited circumstances. We may not restrain or deny any voting rights without the consent of the majority of the shares affected. Whenever the shares of any class of share capital are entitled to vote, each share is entitled to one vote.

Preemptive Rights

Under the Brazilian Corporations Law, each of our common and class A preferred shareholders has a general preemptive right to subscribe for our shares or securities convertible into our shares in any capital increase, in proportion to the number of our shares held by such shareholder. In accordance with the applicable legislation and our by-laws, the class B preferred shares (which are special shares paid up with resources provided for in certain tax incentive legislation), the holders of such class B preferred shares do not have preemptive rights in case of any capital increase. In the event of a capital increase that would maintain or increase the proportion of our capital represented by our class A preferred shares, holders of our class A preferred shares would have preemptive rights to subscribe to newly issued class A preferred shares only. In the event of a capital increase that would reduce the proportion of our capital represented by our class A preferred shares, holders of such preferred shares would have preemptive rights to subscribe to any new class A preferred shares in proportion to the number of our shares that they hold, and to our common shares only to the extent necessary to prevent dilution of their interests in our total capital.

Under our by-laws, except when issuing voting shares or securities convertible into voting shares, our board of directors or our shareholders, as the case may be, may decide to reduce the term of preemptive rights or not to extend preemptive rights to our shareholders with respect to any issuance of our non-voting shares, debentures convertible into our shares or warrants made in connection with a public exchange made to acquire control of another company or in connection with a public offering or through a stock exchange. The preemptive rights are transferable and must be exercised within a period of at least 30 days following the publication of notice of the issuance of shares or securities convertible into our shares. Holders of the ADSs may not be able to exercise the preemptive rights relating to our class A preferred shares underlying their ADSs unless a registration statement under the Securities Act is effective with respect to those rights or an exemption from the registration requirements of the Securities Act is available. We are not obligated to file a registration statement with respect to the shares relating to these preemptive rights or to take any other action to make preemptive rights available to holders of the ADSs, and we may not file any such registration statement.

Redemption, Amortization, Tender Offers and Rights of Withdrawal

Our by-laws or our shareholders at a shareholders' meeting may authorize us to use our profits or reserves to redeem or amortize our shares in accordance with conditions and procedures established for such redemption or amortization. The Brazilian Corporations Law defines "redemption" (*resgate de ações*) as the payment of the value of the shares in order to permanently remove such shares from circulation, with or without a corresponding reduction of our share capital. The Brazilian Corporations Law defines "amortization" (*amortização*) as the distribution to the shareholders, without a corresponding capital reduction, of amounts that they would otherwise receive if we were liquidated. If an amortization distribution has been paid prior to our liquidation, then upon our liquidation, the shareholders who did not receive an amortization distribution will have a preference equal to the amount of the amortization distribution in the distribution of our capital.

The Brazilian Corporations Law authorizes us to redeem shares not held by our controlling shareholders, if, after a tender offer effected as a consequence of delisting or a substantial reduction in the liquidity of our shares, our controlling shareholders increase their participation in our total share capital to more than 95%. The redemption price in such case would be the same price paid for our shares in any such tender offer.

Rights of Withdrawal

The Brazilian Corporations Law provides that, in certain limited circumstances, a dissenting shareholder may withdraw its equity interest from our company and be reimbursed by us for the value of our common or preferred shares that it then holds.

This right of withdrawal may be exercised by the holders of the adversely affected common or preferred shares if we decide:

- to create a new class of our preferred shares with greater privileges than the existing classes of our preferred shares;
- to increase an existing class of our preferred shares relative to the other classes of our preferred shares (unless such actions are provided for or authorized by our by-laws); or
- to modify a preference, privilege or condition of redemption or amortization conferred on one or more classes of our preferred shares.

In addition, holders of our common and preferred shares may exercise their right of withdrawal if we decide to undertake any of the following actions:

- to merge with another company or to consolidate with another company in a transaction in which our company is not the surviving entity;
- to transfer all of our shares to another company or to acquire all of the shares of another company (“*incorporação de ações*”);
- to participate in a centralized group of companies as defined under the Brazilian Corporations Law;
- to reduce the mandatory distribution of dividends;
- to change our corporate purposes; or
- to spin-off a portion of our company.

Only shareholders who own shares on the date of publication of the first notice convening the relevant shareholders’ meeting or the press release concerning the relevant shareholders’ meeting is published, whichever is earlier, will be entitled to withdrawal rights.

Shareholders will not be entitled to this right of withdrawal if the shares of the entity resulting from a merger, incorporation, consolidation of our company or participation of our company in a group of companies have minimal market liquidity and are dispersed among a sufficient number of shareholders. For this purpose, shares that are part of general indices representative of portfolios of securities traded in Brazil or abroad are considered liquid, and sufficient dispersion will exist if the controlling shareholder holds less than half of the class and type of the outstanding shares. In case of a spin-off, the right of withdrawal will only exist if there is a significant change in the corporate purpose or a reduction in the mandatory dividend.

The redemption of shares arising out of the exercise of any withdrawal rights would be made at book value per share, determined on the basis of their most recent audited balance sheet approved by our dissenting shareholders. However, if the shareholders’ meeting approving the action that gave rise to withdrawal rights occurred more than 60 days after the date of the most recent approved audited balance sheet, a shareholder may demand that its shares be valued on the basis of a balance sheet prepared specifically for this purpose. The right of withdrawal lapses 30 days after the date of publication of the minutes of the shareholders’ meeting that approved one of the matters described above. Our shareholders may reconsider any resolution giving rise to withdrawal rights within 10 days following the expiration date for such rights if we believe that the withdrawal of shares of dissenting shareholders would jeopardize our financial stability.

Disclosures of Share Ownership

Brazilian regulations require that (1) each of our controlling shareholders, directly or indirectly, (2) shareholders who have elected members of our board of directors, and (3) any person or group of persons representing a person that has directly or indirectly acquired or sold an interest that exceeds upwards or downwards, the threshold of 5%, 10%, 15%, and so on, of the total number of our shares of any type or class to disclose its or their share ownership or divestment to the CVM and to the B3.

Form and Transfer

Our preferred shares and common shares are in book-entry form, registered in the name of each shareholder or its nominee. The transfer of our shares is governed by Article 35 of the Brazilian Corporations Law, which provides that a transfer of shares is effected by our transfer agent, Banco Itaú S.A., by an entry made by the transfer agent in its books, upon presentation of valid written share transfer instructions to us by a transferor or its representative. When preferred shares or common shares are acquired or sold on a Brazilian stock exchange, the transfer is effected on the records of our transfer agent by a representative of a brokerage firm or the stock exchange's clearing system. The transfer agent also performs all the services of safe-keeping of our shares. Transfers of our shares by a non-Brazilian investor are made in the same manner and are executed on the investor's behalf by the investor's local agent. If the original investment was registered with the Central Bank pursuant to foreign investment regulations, the non-Brazilian investor is also required to amend, if necessary, through its local agent, the electronic certificate of registration to reflect the new ownership.

The B3 operates a central clearing system. A holder of our shares may choose, at its discretion, to participate in this system, and all shares that such shareholder elects to be put into the clearing system are deposited in custody with the clearing and settlement chamber of the B3 (through a Brazilian institution that is duly authorized to operate by the Central Bank and maintains a clearing account with the clearing and settlement chamber of the B3). Shares subject to the custody of the clearing and settlement chamber of the B3 are noted as such in our registry of shareholders. Each participating shareholder will, in turn, be registered in the register of the clearing and settlement chamber of the B3 and will be treated in the same manner as shareholders registered in our books.

Material Contracts

We have not entered into any material contracts, other than those described elsewhere in this annual report or entered into in the ordinary course of business. For additional information about material agreements that we have recently entered into, please see "Item 5. Operating and Financial Review and Prospects—Recent Developments" and "Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources."

Exchange Controls

There are no restrictions on ownership or voting of our capital stock by individuals or legal entities domiciled outside Brazil. However, the right to convert dividend payments, interest on shareholders' equity payments and proceeds from the sale of our share capital into foreign currency and to remit such amounts outside Brazil is subject to exchange control restrictions under foreign investment legislation and foreign exchange regulations, which generally require, among other things, the registration of the relevant investment with the Central Bank and/or the CVM, as the case may be.

Investments in our class A preferred shares by (1) a holder not deemed to be domiciled in Brazil for Brazilian tax purposes, (2) a non-Brazilian holder who is registered with the CVM under Annex I of Resolution No. 4,373, or (3) the depositary, are eligible for registration with the Central Bank. This registration (the amount so registered is referred to as registered capital) allows the remittance outside Brazil of foreign currency, converted at the commercial market rate, acquired with the proceeds of distributions on, and amounts realized through, dispositions of our class A preferred shares.

Depositary Receipts (Annex II of Resolution No. 4,373)

Annex II of Resolution No. 4,373 of the National Monetary Council, as amended, provides for the issuance of depositary receipts in foreign markets in respect of shares of Brazilian issuers. The ADS program was approved by the Central Bank and the CVM prior to the issuance of the ADSs. Accordingly, as a general rule, the proceeds from the sale of ADSs by non-Brazilian resident holders of ADSs outside Brazil are not subject to Brazilian foreign investment controls, and holders of the ADSs who are not domiciled in a favorable tax haven jurisdiction are entitled to favorable tax treatment. See "—Taxation—Brazilian Tax Considerations."

We pay dividends and other cash distributions with respect to our class A preferred shares in reais. We have obtained an electronic certificate of foreign capital registration from the Central Bank in the name of the depositary with respect to our ADSs to be maintained by the custodian. Pursuant to this registration, the custodian is able to convert dividends and other distributions with respect to our class A preferred shares represented by ADSs into foreign currency and remit the proceeds outside Brazil to the depositary so that the depositary may distribute these proceeds to the holders of record of the ADSs.

Foreign Direct Investment and Portfolio Investment

Investors (individuals, legal entities, mutual funds and other collective investment entities) domiciled, residing or headquartered outside Brazil may register their investments in our capital stock as foreign portfolio investments under Annex I of Resolution No. 4,373 (described below) or as foreign direct investments under Law No. 4,131 (described below). Registration under Annex I of Resolution No. 4,373 or Law No. 4,131 generally enables the conversion of dividends, other distributions and sales proceeds received in connection with registered investments into foreign currency and the remittance of such amounts outside Brazil.

Registration under Annex I of Resolution No. 4,373 affords favorable tax treatment to non-Brazilian portfolio investors who are not resident in favorable tax jurisdictions (*países com tributação favorecida*) pursuant to articles 24, 24-A and 24-B of Law no. 9,430/96. See “—Taxation—Brazilian Tax Considerations.”

Annex I of Resolution No. 4,373

All investments made by a non-Brazilian investor under Annex I of Resolution No. 4,373 are subject to electronic registration with the Brazilian Central Bank. Such registration permits the conversion of dividend payments, payments of interest on shareholders' equity and proceeds from the sale of our capital stock into foreign currency and the remission of such amounts outside Brazil.

Under Annex I of Resolution No. 4,373, non-Brazilian investors registered with the CVM may invest in almost all financial assets and engage in almost all transactions available to Brazilian investors in the Brazilian financial and capital markets without obtaining a separate Central Bank registration for each transaction, provided that certain requirements are fulfilled. Under Annex I of Resolution No. 4,373, the definition of a non-Brazilian investor includes individuals, legal entities, mutual funds and other collective investment entities, domiciled or headquartered outside Brazil.

Pursuant to Annex I of Resolution No. 4,373, non-Brazilian investors must:

- appoint at least one representative in Brazil with powers to take action relating to its investments, which must be a financial institution duly authorized by the Central Bank;
- appoint an authorized custodian in Brazil for its investments, which must be a financial institution duly authorized by the CVM;
- complete the appropriate foreign investor registration forms;
- which must be a financial institution duly authorized by the Central Bank
- through its representative, register as a non-Brazilian investor with the CVM;
- through its representative, register its investments with the Central Bank; and
- obtain a taxpayer identification number from the Brazilian federal tax authorities.

The securities and other financial assets held by a non-Brazilian investor pursuant to Annex I of Resolution No. 4,373 must be registered or maintained in deposit accounts or under the custody of an entity duly licensed by the Central Bank or the CVM, as applicable, or be registered on registration, clearing and custody systems authorized by the Central Bank or by the CVM, as applicable. Subject to limited exceptions provided in the CVM regulation or previous CVM authorization, the trading of securities held under Annex I of Resolution No. 4,373 is restricted to transactions carried out on stock exchanges or through organized over-the-counter markets licensed by the CVM.

The offshore transfer or assignment of the securities or other financial assets held by non-Brazilian investors pursuant to Annex I of Resolution No. 4,373 are prohibited, except for transfers (1) resulting from consolidation, spin-off, merger or merger of shares or occurring upon the death of an investor by operation of law or will; (2) resulting from a corporate reorganization effected abroad, as long as the final beneficiaries and the amount of the assets remain the same, or (3) authorized by the CVM.

Law No. 4,131

Foreign direct investors under Law No. 4,131 may sell their shares in both private and open market transactions, but these investors will generally be subject to less favorable tax treatment on gains with respect to our class A preferred shares. See “—Taxation—Brazilian Tax Considerations.”

To obtain a certificate of foreign capital registration from the Brazilian Central Bank under Law No. 4,131, a foreign direct investor must:

- register as a foreign direct investor with the Central Bank;
- obtain a taxpayer identification number from the Brazilian tax authorities;
- appoint a tax representative in Brazil; and
- appoint a representative in Brazil for service of process in respect of suits based on the Brazilian Corporations Law.

Foreign investors must be registered with the Federal Brazilian Revenue Service pursuant to Normative Instruction 1,683, dated as of December 27, 2016. This registration process is undertaken by the investor’s legal representative in Brazil. Investors that are foreign legal entities are required to report their final individual beneficiaries. Some exceptions apply (e.g., publicly listed corporations).

Taxation

The following summary contains a description of the material Brazilian and U.S. federal income tax consequences of the purchase, ownership and disposition of class A preferred shares and ADSs, but it does not purport to be a comprehensive description of all of the tax considerations that may be relevant to a decision to purchase any such securities.

There is at present no income tax treaty between Brazil and the United States.

The description below is not intended to constitute a complete analysis of all tax consequences relating to the acquisition, ownership and disposition of class A preferred shares or ADSs. Prospective purchasers of our class A preferred shares or ADSs are advised to consult their own tax advisors in respect of the consequences that the purchase, ownership or disposition of our class A preferred shares or ADSs might trigger under the laws of Brazil, the United States or any other jurisdiction in light of their particular investment circumstances.

Brazilian Tax Considerations

The following topics summarizes the material Brazilian tax consequences of the acquisition, ownership and disposition of class A preferred shares or ADSs by an individual, entity, trust or organization that is not domiciled or resident in Brazil for purposes of Brazilian taxation and, in the case of a holder of class A preferred shares, which has registered its investment with the Central Bank, or a non-resident holder. The following information is based on the tax laws of Brazil as in effect on the date of this annual report, which are subject to change, with possible retroactive effect, and to differing interpretation. Furthermore, the following discussion does not specifically address all of the Brazilian tax considerations applicable to any particular non-resident holder, and each non-resident holder should consult his or her own tax advisor concerning the Brazilian tax consequences of an investment in any of such securities.

Acquisition of ADSs or Class A Preferred Shares

The acquisition of ADSs or class A preferred shares by non-resident holders is not a taxable event in Brazil. See “—Taxation of Gains Outside Brazil” for further information on the tax implications arising from the exchange of existing class A preferred shares for ADSs, as well as those arising from the exchange of ADSs for class A preferred shares.

Taxation of Dividends

Dividends paid by a Brazilian corporation with respect to profits generated as of January 1, 1996, including dividends paid in kind to the depositary in respect of our class A preferred shares underlying the ADSs or to a non-resident holder in respect of class A preferred shares, are not subject to withholding income tax in Brazil.

Dividends paid from profits generated before January 1, 1996 may be subject to Brazilian withholding income tax at variable rates, according to the tax legislation applicable to each corresponding year.

Interest on Shareholders' Equity

Distributions of interest on our shareholders' equity in respect of our class A preferred shares or the ADSs are generally subject to Brazilian withholding tax at the rate of 15%. However, the rate of 25% is applicable in case the non-resident holder is domiciled in a country or location or other jurisdiction (1) that does not impose income tax; (2) where the maximum income tax rate is lower than 20%; or (3) its legislation do not allow access to information related to the composition of shareholders, ownership of investments or identification of beneficial owners of earnings attributed to non-residents, or it is considered a tax favorable jurisdiction.

Since 1997 and in accordance with Laws Nos. 9,249/95 and 9,430/96, we have been permitted to deduct these distributions for purposes of calculating the CSLL and the corporate income taxes that we owe, provided that such distribution is approved by our shareholders in a general meeting and complies with the limits established by Brazilian tax legislation.

Payments of interest on shareholders' equity may be included, at their net value, as part of any mandatory dividend. To the extent payment of interest on shareholders' equity is so included, the corporation is required to distribute to shareholders an additional amount to ensure that the net amount received by them, after payment of the applicable withholding income tax plus the amount of declared dividends, is at least equal to the mandatory dividend.

Taxation of Gains outside Brazil

According to Brazilian Law No. 10,833/03, gains realized on the disposition or sale of assets located in Brazil are subject to income tax in Brazil, regardless of whether the sale or the disposition is made by the non-resident holder to a Brazilian resident or to another non-resident of Brazil, as follows: "the acquiror, individual or legal entity resident or domiciled in Brazil, or the acquiror's attorney-in-fact, when such acquiror is resident or domiciled abroad, shall be responsible to withhold and pay the income tax applicable to capital gains under Article 18 of Law 9,249 of December 26, 1995 earned by the individual or legal entity resident or domiciled abroad who disposes of property located in Brazil."

Holders of the ADSs outside of Brazil may have grounds to assert that Brazilian Law No. 10,833/03 does not apply to sales or other dispositions of ADSs as ADSs are not assets located in Brazil. However, the sale or other disposition of class A preferred shares abroad may be subject to the provisions of Brazilian Law No. 10,833/03. Any capital gains arising from sales or other dispositions outside Brazil would be subject to Brazilian income tax at the rate of 15% or 25% if the investor is located in a tax favorable jurisdiction. Brazilian Law No. 10,833/03 requires the purchaser of our class A preferred shares outside Brazil or its attorney-in-fact in Brazil to withhold the income tax. A disposition of class A preferred shares can only occur abroad if any investor decides to cancel its investment in ADSs and register the underlying class A preferred shares as a direct foreign investment under Law No. 4,131/62.

Taxation of Gains in Brazil

The exchange of ADSs for class A preferred shares is not subject to Brazilian tax. Upon receipt of the underlying class A preferred shares in exchange of ADSs, a non-resident investor will be entitled to register with the Central Bank the U.S. dollar value of such shares as a foreign portfolio investment under Resolution No.4,373/14. See "—Exchange Controls" and "—Tax on Foreign Exchange and on Bonds and Securities Transactions—Registered Capital." The sale or disposition of class A preferred shares on a Brazilian stock exchange is exempt from capital gains tax, provided that such shares are held by a non-resident holder that (1) has registered its investment in Brazil with the Central Bank under the rules of Resolution No.4,373/14, and (2) is not resident or domiciled in a tax favorable jurisdiction. Upon receipt of the underlying class A preferred shares, a non-resident holder is also entitled to register with the Central Bank the U.S. dollar value of such shares as a foreign direct investment under Law 4,131/62. See "—Exchange Controls" and "—Tax on Foreign Exchange and on Bonds and Securities Transactions—Registered Capital." A 15% capital gains tax is applicable to the sale or other disposition of preferred class A shares in Brazil where such shares are held by a non-resident holder as a foreign direct investment and the transaction is executed outside a Brazilian stock exchange. If the non-resident holder is domiciled in a tax favorable jurisdiction and the disposition of the preferred class A shares is executed outside a Brazilian stock exchange, the income tax rate will be 25%.

If the sale or other disposition of such shares is carried out on a Brazilian stock exchange, the capital gains on the sale or disposition will be taxed at a rate of 15%. This 15% rate applies to all transactions carried out on a Brazilian stock exchange by non-resident holders regardless of whether or not they are domiciled in tax favorable jurisdiction (except to gains realized by a 4,373 Holder that is not resident or domiciled in a tax favorable jurisdiction as described above). In these transactions, the gain realized is calculated based on the amount registered with the Central Bank. As of January 1, 2005, a withholding tax of 0.005% will also be assessed on the sales price or other disposition value of shares sold or disposed of in transactions carried out on a Brazilian stock exchange. The withholding tax, to be offset against tax due on eventual capital gain, must be withheld by one of the following entities: (1) the agent receiving the sale or disposition order from the client; (2) the stock exchange responsible for registering the transactions; or (3) the entity responsible for the settlement and payment of the transactions. Such withholding does not apply to a 4,373 Holder that is not a resident of or domiciled in a favorable tax jurisdiction.

The deposit of class A preferred shares in exchange for ADSs is not subject to Brazilian tax, provided that these shares are held by the non-resident holder as a foreign portfolio investment under Resolution No. 4,373/14. In the event our class A preferred shares are held by the non-resident holder as a foreign direct investment under Law No. 4,131/62, the deposit of these shares in exchange for ADSs is subject to payment of Brazilian capital gains tax at the rate of 15% (25% in the case of a non-resident holder located in a tax favorable jurisdiction).

The current preferential treatment for non-resident holders of ADSs and non-resident holders of class A preferred shares under Resolution No. 4,373/14 may not continue in the future.

Any exercise of preemptive rights relating to our class A preferred shares will not be subject to Brazilian taxation. Gains on the sale or assignment of preemptive rights relating to our class A preferred shares by the depository may be subject to Brazilian taxation. Tax authorities may attempt to tax such gains even when the sale or assignment of such rights takes place outside Brazil, based on the provisions of Law No. 10,833/03. These authorities may allege that the preemptive rights relate to assets located in Brazil (the class A preferred shares) and require payment of capital gains tax at the rate of 15% (or 25% if the beneficiary of the payments is resident of a tax favorable jurisdiction). If the preemptive rights are assigned or sold in Brazil, capital gains tax will apply at a rate of 15% (or 25% in the case of a non-resident holder located in a tax favorable jurisdiction). Sales or assignments of preemptive rights effected on Brazilian stock exchanges are exempt from income tax, provided that such preemptive rights relate to shares registered as a foreign portfolio investment under Resolution No. 4,373 is not a resident of or domiciled in a tax favorable jurisdiction.

As of January 2017, Law No. 13,259 established new progressive income tax rates applicable to capital gains derived from the disposition of assets by Brazilian individuals. Law No. 13,259 established new rates that range from 15% to 22.5%, depending on the amount of the gain recognized by the Brazilian individual, as follows: (i) 15% on gains not exceeding R\$5,000,000.00; (ii) 17.5% on gains that exceed R\$5,000,000.00 and do not exceed R\$10,000,000.00; (iii) 20% on gains that exceed R\$10,000,000.00 and do not exceed R\$30,000,000.00; and (iv) 22.5% on gains exceeding R\$30,000,000.00.

Pursuant to Section 18 of Law No. 9,249/95, the tax treatment applicable to capital gains earned by Brazilian individuals also applies to capital gains earned by non-Brazilian residents (except in cases that remain subject to specific rules). However, the Normative Ruling No. 1,732/2017 established that the rates are applicable to legal entities located abroad that make any disposal of assets recorded as non-current assets in their balance sheet. As a result, it is not possible at this time to determine what position the tax authorities will adopt in the case of a non-resident individual who disposes of ADSs.

Other Brazilian Taxes

There are no Brazilian inheritance, gift or succession taxes applicable to the ownership, transfer or disposition of class A preferred shares or ADSs by a non-resident holder except for gift and inheritance imposed by some states of Brazil on gifts made or inheritances bestowed by individuals or entities not resident or domiciled in Brazil or domiciled within the state to individuals or entities resident or domiciled within such state in Brazil. There are no Brazilian stamp, issue, registration or similar taxes or duties payable by holders of class A preferred shares or ADSs.

Tax on Foreign Exchange and on Bonds and Securities Transactions

Foreign Exchange Transactions

Pursuant to Decree 6,306/07, the conversion of Brazilian currency into foreign currency and the conversion of foreign currency into Brazilian currency may be subject to the IOF/Exchange Tax. Currently, for most exchange transactions, the rate of IOF/Exchange is 0.38%. This is the rate applicable to the inflow and outflow of foreign direct investments for companies in Brazil according to Law 4,131/62 (other than trading portfolio investments in securities under Resolution 4,373/14).

The IOF/Exchange Tax levies at 0% on the following capital inflows and outflows realized by non-residents: (1) investments for the constitution of an initial or additional security guarantee margin required by Brazilian stock exchange, futures and commodities exchanges; (2) investments in Brazilian stocks using funds derived from the cancellation of "depository receipts"; (3) investments in the Brazilian financial and capital markets; (4) return of the investments realized in the Brazilian financial and capital markets to the non-resident; and (5) conversion of foreign direct investments in stocks under Law 4,131/62 into foreign investment in stocks under Resolution 4,373/14.

The remittance abroad of dividends and interest on equity to non-Brazilian residents is subject to 0% IOF/Exchange tax.

Additionally, the transfers of shares traded on the stock exchange with the purpose of enabling the issuance of ADSs are subject to the IOF/Bonds Tax at a rate of 1.5%, which is aimed at correcting an asymmetry created by the IOF/Exchange Tax.

The Brazilian government may increase the rate of the IOF/Exchange Tax to a maximum of 25% of the amount of the foreign exchange transaction at any time, but such an increase would only apply to future foreign exchange transactions. The imposition of these taxes may discourage foreign investment in shares of Brazilian companies, including our company, due to higher transaction costs, and may negatively impact the price and volatility of our ADSs and preferred shares on the NYSE and the B3.

Registered Capital

The amount of an investment in class A preferred shares held by a non-Brazilian holder as a foreign direct investment under Law No. 4,131/62 or a foreign portfolio investment under Resolution No. 4,373/14 or in ADSs held by the depository representing such holder, as the case may be, is eligible for registration with the Central Bank; such registration (the amount so registered is referred to as "registered capital") allows the remittance outside Brazil of foreign currency, converted at the commercial market rate, acquired with the proceeds of distributions on, and amounts realized with respect to disposition of, such class A preferred shares. The registered capital for class A preferred shares purchased in the form of ADSs, or purchased in Brazil and deposited with the depository in exchange for an ADS, is equal to their purchase price in U.S. dollars paid by the purchaser. The registered capital for class A preferred shares that are withdrawn upon surrender of ADSs is the U.S. dollar equivalent of (1) the average price of our class A preferred shares on the Brazilian stock exchange on which the greatest number of such class A preferred shares was sold on the day of withdrawal, or (2) if no class A preferred shares were sold on such day, the average price of class A preferred shares that were sold in the fifteen trading sessions immediately preceding such withdrawal. The U.S. dollar value of our class A preferred shares is determined on the basis of the average commercial market rates quoted by the Central Bank on such date (or, if the average price of class A preferred shares is determined under clause (2) of the preceding sentence, the average of such average quoted rates on the same fifteen dates used to determine the average price of our class A preferred shares).

A non-Brazilian holder of class A preferred shares may experience delays in effecting the registration of registered capital, which may delay remittances abroad. Such a delay may adversely affect the amount, in U.S. dollars, received by the non-Brazilian holder. See "—Exchange Controls" and "Item 3. Key Information—Risk Factors—Risks Relating to Our Class A Preferred Shares and the ADSs."

The following is a discussion of the material U.S. federal income tax consequences that may be relevant with respect to the acquisition, ownership and disposition of our class A preferred shares or ADSs, which are evidenced by ADRs. This description addresses only the U.S. federal income tax considerations of U.S. holders (as defined below) that will hold class A preferred shares or ADSs as capital assets. This description does not address tax considerations applicable to holders that may be subject to special tax rules, such as banks, financial institutions, insurance companies, real estate investment trusts, grantor trusts, regulated investment companies, dealers or traders in securities or currencies, tax-exempt entities, pension funds, persons that received our class A preferred shares or ADSs pursuant to an exercise of employee stock options or rights or otherwise as compensation for the performance of services, persons that will hold our class A preferred shares or ADSs as a position in a "straddle" or as a part of a "hedging," "conversion" or other risk reduction transaction for U.S. federal income tax purposes, persons that have a "functional currency" other than the U.S. dollar, persons that will own our class A preferred shares or ADSs through partnerships or other pass through entities, persons that are required to accelerate the recognition of any item of gross income with respect to our class A preferred shares or ADSs as a result of such income being recognized on an applicable financial statement, holders subject to the alternative minimum tax, certain former citizens or long-term residents of the United States or holders that own (or are deemed to own) 10% or more (by voting power or value) of our shares.

This description does not address any state, local or non-U.S. tax consequences of the acquisition, ownership and disposition of our class A preferred shares or ADSs. In addition, this description does not address the consequences of any U.S. federal tax other than income tax, including but not limited to the U.S. federal estate and gift taxes. This description is based on (1) the Internal Revenue Code of 1986, as amended (the "Code"), existing, proposed and temporary U.S. Treasury Regulations and judicial and administrative interpretations thereof, in each case as in effect and available on the date of this annual report and (2), in part, on the representations of the depository and the assumption that each obligation in the deposit agreement and any related agreement will be performed in accordance with its terms. All of the foregoing are subject to change, which change could apply retroactively and could affect the tax consequences described below.

As used below, a "U.S. holder" is a beneficial owner of a class A preferred share or ADS that is, for U.S. federal income tax purposes, (1) an individual citizen or resident of the United States, (2) a corporation organized under the laws of the United States, any state thereof or the District of Columbia, (3) an estate the income of which is subject to U.S. federal income taxation regardless of its source, or (4) a trust if (i) a court within the United States is able to exercise primary supervision over its administration and (ii) one or more U.S. persons have the authority to control all of the substantial decisions of such trust. As used below, a "Non-U.S. holder" is a beneficial owner of a class A preferred share or ADS that is neither a U.S. holder nor a partnership (or other entity treated as a partnership for U.S. federal income tax purposes).

If a partnership (or any other entity treated as a partnership for U.S. federal income tax purposes) holds class A preferred shares or ADSs, the tax treatment of a partner in such partnership will generally depend on the status of the partner and the activities of the partnership. A partnership or its partners should consult their tax advisor as to its tax consequences.

The class A preferred shares will be treated as equity for U.S. federal income tax purposes. In general, for U.S. federal income tax purposes, a holder of an ADR evidencing an ADS will be treated as the beneficial owner of our class A preferred shares represented by the applicable ADS. The U.S. Treasury Department has expressed concern that depositories for ADSs, or other intermediaries between the holders of shares of an issuer and the issuer, may be taking actions that are inconsistent with the claiming of U.S. foreign tax credits by U.S. holders of such receipts or shares. Such actions include, for example, a pre-release of an ADS by a depository. Accordingly, the analysis regarding the availability of a U.S. foreign tax credit for Brazilian taxes, the sourcing rules and the availability of the reduced tax rate for dividends received by certain non-corporate holders, each described below could be affected by future actions that may be taken by the U.S. Treasury Department.

Taxation of Dividends

Subject to the discussion under "—Passive Foreign Investment Company Rules," in general, the gross amount of a distribution made with respect to a class A preferred share or ADS (which for this purpose shall include distributions of interest attributable to shareholders' equity before any reduction for any Brazilian taxes withheld therefrom) will, to the extent made from the current or accumulated earnings and profits of our company, as determined under U.S. federal income tax principles, constitute a dividend to a U.S. holder for U.S. federal income tax purposes. Non-corporate U.S. holders may be taxed on dividends from a qualified foreign corporation at the lower rates applicable to long-term capital gains (*i.e.*, gains with respect to capital assets held for more than one year). A foreign corporation is treated as a qualified foreign corporation with respect to dividends received from that corporation on shares or ADSs that are readily tradable on an "established securities market" in the United States. U.S. Treasury Department guidance indicates that the ADSs (which are listed on the NYSE), but not our class A preferred shares, are readily tradable on an established securities market in the United States. Thus, subject to the discussion below under "—Passive Foreign Investment Company Rules," dividends that we pay on the ADSs, but not on our class A preferred shares, currently meet the conditions required for these reduced tax rates. There, however, can be no assurance that the ADSs will be considered readily tradable on an established securities market in later years. Furthermore, a U.S. holder's eligibility for such preferential rate is subject to certain holding period requirements and the non-existence of certain risk reduction transactions with respect to the ADSs. Such dividends will not be eligible for the dividends received deduction generally allowed to corporate U.S. holders. In order for dividends on ADS backed by preferred shares to qualify for the reduced rates of taxation, we must certify that the preferred shares are equity. The United States Treasury Department and the Internal Revenue Service intend to issue regulations providing the appropriate certification procedure; however, it is expected that an annual certification in a public SEC filing or a public statement with a copy filed with the Internal Revenue Service will satisfy this requirement. We have included the appropriate certification in this filing. In the future, we intend to file the required certification that is necessary for the preferred shares to continue to qualify for reduced rates of taxation. Subject to the discussion below under "—Passive Foreign Investment Company Rules," if a distribution exceeds the amount of our company's current and accumulated earnings and profits, it will be treated as a non-taxable return of capital to the extent of the U.S. holder's tax basis in our class A preferred share or ADS on which it is paid and thereafter as capital gain. Our company does not maintain calculations of our earnings and profits under U.S. federal income tax principles. Therefore, U.S. holders should expect that distributions by our company generally will be treated as dividends for U.S. federal income tax purposes.

A dividend paid in *reais* will be includible in the income of a U.S. holder at its value in U.S. dollars calculated by reference to the prevailing spot market exchange rate in effect on the day it is received by the U.S. holder in the case of our class A preferred shares or, in the case of a dividend received in respect of ADSs, on the date the dividend is received by the depository, whether or not the dividend is converted into U.S. dollars. Assuming the payment is not converted at that time, the U.S. holder will have a tax basis in *reais* equal to that U.S. dollar amount, which will be used to measure gain or loss from subsequent changes in exchange rates. Any gain or loss realized by a U.S. holder that subsequently sells or otherwise disposes of *reais*, which gain or loss is attributable to currency fluctuations after the date of receipt of the dividend, will be ordinary gain or loss. The amount of any distribution of property other than cash will be the fair market value of such property on the date of distribution.

The gross amount of any dividend paid (which will include any amounts withheld in respect of Brazilian taxes) with respect to a class A preferred share or ADS will be subject to U.S. federal income taxation as foreign source dividend income, which may be relevant in calculating a U.S. holder's foreign tax credit limitation. Subject to limitations under U.S. federal income tax law concerning credits or deductions for foreign taxes and certain exceptions for short-term and hedged positions, any Brazilian withholding tax will be treated as a foreign income tax eligible for credit against a U.S. holder's U.S. federal income tax liability (or at a U.S. holder's election, may be deducted in computing taxable income if the U.S. holder has elected to deduct all foreign income taxes for the taxable year). The limitation on foreign taxes eligible for the U.S. foreign tax credit is calculated separately with respect to specific "baskets" of income. For this purpose, the dividends should generally constitute "passive category income," or in the case of certain U.S. holders, "general category income." The rules with respect to foreign tax credits are complex, and U.S. holders are urged to consult their own tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

Sale, Exchange or Other Disposition of Class A Preferred Shares or ADSs

A deposit or withdrawal of class A preferred shares by a holder in exchange for an ADS that represents such shares will not result in the realization of gain or loss for U.S. federal income tax purposes. A U.S. holder generally will recognize capital gain or loss upon a sale, exchange or other disposition of a class A preferred share or ADS held by the U.S. holder or the depository, as the case may be, in an amount equal to the difference between the U.S. holder's adjusted basis in our class A preferred share or ADS (determined in U.S. dollars) and the U.S. dollar amount realized on the sale, exchange or other disposition. If a Brazilian tax is withheld on the sale, exchange or other disposition of a share, the amount realized by a U.S. holder will include the gross amount of the proceeds of that sale, exchange or other disposition before deduction of the Brazilian tax. In the case of a non-corporate U.S. holder, the maximum marginal U.S. federal income tax rate applicable to capital gain will generally be lower than the maximum marginal U.S. federal income tax rate applicable to ordinary income (other than, as discussed above, certain dividends) if such holder's holding period for such class A preferred share or ADS exceeds one year (i.e., such gain is a long-term capital gain). Capital gain, if any, realized by a U.S. holder on the sale or exchange of a class A preferred share or ADS generally will be treated as U.S. source income for U.S. foreign tax credit purposes. Consequently, in the case of a disposition or deposit of a class A preferred share or ADS that is subject to Brazilian tax, the U.S. holder may not be able to use the foreign tax credit for that Brazilian tax unless it can apply the credit against U.S. tax payable on other income from foreign sources in the appropriate income category, or, alternatively, it may take a deduction for the Brazilian tax if it elects to deduct all of its foreign income taxes. The deductibility of capital losses is subject to limitations under the Code.

The initial tax basis of class A preferred shares or ADSs to a U.S. holder is the U.S. dollar value of the *reais*-denominated purchase price determined on the date of purchase. If our class A preferred shares or ADSs are treated as traded on an “established securities market,” a cash basis U.S. holder, or, if it elects, an accrual basis U.S. holder, will determine the dollar value of the cost of such class A preferred shares or ADSs by translating the amount paid at the spot rate of exchange on the settlement date of the purchase. The conversion of U.S. dollars to *reais* and the immediate use of that currency to purchase class A preferred shares or ADSs generally will not result in taxable gain or loss for a U.S. holder.

With respect to the sale or exchange of class A preferred shares or ADSs, the amount realized generally will be the U.S. dollar value of the payment received determined on (1) the date of receipt of payment in the case of a cash basis U.S. holder and (2) the date of disposition in the case of an accrual basis U.S. holder. If our class A preferred shares or ADSs are treated as traded on an “established securities market,” a cash basis taxpayer, or, if it elects, an accrual basis taxpayer, will determine the U.S. dollar value of the amount realized by translating the amount received at the spot rate of exchange on the settlement date of the sale.

Passive Foreign Investment Company Rules

A Non-U.S. corporation will be classified as a “passive foreign investment company,” or a PFIC, for U.S. federal income tax purposes in any taxable year in which, after applying certain look-through rules, either (1) at least 75 percent of its gross income is “passive income” or (2) at least 50 percent of the average value of its gross assets is attributable to assets that produce “passive income” or is held for the production of passive income. Passive income for this purpose generally includes dividends, interest, royalties, rents and gains from commodities and securities transactions.

Based on certain estimates of its gross income and gross assets and the nature of its business, our company believes that it will not be classified as a PFIC for its taxable year ended December 31, 2018. The company’s status in future years will depend on its assets and activities in those years. The company has no reason to believe that its assets or activities will change in a manner that would cause it to be classified as a PFIC for the taxable year ending December 31, 2018 or any future year, but there can be no assurance that the company will not be considered a PFIC for any taxable year. If we were a PFIC, a U.S. holder of class A preferred shares or ADSs generally would be subject to imputed interest charges and other disadvantageous tax treatment with respect to any gain from the sale or exchange of, and certain distributions with respect to, the shares or ADSs (including the loss of the potential reduced tax rate on certain dividends described above).

If we were a PFIC, a U.S. holder of class A preferred shares or ADSs could make a variety of elections that may alleviate certain of the tax consequences referred to above, and one of these elections may be made retroactively. However, it is expected that the conditions necessary for making certain of such elections will not apply in the case of the class A preferred shares or ADSs. U.S. holders should consult their own tax advisors regarding the tax consequences that would arise if the company were treated as a PFIC.

If a U.S. holder owns our class A preferred shares or ADSs during any year in which we were a PFIC, the U.S. holder generally must file IRS Form 8621 with respect to our company, generally with the U.S. holder’s federal income tax return for that year. If our company was a PFIC for a given taxable year, then U.S. holders of class A preferred shares or ADSs should consult their tax advisor concerning their annual filing requirements.

Medicare Tax on "Net Investment Income"

Certain U.S. Holders who are individuals, estates or trusts are required to pay an additional 3.8% tax on, among other things, dividends and capital gains for the sale or other disposition of class A preferred shares and ADSs.

Foreign Asset Reporting

Certain U.S. holders who are individuals are required to report information relating to an interest in our class A preferred shares or ADSs, subject to certain exceptions (including an exception for shares or ADSs held in custodial accounts maintained with a financial institution). U.S. holders of the class A preferred shares or ADSs are urged to consult their tax advisors regarding their information reporting obligations, if any, with respect to their ownership and disposition of our class A preferred shares or ADSs.

Information Reporting and Backup Withholding

U.S. backup withholding tax and information reporting requirements generally apply to certain payments to certain non-corporate holders of shares. Information reporting generally will apply to payments of dividends on, and to proceeds from the sale or redemption of, our class A preferred shares or the ADSs made within the United States or by a U.S. payor or U.S. middleman to a holder of our class A preferred shares or the ADSs, other than an exempt recipient, including a corporation, a payee that is not a U.S. person that provides an appropriate certification and certain other persons. Backup withholding tax will apply to any payments of dividends on, or the proceeds from the sale or redemption of, class A preferred shares or the ADSs within the United States or by a U.S. payor or U.S. middleman to a holder, other than an exempt recipient, if such holder fails to furnish its correct taxpayer identification number or otherwise fails to comply with, or establish an exemption from, such backup withholding tax requirements. The backup withholding tax rate is 24%.

Backup withholding is not an additional tax. Holders generally will be entitled to credit any amounts withheld under the backup withholding rules against their U.S. federal income tax liability or a refund of the amounts withheld provided the required information is furnished to the IRS in a timely manner.

The above description is not intended to constitute a complete analysis of all tax consequences relating to ownership and disposition of class A preferred shares or ADSs. Prospective purchasers should consult their own tax advisors concerning the tax consequences of their particular situations.

Documents on Display

Statements contained in this annual report regarding the contents of any contract or other document filed as an exhibit to this annual report summarize their material terms, but are not necessarily complete, and each of these statements is qualified in all respects by reference to the full text of such contract or other document.

We are subject to the periodic reporting and other informational requirements of the Exchange Act applicable to a foreign private issuer. Accordingly, we are required to file with or furnish to the SEC, reports and other information, including annual reports on Form 20-F and reports on Form 6-K.

As a foreign private issuer, we are exempt under the Exchange Act from, among other things, the rules prescribing the furnishing and content of proxy statements, and members of our board of directors and board of executive officers and our principal shareholders are exempt from reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, as a foreign private issuer, we will not be required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act.

You may inspect and copy reports and other information that we file with or furnish to the SEC at the SEC's Public Reference Room located at 100 F Street, N.E., Washington D.C. 20549. Copies of these materials may be obtained by mail from the SEC's Public Reference Room at prescribed rates. The public may obtain information on the operation of the SEC's Public Reference Room by calling the SEC in the United States at 1-800-SEC-0330. In addition, the SEC maintains an internet website at www.sec.gov from which you can electronically access these materials.

We also file financial statements and other periodic reports with the CVM, which are available for investor inspection at the CVM's offices located at Rua Sete de Setembro, 111, 2nd floor, Rio de Janeiro, RJ, and Rua Cincinato Braga, 340, 2nd, 3rd and 4th floors, São Paulo, SP. The telephone numbers of the CVM in Rio de Janeiro and São Paulo are +55-21-3554-8686 and +55-11-2146-2097, respectively.

Copies of our annual report on Form 20-F and documents referred to in this annual report and our by-laws, as well as certain other documents that we are required to file with, or make available to, the SEC and the CVM, are available for inspection upon request at our headquarters at Rua Lemos Monteiro, 120 – 24^o andar, Butantã—São Paulo—SP, CEP 05501-050, Brazil. Our filings are also available to the public through the internet on our website at www.braskem-ri.com.br. The information included on our website or that might be accessed through our website is not included in this annual report and is not incorporated into this annual report by reference.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk is the potential loss arising from adverse changes in market rates and prices. We are exposed to market risks arising from our normal business activities. These risks are beyond our control and consist, principally, in the possibility that changes in interest rates, exchange rates or commodity prices will adversely affect the value of our financial assets and liabilities or future cash flows and earnings.

In order to mitigate the market risks to which we are exposed, we have used, and we may use, foreign currency, interest rate and commodity derivative instruments, as well as cash and receivables. As of December 31, 2018, we had currency options with an aggregate notional amount of US\$2.232 million in puts and US\$1.594 million in calls. In addition, we had an interest rate swap related to Project Ethylene XXI with an aggregate notional amount of US\$798.46 million. These cross-currency and interest rate swaps match certain of our debt obligations.

We assess the potential and consolidated impact of market risks and seek to mitigate assessed risks in accordance with our risk management policy.

Our current risk management policy, adopted on March 30, 2017 by our board of directors and recently updated in September 2018, covers cash flow management and liquidity, investment of cash and cash equivalents, funding activities and guarantees, and management of foreign exchange and commodity risks. This policy reflects our conservative financial practices and risk management procedures. Its objective is to manage and anticipate risks by continuously evaluating several key factors, including the overall financial health of the company, any financial operations we have with related parties, our ratings, counterparty risk and hedging strategy. Additionally, the policy aims to ensure the alignment of the objectives of the financial teams with the overall objectives of Braskem.

We do not enter into derivative transactions with speculative purposes.

As of December 31, 2018 we had R\$3,662 million in foreign currency-denominated cash, cash equivalents and financial investments, which may partially offset the effects of a depreciation of the real against the foreign currency and, consequently, our ability to service our foreign currency-denominated debt to the extent of these foreign currency-denominated cash equivalents and other investments.

Interest Rate Risk

Our variable interest rate exposure is primarily subject to the variations of the LIBOR rate and, for *real*-denominated borrowings and short-term cash investments, variations of the TLP rate, CDI rate and IPCA rate.

With respect to Brazilian interest rates:

- the short-term domestic CDI rate decreased to 6.40% per annum as of December 31, 2018, from 6.89% per annum as of December 31, 2017 and 13.63% per annum as of December 31, 2016; and
- the TLP increased to 7.06% per annum as of December 31, 2018, from 7% per annum as of December 31, 2017 and 7.5% per annum as of December 31, 2016.
- the IPCA recorded in 2018 was 3.75%, increasing from 2.95% in 2017 and 6.29% in 2016.

The table below provides information about our significant interest-rate sensitive instruments:

Payment Schedule — Breakdown by Type of Interest Rate								
As of December 31, 2018								
Expected Maturity Date								
2019	2020	2021	2022	2023	Thereafter	Total	Fair Value ⁽¹⁾	
(in millions of reais, unless otherwise indicated)								
Liabilities:								
Loans and financings (excluding debentures):								
Fixed rate, denominated in U.S. dollars	412.9	1,473.3	3,686.2	2,010.3	2,010.3	12,957.8	22,550.7	24,888.2
Average interest rate	5.9%	6.9%	5.7%	5.3%	3.5%	5.9%		
Variable rate, denominated in U.S. dollars	260.6	250.0	250.0	249.8	172.5	775.2	1,957.9	1,746.5
Average interest rate (over LIBOR)	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%		
Ethylene XXI Project finance fixed rate, denominated in U.S. dollars	2,640.8	-	-	-	-	-	2,640.8	2,329.6
Average interest rate	4.8%	-	-	-	-	-		
Ethylene XXI Project finance variable rate, denominated in U.S. dollars	7,953.3	-	-	-	-	-	7,953.3	7,038.3
Average interest rate	3.9%	-	-	-	-	-		
Fixed rate, denominated in reais	120.0	84.6	51.7	46.4	14.6	12.3	329.6	293.7
Average interest rate	5.4%	5.6%	5.9%	6.1%	4.4%	6.5%		
Variable rate, denominated in reais	19.0	12.5	12.5	12.5	212.5	221.9	490.9	371.5
Average interest rate (CDI referenced)	7.6%	8.2%	8.2%	8.2%	6.5%	6.6%		
Variable rate, denominated in reais	0.2	0.2	0.1	-	-	-	0.6	0.5
Average interest rate (over TLP)	6.0%	6.0%	6.0%	-	-	-		
Variable rate, denominated in reais	15.3	33.9	38.1	38.1	38.1	47.6	211.2	186.0
Average interest rate (over IPCA)	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%		
Total loans and financings	11,286.8	1,736.0	3,948.7	2,272.6	2,395.3	13,954.9	36,135.0	36,854.2
Assets:								
Cash and cash equivalents and other instruments:								
Fixed rate, denominated in foreign currency	3,661.8	-	-	-	-	-	3,661.8	3,661.8
Variable rate, denominated in reais	4,253.4	-	-	-	-	-	4,253.4	4,253.4
Total cash and cash equivalents and other investments	7,915.2	-	-	-	-	-	7,915.2	7,915.2

(1) Represents the net present value of the future cash flows from the obligations converted into reais at fair market value as of December 31, 2018.

In the event that the average interest rate applicable to our financial assets and debt in 2019 were 1 percentage point higher than the average interest rate in 2018, our financial income would increase by R\$ 79.2 million and our financial expenses would increase by R\$ 361.3 million.

Foreign Currency Exchange Rate Risk

Our liabilities that are exposed to foreign currency exchange rate risk are primarily denominated in U.S. dollars. To partially offset our risk of any devaluation of the real against the U.S. dollar, we currently maintain available liquid assets denominated in U.S. dollars and enter into derivative contracts. Additionally, in order to provide a better representation of the actual exchange rate risk related to future exports, we designated part of our U.S. dollar-denominated liabilities as a hedging instrument, implementing the hedge accounting treatment on May 1, 2013. We borrow in the international markets to support our operations and investments; we are exposed to market risks from changes in foreign exchange rates and interest rates.

The table below provides information about our significant foreign currency exposures:

Liabilities and Assets Schedule — Breakdown by Currency

	As of December 31, 2018 Expected Maturity Date						Total	Fair Value ⁽¹⁾
	2019	2020	2021	2022	2023	Thereafter		
	(in millions of <i>reais</i>)							
Liabilities:								
Loans, financings and trade payables:								
Loans and financings denominated in U.S. dollars	11,267.5	1,723.2	3,936.1	2,260.1	2,182.8	13,733.0	35,102.8	28,262.5
Accounts payable denominated in U.S. dollars	5,841.7	-	-	-	-	-	5,841.7	5,841.7
Total loans, financings and trade payables	17,109.2	1,723.2	3,936.1	2,260.1	2,182.8	13,733.0	40,944.5	34,104.2
Assets:								
Cash, cash equivalents and other investments denominated in foreign currency	3,661.8	-	-	-	-	-	3,661.8	3,661.8
Total cash and cash equivalents and other investments	3,661.8	-	-	-	-	-	3,661.8	3,661.8
Hedge Accounting:								
Hedge Accounting designated Exports/Sales	3,730.8	3,836.8	3,947.7	3,765.2	4,071.8	12,650.0	32,002.2	32,002.2

(1) Represents the net present value of the future cash flows from the obligations converted into *reais* at fair market value as of December 31, 2018.

Our foreign currency exposures give rise to market risks associated with exchange rate movements of the *real* against the U.S. dollar. Foreign currency-denominated liabilities as of December 31, 2018 consisted primarily of U.S. dollar-denominated debt. Our U.S. dollar-denominated debt, including short-term debt and current portion of long-term debt, was R\$35,103 million (US\$9,059 million) and R\$32,156 million (US\$10,142 million) as of December 31, 2017. This foreign currency exposure is represented by debt in the form of notes, bonds, pre-export finance facilities and working capital loans.

Our cash and funds available in U.S. dollars partially protect us against exposure arising from the U.S. dollar-denominated debt. Similarly, revenue from future sales and exports partially offsets this foreign currency exposure for U.S. dollar-denominated debt, and we therefore adopted hedge accounting treatment to provide a better representation of our actual exposure. Since 2016, Braskem has recognized the exchange rate variation, held on "Other Comprehensive Income", to the income statement, following the future sales and exports designation schedule (for further information, see note 17 to our audited consolidated financial statements elsewhere in this annual report).

In the event that the *real* depreciated by 10% against the U.S. dollar during 2018 as compared to the *real*/U.S. dollar exchange rate as of December 31, 2017, our financial expenses indexed to the dollar in 2018 would have increased by R\$3,510 million, and our financial income would have increased by R\$366 million.

Commodity Prices

We do not currently hedge our main exposure to changes in prices of naphtha, our principal raw material, which are linked to international market prices denominated in U.S. dollars of naphtha and other petroleum derivatives. We do not hedge this main exposure, in part, because a portion of our sales are exports payable in foreign currencies and linked to the international market prices of these commodities denominated in U.S. dollars and, in part, because the prices of our polyethylene, polypropylene and PVC products sold in domestic markets generally reflect changes in the international market prices of these products denominated in U.S. dollars, converted into *reais*. In periods of high volatility in the U.S. dollar price of naphtha or the *real*/U.S. dollar exchange rate, there is usually a lag between the time that the U.S. dollar price of naphtha increases or the U.S. dollar appreciates and the time that we can effectively pass on the resulting increased cost in *reais* to our customers in Brazil. Accordingly, if the U.S. dollar price of naphtha increases precipitously or the *real* devalues precipitously against the U.S. dollar in the future, we may not immediately be able to pass on all of the corresponding increases in our naphtha costs to our customers in Brazil, which could materially adversely affect our results of operations and financial condition. See "Item 3. Key Information—Risk Factors—Risks Relating to Us and the Petrochemical Industry."

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

The Bank of New York Mellon, which was designated our depository in December 2016, collects its fees for the delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs or from

intermediaries acting for them. The depository also collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depository may collect its annual fee for depository services by deductions from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The depository may generally refuse to provide fee-attracting services until its fees for those services are paid.

Persons depositing or withdrawing shares must pay:

- US\$5.00 for each 100 ADSs (or portion thereof) issued, delivered, reduced, cancelled or surrendered (as the case may be) plus any additional fees charged by any governmental authorities or other institutions such as the Brazilian Clearing and Depository Corporation (*Companhia Brasileira de Liquidação e Custódia*);
- a fee of US\$0.04 or less per ADS for any cash distribution made pursuant to the Deposit Agreement;
- a fee of US\$1.50 per ADR or ADRs for transfers made pursuant to paragraph;
- a fee for the distribution or sale of securities;
- an aggregate fee of US\$0.04 or less per ADS per calendar year (or portion thereof) for services performed by the Depository in administering the ADRs;
- a fee for the reimbursement of such fees, charges and expenses as are incurred by the Depository and/or any of its agents; and
- transfer or registration fees for the registration or transfer of deposited securities on any applicable register in connection with the deposit or withdrawal of deposited Securities.

During the year ended December 31, 2018, we received from the depository of our ADSs US\$685,217.03, which was used for general corporate purposes such as the payment of costs and expenses associated with (1) the preparation and distribution of proxy materials, (2) the preparation and distribution of marketing materials and (3) consulting and other services related to investor relations.

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

Not applicable.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Not applicable.

ITEM 15. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, including our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of December 31, 2018. Based on our evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as a result of the material weaknesses in our internal control over financial reporting described below, as of December 31, 2018, our disclosure controls and procedures were not effective to provide reasonable assurance that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act was being recorded, processed, summarized and reported within the time periods specified in the applicable rules and forms, and that it was accumulated for and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding the required disclosures.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of the effectiveness of internal control to future periods are subject to the risk that controls may become inadequate because of changes in conditions, and that the degree of compliance with the policies or procedures may deteriorate.

Our management, with the participation of the CEO and CFO, under the oversight of the Board of Directors, assessed the effectiveness of our internal control over financial reporting as of December 31, 2018 based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, our management concluded that, as of December 31, 2018, our internal control over financial reporting was not effective because of the material weaknesses described below. A material weakness is a control deficiency, or combination of control deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the annual consolidated financial statements will not be prevented or detected on a timely basis.

Material Weaknesses in Internal Control over Financial Reporting

We identified a material weakness in our control environment as we had an insufficient complement of resources with an appropriate level of knowledge, expertise and skills commensurate with our financial reporting requirements in certain areas. This resulted in a material weakness in our risk assessment as we did not have the necessary resources to effectively implement and execute our processes and controls over risk assessment. Additionally, as described below we had a number of ineffective controls that also indicated that we had material weaknesses in our information and communication and monitoring components of internal control over financial reporting. These material weaknesses resulted in or were as a result of the following control deficiencies that were material weaknesses or aggregated to material weaknesses:

- (i) Ineffective design and operation of general information technology controls (GITCs) related to user access and program change-management over all IT operating systems, databases and applications that support our financial reporting processes, which resulted in business process controls that are dependent on the affected IT systems also being considered ineffective because they could have been adversely impacted;
- (ii) Ineffective design of controls over the purchase of raw materials;
- (iii) Ineffective design of controls over the purchase of and payment for legal services;
- (iv) Ineffective design and operation of controls over the provision for legal contingencies; and
- (v) Ineffective design and operation of controls within the financial reporting process covering the analysis of complex and unusual transactions and the preparation and review of the financial statements, including the technical application of generally accepted accounting principles and applicability of required disclosures. In one instance, we did not fully evaluate an agreement signed with the authorities in Brazil that led to an improper tax deduction under the Plea Agreement signed in 2016 with the U.S. authorities.

Material weaknesses (iv) and (v) above resulted in material misstatements that were corrected in the consolidated financial statements. Material weakness (i), (ii) and (iii) did not result in a material misstatement.

Our independent registered public accounting firm, KPMG Auditores Independentes, has issued an adverse audit opinion on the effectiveness of our internal control over financial reporting as of December 31, 2018, which is included in this annual report.

Remediation Actions Addressing Material Weaknesses Reported in 2018

Management has taken several actions to improve the control environment and continues to monitor the maturity and operating effectiveness of controls designed and implemented. In order to remediate the material weaknesses, we, led by our Chief Executive Officer and the Chief Financial Officer, are implementing and monitoring the following specific actions:

Regarding the material weaknesses related to our control environment and risk assessment, we are focused on ensuring we have adequate accounting structures with the technical skills and resources needed to account for specific transactions and assess risk associated with financial reporting, and that the individuals involved in our risk assessment have the requisite time and technical skills to perform adequate risk evaluation over the financial statements. Additionally, as further described below we are focused on ensuring controls are designed and operating to completely mitigate the risks associated with our financial statements by addressing all components and principles of internal control over financial reporting.

The Company, led by our Chief Executive Officer and the Chief Financial Officer, are implementing and monitoring the following specific actions:

- (i) *Ineffective design and operation of GITCs:*
 - internal procedures for users with privileged access and controls to monitor these users;
 - controls for approval of access;
 - controls over changes to applications made by users with privileged access;
 - access management protocols (granting, changing or revoking access);
 - parameters for change management; and
 - segregation of duties between the development and migration of changes into the production environment.
- (ii) *Ineffective design of controls over the purchase of raw materials:*
 - review controls over the purchase and payment of raw materials;
 - a quantitative and qualitative analysis of raw materials previously purchased; and
 - monitoring controls to oversee the effectiveness of existing controls over the purchase of raw materials (including controls over the billing of purchase rebates and collectability of previously-billed purchase rebates).
- (iii) *Ineffective design of controls over the purchase of and payment for legal services:*

- due diligence procedures for new third parties service providers;
- compliance training sessions for employees and third parties;
- review of the legal affairs policy;
- requiring appropriate support documentation for legal services;
- delegation of authority directive which establishes limits of approval; and
- hiring a head of legal operations, who is also responsible for overseeing and enhancing the processes and controls around payment of legal services to ensure that legal services had been rendered.

(iv) *Ineffective design and operation of controls over the provision for legal contingencies:*

- review controls over information contained in the litigation database to ensure its accuracy;
- analysis of information used in the execution of controls over legal contingencies to ensure the completeness and accuracy of reports used to perform the controls;
- reconciliation of litigation management system and the general ledger;
- controls over the timely updating of data in our litigation management system, based on information provided by external law firms; and
- communication protocols between our legal and accounting departments regarding legal provisions and related changes.

(v) *Ineffective design and operation of controls within the financial reporting process:*

- hiring an individual responsible for overseeing the processes and controls related to the financial reporting process;
- control to prepare and review a checklist on disclosures required in the financial statements;
- proper instructions to the accounting teams for the preparation and review of the reporting package for consolidation purposes, including cash flow and disclosures;
- review controls over significant unusual transactions;
- training covering corporate regulation and accounting standards; and
- improved communication by the corporate accounting department with the subsidiary accounting teams.

Remediation Actions Addressing Material Weaknesses Reported in 2017

We have implemented improved procedures and control activities, which allowed us to remediate certain material weaknesses described in our 2017 annual report on Form 20-F.

Remediation efforts related to control environment – tone at the top and appointment of Board members

Braskem has performed several actions regarding compliance concepts, requirements and systemic tools to improve the control environment and the decision making process by the Board members (tone at the top). In 2018 the Braskem's Bylaws were reviewed, some Board members were replaced, and a new control related to integrity due diligence was implemented to ensure that all Board members are submitted to an analysis, as part of the "Know your employee (KYE)" process. Additionally, the Board members have been attending training sessions regarding compliance matters, and there are compliance policies in place that impact variable compensation.

The processes and controls have been implemented and tested resulting in management concluding this material weakness was remediated as of December 31, 2018.

Remediation efforts related to anti-corruption compliance program and controls:

Braskem has developed a series of structural actions to maintain an effective anti-corruption Compliance Program and Controls designed to prevent and detect violations of the Foreign Corrupt Practices Act of 1977 ("FCPA") and other applicable anti-corruption laws. The existing Compliance Program establish short, medium and long-term initiatives; and recommendations received by local and foreign authorities (i.e. external monitors) were implemented in a short-term, as a priority. There are remaining actions that were concluded later with the objective to provide strengthening and establish new improvements.

The following remediation efforts were implemented by December, 31 2018 related to Anti-corruption Compliance Program and related controls:

- (i) Increase of the number of employees of the Compliance area, including a hiring of Compliance Officers to serve the Companies located in foreign countries (Mexico, United States and Netherlands and Germany);
- (ii) Appointment of new independent members of the our Board of Directors to the Compliance Committee, enhancing the transparent and independent judgment;
- (iii) Designation and contracting of an independent monitor with the Department of Justice “DOJ” and Ministério Público Federal “MPF”, and review of processes and documentation of the Company by the monitor;
- (iv) Approval and/or review of normative documentation (policies, directives and procedures): Code of Conduct, Third Party Code of Conduct, Global Anti-corruption Policy, Directive and the Procedure for Relations with Public Agents, Global Risk Management Policy, Transactions with Related Parties of Braskem SA, Internal Audit Directive, Internal Controls Directive, Global Procurement Directive, Global Sales Directive, Sponsorship and Donations Directive, Delegation of Authority Directive, Third Party Integrity Due Diligence Directive, Disciplinary Measures Directive, Corporate Credit Card Directive, Treasury Payments Directive, Business Travel Directive, Personnel Selection Directive (hiring of employees), Payment of commissions to agents Procedure, Ethics Line Channel Research Protocols, Global Conflict of Interest Directive and others;
- (v) Outsourcing of the “Ethics Line” (whistleblowing) Channel and improvements to the tool for receiving of complaints;
- (vi) Continuation of the Training Program, based on the Compliance System for employees (including the Board) and for third parties;
- (vii) Approval of a normative documentation related to interactions with politicians and executives of public companies;
- (viii) Development of the corporate goal related to Compliance actions for all of our leaders;
- (ix) Formal and effective participation in working groups: United Nation Anti-Corruption and ETHOS Integrity;
- (x) Improvement of the integrity due diligence process for third parties;
- (xi) Development and application of the Communication Plan to lead the business to operate with a commitment to ethical, integrity and transparency concepts;
- (xii) Mapping of risks and controls and evaluations of the effectiveness of controls for the most relevant corporate processes of companies with businesses in Brazil, USA, Mexico, Netherlands and Germany;
- (xiii) Use of anti-corruption clauses in contracts with third parties;
- (xiv) Implementation of improvements in relevant internal controls, including the remediation of deficiencies previously identified in our internal processes (mainly the material weaknesses and significant deficiencies);
- (xv) Mapping of anti-bribery and anti-corruption controls and improvement of enterprise risk management for these matters;
- (xvi) Inclusion of the anti-bribery and anti-corruption risks as scope of Internal Audit works;
- (xvii) Definition and review of the corporate risk management methodology; and
- (xviii) Conclusion of Internal Audit projects and communication of the issues found to our leaders. Several remediation plans were also implemented in response to these issues.

We have implemented this anti-corruption compliance program and successfully tested the related controls. Therefore, as of December 31, 2018, we have concluded that the material weakness has been remediated.

Remediation efforts related to Controls related to long-term debt:

In 2017, we took the following measures to remediate the material weakness related to non-financial covenants for long-term debt:

- (i) Implementation of improvements to the monthly monitoring control relating to covenants;
- (ii) Implementation of review controls over long-term debt and covenant clauses analyses;
- (iii) Establishment of controls and procedures in the Finance and Accounting areas to ensure the correct recognition of debt (long and short-term obligations) on a timely basis.

We have implemented these remedial steps and successfully tested the related controls. Therefore, as of December 31, 2018, we have concluded that the material weakness has been remediated

Remediation efforts related to Braskem America:

Braskem America teams has taken several actions, in order to implement and improve processes and controls. That includes:

- (i) improvements to manual journal entry controls;
- (ii) review and implementation of reconciliation controls, based on a risk assessment analysis;
- (iii) improvements to inventory count and monitoring controls;
- (iv) creation of due diligence routines resulting in a more complete vendor master data process;
- (v) improvements to revenue recognition controls;
- (vi) improvements to supporting documentation related to internal controls in general.

We have implemented these remedial steps and successfully tested the related controls. Therefore, as of December 31, 2018, we have concluded that the material weaknesses have been remediated.

Changes in Internal Control over Financial Reporting

Other than the material weaknesses identified during the year and the remediation activities described above, there were no changes to internal control over financial reporting during the year ended December 31, 2018 that would have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our fiscal council currently includes an "audit committee financial expert" within the meaning of this Item 16A. Our fiscal council has determined that Ismael Campos de Abreu is our fiscal council financial expert. Mr. Abreu's biographical information is included in "Item 6. Directors, Senior Management and Employees—Directors and Senior Management—Fiscal Council." Given that our board has not made a formal determination as to Mr. Abreu's independence, as that term is defined in Rule 303A.02 of the New York Stock Exchange's Listed Company Manual, he is not considered independent under that standard. However, he meets the standards of independence for fiscal council members under Brazilian Corporations Law. See "Item 6. Directors, Senior Management and Employees—Directors and Senior Management—Fiscal Council" for more information.

ITEM 16B. CODE OF ETHICS

We have adopted a code of conduct that applies to members of our board of directors, fiscal council and board of executive officers, as well as to our other employees. Our current code of conduct was approved by our board of directors in April 2018 and amended in September 2018. A copy of our code of conduct may be found on our website at www.braskem.com.br. The information included on our website or that might be accessed through our website is not included in this annual report and is not incorporated into this annual report by reference.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Audit and Non-Audit Fees

The following table sets forth the fees billed to us by our independent registered public accounting firms, KPMG Auditores Independentes, during the fiscal year ended December 31, 2018, and PricewaterhouseCoopers Auditores Independentes, during the fiscal year ended December 31, 2017.

	Year Ended December 31,	
	2018	2017
	(in millions of reais)	
Audit fees ⁽¹⁾	11.9	39.7
Audit-related fees	0.0	2.0
Tax fees ⁽²⁾	1.9	1.2
All other fees	0.0	0.0
Total fees	13.8	43.0

(1) Audit fees consist of the aggregate fees billed by our independent registered public accounting firms in connection with the audit of our annual financial statements, interim reviews and related reserves in connection with the audit and review of financial statements and review of documents filed with the SEC.

(2) Tax fees consist of the aggregate fees billed by our independent registered public accounting firms for tax compliance reviews.

Pre-Approval Policies and Procedures

Our fiscal council and board of directors have approved an Audit and Non-Audit Services Pre-Approval Policy that sets forth the procedures and the conditions pursuant to which services proposed to be performed by our independent auditors may be pre-approved. This policy is designed to (1) provide both general pre-approval of certain types of services through the use of an annually established schedule setting forth the types of services that have already been pre-approved for a certain year and, with respect to services not included in an annual schedule, special pre-approval of services on a case by case basis by our fiscal council and our independent auditors, and (2) assess compliance with the pre-approval policies and procedures. Our management periodically reports to our fiscal council the nature and scope of audit and non-audit services rendered by our independent auditors and is also required to report to our fiscal council any breach of this policy of which our management is aware.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

We are relying on the general exemption from the listing standards relating to audit committees contained in Rule 10A-3(c)(3) under the Exchange Act for the following reasons:

- we are a foreign private issuer that has a fiscal council, which is a board of auditors (or similar body) established and selected pursuant to and as expressly permitted under Brazilian law;
- Brazilian law requires our fiscal council to be separate from our board of directors;
- members of our fiscal council are not elected by our management, and none of our executive officers is a member of our fiscal council;
- Brazilian law provides standards for the independence of our fiscal council from our management;
- our fiscal council, in accordance with its charter, makes recommendations to our board of directors regarding the appointment, retention and oversight of the work of any registered public accounting firm engaged (including, the intermediation of disagreements between our management and our independent auditors regarding financial reporting) for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for our company, as Brazilian law requires that our board of directors appoint, retain and oversee the work of our independent public accountants;
- our fiscal council (1) has implemented procedures for receiving, retaining and addressing complaints regarding accounting, internal control and auditing matters, including the submission of confidential, anonymous complaints from employees regarding questionable accounting or auditing, and (2) has authority to engage independent counsel and other advisors as it determines necessary to carry out its duties; and
- we compensate our independent auditors and any outside advisors hired by our fiscal council and provides funding for ordinary administrative expenses incurred by the fiscal council in the course of its duties.

We do not believe that our reliance on this general exemption will materially adversely affect the ability of our fiscal council to act independently and to satisfy the other requirements of the listing standards relating to audit committees contained in Rule 10A-3 under the Exchange Act.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Period:	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet be Purchased Under the Plans or Programs
From Aug 29, 2012 to Aug 28, 2013	262,300	R\$13.30	1.961000%	13,376,161
From Feb 19, 2015 to Feb 18, 2016	80,000	R\$11.58	0.030096%	3,500,000

On August 13, 2012, our board of directors authorized a share repurchase program under which we are authorized to repurchase up to 13,376,161 "class A" preferred shares at market prices over the B3 at any time and from time to time prior to August 28, 2013. In 2012, we repurchased 262,300 shares under this program. In 2013 and 2014, we did not repurchase any shares.

On February 11, 2015, our board of directors approved the fifth program for the repurchase of shares effective for the period between February 19, 2015 and February 18, 2016, through which we may acquire up to 3,500,000 “class A” preferred shares at market price.

In April 20, 2015, we had repurchased 80,000 “class A” preferred shares for an aggregate of R\$0.9 million.

ITEM 16F. CHANGE IN REGISTRANT’S CERTIFYING ACCOUNTANT

PricewaterhouseCoopers Auditores Independentes, or PwC, acted as our independent public accounting firm until fiscal year ended December 31, 2017. On March 28, 2018, our board of directors, as recommended by our Fiscal Council, approved the appointment of KPMG Auditores Independentes, or KPMG, as our independent registered public accounting firm for fiscal years ended December 31, 2018 and 2019. The change in auditors was made following the expiration of our contract with PwC and its dismissal effective upon the issuance of PwC’s audit report for the year ended December 31, 2017. The reports of PwC on our financial statements for each of the two years ended December 31, 2017 and 2016 did not contain an adverse opinion or disclaimer of opinion, nor were they qualified or modified as to uncertainty, audit scope or accounting principles.

During the years ended December 31, 2017 and 2016 and the subsequent interim period through March 28, 2018, there were no disagreements with PwC on any matter of accounting principles or practices, financial statement disclosure, or scope of audit procedures, which disagreement, if not resolved to the satisfaction of PwC, would have caused PwC to make a reference to the subject matter of the disagreement in connection with its audit reports for such fiscal years.

During the years ended December 31, 2017 and 2016 and the subsequent interim period through March 28, 2018, date that our Fiscal Council approved the appointment of KPMG, there were no “reportable events” (as that term is defined in Item 16F(a)(1)(v) of Form 20-F), other than the identification of material weaknesses in our internal control over financial reporting, as described in the “Management’s Report on Internal Control over Financial Reporting” in each of our annual report on Form 20-F for 2016 and in this annual report on Form 20-F.

All material weaknesses identified were presented to our board of directors and PwC. We authorized PwC to respond fully to the inquiries of the new independent registered public accounting firm concerning these matters.

We have provided PwC with a copy of the foregoing disclosure, and have requested that they furnish us with a letter addressed to the U.S. Securities and Exchange Commission stating whether or not they agree with such disclosure. A copy of this letter is filed as Exhibit 16.1 to this Form 20-F.

Prior to the engagement of KPMG as our independent registered public accounting firm, we did not consult with KPMG as to: (i) the application of accounting principles to a specified transaction, either completed or proposed, (ii) the type of audit opinion that might be rendered on our financial statements; or (iii) any matter that was either the subject of a disagreement (as defined in Item 16F(a)(1)(iv) of Form 20-F) or a “reportable event” (as described in Item 16F(a)(1)(v) of Form 20-F) during our two most recent fiscal years or any subsequent interim period, including the interim period up to and including the date on which KPMG was engaged.

ITEM 16G. CORPORATE GOVERNANCE

On November 4, 2003, the SEC approved the final corporate governance rules established by the NYSE. According to these rules, foreign private issuers that are listed on the NYSE, such as Braskem, are subject to a more limited set of corporate governance requirements than those imposed on U.S. domestic issuers. As a foreign private issuer, Braskem must comply with the following four requirements imposed by the NYSE:

- Braskem must satisfy the audit committee requirements of Rule 10A-3 under the Exchange Act;
- Braskem’s chief executive officer must promptly notify the NYSE in writing if any executive officer of Braskem becomes aware of any material non-compliance with any of the applicable NYSE corporate governance rules;

- Braskem must provide a brief description of any significant ways in which Braskem's corporate governance practices differ from those required to be followed by U.S. domestic issuers under the NYSE corporate governance rules; and
- Braskem must submit an executed written affirmation annually to the NYSE and an interim written affirmation to the NYSE each time a change occurs to Braskem's board of directors or any committees of Braskem's board of directors that are subject to Section 303A, in each case in the form specified by the NYSE.

Significant Differences

The significant differences between Braskem's corporate governance practices and the NYSE's corporate governance standards are mainly due to the differences between the U.S. and Brazilian legal systems. Braskem must comply with the corporate governance standards set forth under the Brazilian Corporations Law, the rules of the CVM and the applicable rules of the B3, as well as those set forth in Braskem's by-laws.

The significant differences between Braskem's corporate governance practices and the NYSE's corporate governance standards are set forth below.

Independence of Directors and Independence Tests

In general, the NYSE corporate governance standards require listed companies to have a majority of independent directors and set forth the principles by which a listed company can determine whether a director is independent. However, under the NYSE corporate governance standards, a listed company (whether U.S. or foreign) of which more than 50% of the voting power is held by another company (a "controlled company"), need not comply with the following NYSE corporate governance standards:

- A controlled company need not have a majority of independent directors;
- A controlled company need not have a nominating/corporate governance committee composed of independent directors with a charter that complies with the NYSE corporate governance rules; and
- A controlled company need not have a compensation committee composed of independent directors with a charter that complies with the NYSE corporate governance rules.

Because a majority of the voting power of Braskem's capital stock is directly controlled by Odebrecht, Braskem is a controlled company, and would therefore not be required to have a majority of independent directors if it were a U.S. domestic issuer.

Although Brazilian Corporations Law and Braskem's by-laws establish rules in relation to certain qualification requirements of its directors, neither Brazilian Corporations Law nor Braskem's by-laws require that Braskem have a majority of independent directors nor require Braskem's board of directors or management to test the independence of Braskem's directors before such directors are appointed.

Executive Sessions

The NYSE corporate governance standards require non-management directors of a listed company to meet at regularly scheduled executive sessions without management.

According to the Brazilian Corporations Law, up to 1/3 of the members of Braskem's board of directors can be elected to management positions. The remaining non-management directors are not expressly empowered to serve as a check on Braskem's management, and there is no requirement that those directors meet regularly without management. Notwithstanding the foregoing, Braskem's board of directors consists entirely of non-management directors, and therefore Braskem believes it would be in compliance with this NYSE corporate governance standard.

Nominating/Corporate Governance and Compensation Committees

The NYSE corporate governance standards require that a listed company have a nomination/corporate governance committee and a compensation committee, each composed entirely of independent directors and each with a written charter that addresses certain duties. However, as a controlled company, Braskem would not be required to comply with these requirements if it were a U.S. domestic company.

Braskem is not required under Brazilian law to have, and accordingly does not have, a nominating/corporate governance committee. Currently, all of Braskem's directors are nominated by certain of its shareholders, including Odebrecht, pursuant to shareholders agreements and Braskem's by-laws.

Braskem is not required under Brazilian law to have a compensation committee. However, Braskem has a personnel and organization committee, which is a subcommittee of its board of directors which is responsible for, among other things, analyzing proposals and making recommendations to Braskem's board of directors with respect to the total compensation paid to Braskem's management, including Braskem's chief executive officer. This committee contributes, along with the board of directors, to the annual evaluation of the chief executive officer performance, based on the goals and objectives previously defined and approved by the board of directors, and analyzes the results of the chief executive officer's annual evaluation of the team members directly associated with him, which results shall be submitted to the board of directors. Under Brazilian Corporations Law, Braskem's shareholders establish the aggregate compensation of its directors and executive officers, including benefits and allowances, at a general shareholder's meeting based on the recommendation of Braskem's board of directors.

Audit Committee and Audit Committee Additional Requirements

The NYSE corporate governance standards require that a listed company have an audit committee with a written charter that addresses certain specified duties and that is composed of at least three members, all of whom satisfy the independence requirements of Rule 10A-3 under the Exchange Act and Section 303A.02 of the NYSE's Listed Company Manual.

As a foreign private issuer that qualifies for the general exemption from the listing standards relating to audit committees set forth in Section 10A-3(c)(3) under the Exchange Act, Braskem is not subject to the independence requirements of the NYSE corporate governance standards. See "Item 16D. Exemptions From the Listing Standards for Audit Committees."

Shareholder Approval of Equity Compensation Plans

The NYSE corporate governance standards require that shareholders of a listed company must be given the opportunity to vote on all equity compensation plans and material revisions thereto, subject to certain exceptions.

Under CVM's Resolution No. 567, shareholder pre-approval is required for the adoption and revision of any equity compensation plans. Braskem's shareholders approved on March 21, 2018 the company's Long Term Incentive Plan, an equity incentive compensation plan which provides the yearly opportunity for certain members of the company, selected by the Board of Directors, to voluntarily adhere to the plan by acquisition of Braskem Shares and receive matching shares after the vesting period of three years provided the member continuously holds the shares acquired and remains a member of the company during the entire vesting period.

Corporate Governance Guidelines

The NYSE corporate governance standards require that a listed company must adopt and disclose corporate governance guidelines that address certain minimum specified standards which include: (1) director qualification standards; (2) director responsibilities; (3) director access to management and independent advisors; (4) director compensation; (5) director orientation and continuing education; (6) management succession; and (7) annual performance evaluation of the board of directors.

Braskem has adopted the B3 corporate governance rules for Level 1 companies and must also comply with certain corporate governance standards set forth under Brazilian Corporations Law. See "Item 9. The Offer and Listing—Trading on the B3." The Level 1 rules do not require Braskem to adopt and disclose corporate governance guidelines covering the matters set forth in the NYSE's corporate governance standards. However, certain provisions of Brazilian Corporations Law that are applicable to Braskem address certain aspects of director qualifications standards and director responsibilities.

Code of Business Conduct and Ethics

The NYSE corporate governance standards require that a listed company must adopt and disclose a code of business conduct and ethics for directors, officers and employees and promptly disclose any waivers of the code for directors or officers. Each code of business conduct and ethics should address the following matters: (1) conflicts of interest; (2) corporate opportunities; (3) confidentiality; (4) fair dealing; (5) protection and proper use of company assets; (6) compliance with laws, rules and regulations (including insider trading laws); and (7) encouraging the reporting of any illegal or unethical behavior.

Braskem has adopted a code of business conduct applicable to its directors, officers and employees, which addresses each of the items listed above. Braskem's code of business conduct is available on Braskem's website at www.braskem.com.br. The information included on our website or that might be accessed through our website is not included in this annual report and is not incorporated into this annual report by reference. No waivers of the provisions of the code of business conduct are permitted, except that the restrictions on outside activities do not apply to Braskem's directors and members of its fiscal council.

ITEM 16H. MINE SAFETY DISCLOSURE

The information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and this Item is included in [exhibit 99.01](#).

PART III

ITEM 17. FINANCIAL STATEMENTS

We have responded to Item 18 in lieu of responding to this item.

ITEM 18. FINANCIAL STATEMENTS

Reference is made to Item 19 for a list of all financial statements filed as part of this annual report.

ITEM 19. EXHIBITS

(a) Financial Statements

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(b) List of Exhibits

<u>Exhibit Number</u>	<u>Exhibit</u>
<u>1.01</u>	<u>Bylaws of Braskem S.A., as amended (English translation), (incorporated by reference to Exhibit 1 to Form 6-K of Braskem S.A. filed on October 22, 2018).</u>
<u>2.01</u>	<u>Amended and Restated Form of Deposit Agreement, dated as of January 4, 2017, among Braskem S.A., The Bank of New York Mellon, as Depositary, and Owners and Holders of American Depositary Shares issued thereunder (incorporated by reference to Exhibit 1 to Form F-6 of Braskem S.A. filed on December 22, 2016).</u>
<u>3.01</u>	<u>Shareholders' Agreement of BRK Investimentos Petroquímicos S.A. and Braskem S.A., dated as of February 8, 2010, among Odebrecht S.A., Odebrecht Serviços e Participações S.A., Petrobras Química S.A. – Petroquisa, Petróleo Brasileiro S.A. – Petrobras, and BRK Investimentos Petroquímicos S.A. and Braskem S.A., as intervening parties (English translation), as amended on September 24, 2018 and as adhered to by OSP Investimentos S.A. on December 31, 2018 (incorporated by reference to Exhibit 1 to Form 6-K of Braskem S.A. filed on February 28, 2019).</u>
<u>4.03</u>	<u>Restricted Share Award Plan of Braskem S.A. approved at the Extraordinary Shareholders' Meeting held on March 21, 2018 (English translation) (incorporated by reference to Exhibit 1 to Form 6-K of Braskem S.A. filed on March 22, 2018).</u>
<u>4.04</u>	<u>Naphtha Purchase Agreement, dated as of December 23, 2015, between Petróleo Brasileiro S.A. - Petrobras and Braskem S.A. (English translation). (*Confidential treatment has been requested for certain portions omitted from this exhibit pursuant to Rule 24b-2 under the Securities Exchange Act of 1934, as amended. Confidential portions of this Exhibit have been separately filed with the Securities and Exchange Commission.) (incorporated by reference to Exhibit 4.04 to Form 20-F of Braskem S.A. filed on May 5, 2016).</u>
<u>8.01</u>	<u>List of subsidiaries (incorporated by reference to note 2.1.1 to our audited consolidated financial statements included elsewhere in this annual report).</u>
<u>11.01</u>	<u>Code of Conduct of Braskem S.A., as amended (English translation) (incorporated by reference to Exhibit 1 to Form 6-K of Braskem S.A. filed on December 17, 2018).</u>
<u>12.01</u>	<u>Certification of Principal Executive Officer dated October 17, 2019 pursuant to Exchange Act Rules 13a-15(e) and 15d-15(e).</u>
<u>12.02</u>	<u>Certification of Principal Financial Officer dated October 17, 2019 pursuant to Rules 13a-15(e) and 15d-15(e).</u>
<u>13.01</u>	<u>Certifications of Principal Executive Officer and Principal Financial Officer dated October 17, 2019 pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
<u>16.01</u>	<u>Letter from PricewaterhouseCoopers Auditores Independentes to the Securities and Exchange Commission, dated October 7, 2019, regarding the change in independent public accounting firm.</u>
<u>99.01</u>	<u>Disclosure of Mine Safety and Health Administration Safety Data.</u>

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

October 17, 2019

BRASKEM S.A.

By /s/ Fernando Musa

Name: Fernando Musa

Title: Chief Executive Officer

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<u>99.01</u>	<u>Disclosure of Mine Safety and Health Administration Safety Data.</u>

Braskem S.A.
Financial statements
at December 31, 2018
and Independent Auditors' Report

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Braskem S.A.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statement of financial position of Braskem S.A. and subsidiaries (the Company) as of December 31, 2018, the related consolidated statements of profit or loss, comprehensive income, changes in equity, and cash flows for the year ended December 31, 2018, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018, and the results of its operations and its cash flows for the year ended December 31, 2018, in conformity with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated October 17, 2019, expressed an adverse opinion on the effectiveness of the Company's internal control over financial reporting.

Changes in Accounting Principles

As discussed in Note 2.3 to the consolidated financial statements, the Company has changed its method of accounting for revenue and financial instruments as of January 1, 2018 due to the adoption of IFRS 15 – *Revenue from Contracts with Customers* and IFRS 9 – *Financial Instruments*, respectively.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audit included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

KPMG Auditores Independentes

We have served as the Company's auditor since 2018.

São Paulo, Brazil
October 17, 2019

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Braskem S.A.:

Opinion on Internal Control Over Financial Reporting

We have audited Braskem S.A. and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, because of the effect of the material weaknesses, described below, on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statement of financial position of the Company as of December 31, 2018, the related consolidated statements of profit and loss, comprehensive income, changes in equity, and cash flows for the year ended December 31, 2018, and the related notes, and our report dated October 17, 2019 expressed, an unqualified opinion on those consolidated financial statements.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. Material weaknesses have been identified and included in management's assessment related to the Company's control environment, risk assessment, information and communication, and monitoring activities along with material weaknesses related to the ineffective design, implementation, and operation of (i) general information technology controls (GITCs) in the areas of user access and program change-management over information technology systems that support the Company's financial reporting processes, which resulted in business process controls that are dependent on the affected also being considered ineffective because they could have been adversely impacted; (ii) controls over the purchase of raw materials; (iii) controls over the purchase of and payment for legal services; (iv) controls over the provision for legal contingencies; and (v) controls within the financial reporting process covering the analysis of complex and unusual transactions, and the preparation and review of the financial statements, including the technical application of generally accepted accounting principles and applicability of required disclosures. These material weaknesses were considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2018 consolidated financial statements, and this report does not affect our report on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

KPMG Auditores Independentes

São Paulo, Brazil
October 17, 2019

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Braskem S.A.

Opinion on the Financial Statements

We have audited the consolidated balance sheet of Braskem S.A. and its subsidiaries (the "Company") as of December 31, 2017, and the related consolidated statements of operations, comprehensive income, changes in equity and cash flows for each of the two years in the period ended December 31, 2017, including the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2017 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers Auditores Independentes
Salvador, Bahia, Brazil
October 7, 2019

We served as the Company's auditor from 2002 to 2019.

Braskem S.A.**Statement of financial position at December 31**
All amounts in thousands of reais

Assets	Note	2018	2017
Current assets			
Cash and cash equivalents	5	5,547,637	3,775,093
Financial investments	6	2,357,613	2,302,672
Trade accounts receivable	7	3,075,218	3,281,196
Inventories	8	8,486,577	6,640,049
Taxes recoverable	10	847,088	982,629
Dividends and interest on capital	9	890	10,859
Prepaid expenses		239,500	134,337
Derivatives	19.3.1	27,714	3,793
Other receivables		451,578	288,391
		21,033,815	17,419,019
Non-current assets			
Financial investments	6	9,998	10,336
Trade accounts receivable	7	17,785	37,496
Advances to suppliers	8	31,394	46,464
Taxes recoverable	10	1,574,579	987,236
Deferred income tax and social contribution	21.2(a)	1,104,158	1,165,726
Judicial deposits		169,536	289,737
Insurance claims		63,054	39,802
Derivatives	19.3.1	46,664	32,666
Other receivables		189,724	112,997
Investments	11	65,954	101,258
Property, plant and equipment	12	31,759,890	29,761,610
Intangible assets	13	2,740,982	2,727,497
		37,773,718	35,312,825
Total assets		58,807,533	52,731,844

The notes are an integral part of the financial statements.

Liabilities and shareholders' equity	Note	2018	2017
Current liabilities			
Trade payables	14	8,341,252	5,058,796
Borrowings	15	737,436	1,184,781
Braskem Idesa borrowings	16	10,504,592	9,691,450
Debenture	17	27,732	27,183
Derivatives	19.3.1	70,305	6,875
Payroll and related charges		645,396	630,517
Taxes payable	20	501,273	894,769
Dividends		672,395	3,850
Advances from customers		153,264	353,222
Leniency agreement	23.3	288,123	257,347
Sundry provisions	22	191,536	178,676
Other payables		632,774	276,957
		22,766,078	18,564,423
Non-current liabilities			
Trade payables	14	37,252	
Borrowings	15	24,160,720	22,176,640
Debenture	17	266,777	286,141
Derivatives	19.3.1	161,694	
Taxes payable	20	85,904	52,802
Loan to non-controlling shareholders of Braskem Idesa		2,183,830	1,756,600
Deferred income tax and social contribution	21.2(a)	381,582	1,005,493
Post-employment benefits	24.2	206,373	193,775
Contingencies	23	965,317	1,092,645
Leniency agreement	23.3	1,554,395	1,747,243
Sundry provisions	22	233,006	234,996
Other payables		149,935	148,286
		30,386,785	28,694,621
Shareholders' equity			
Capital	25	8,043,222	8,043,222
Capital reserve		232,430	232,430
Revenue reserves		4,673,220	3,945,898
Additional paid in capital		(488,388)	(488,388)
Other comprehensive income		(5,623,020)	(5,165,492)
Treasury shares		(49,819)	(49,819)
Accumulated losses		(256,575)	(217,550)
Total attributable to the Company's shareholders		6,531,070	6,300,301
Non-controlling interest in subsidiaries		(876,400)	(827,501)
		5,654,670	5,472,800
Total liabilities and shareholders' equity		58,807,533	52,731,844

The notes are an integral part of the financial statements.

Braskem S.A.

Statement of profit or loss
Years ended December 31

All amounts in thousands of reais, except earnings (loss) per share

	Note	2018	2017	2016
Continued operations				
Net revenue	27	57,999,866	49,260,594	47,663,988
Cost of products sold		(46,431,220)	(36,177,408)	(34,985,569)
		11,568,646	13,083,186	12,678,419
Income (expenses)				
Selling and distribution		(1,545,568)	(1,459,608)	(1,403,673)
General and administrative		(1,633,003)	(1,434,272)	(1,285,613)
Research and development		(199,821)	(167,456)	(162,010)
Results from equity investments	11(c)	(888)	39,956	30,078
Other income (expenses), net	29	90,852	(854,880)	(3,905,954)
		8,280,218	9,206,926	5,951,247
Financial results				
Financial expenses	30	(3,007,551)	(3,747,217)	(3,570,962)
Financial income		589,052	603,630	690,122
Exchange rate variations, net		(2,256,983)	(798,762)	(3,210,417)
		(4,675,482)	(3,942,349)	(6,091,257)
Profit (loss) before income tax and social contribution		3,604,736	5,264,577	(140,010)
Current and deferred income tax and social contribution	21.1	(736,551)	(1,357,682)	(616,046)
Profit (loss) for the year of continued operations		2,868,185	3,906,895	(756,056)
Discontinued operations results				
Profit from discontinued operations			13,499	40,760
Current and deferred income tax and social contribution			(4,623)	(13,901)
			8,876	26,859
Profit (loss) for the year		2,868,185	3,915,771	(729,197)
Attributable to:				
Company's shareholders		2,827,650	3,865,440	(411,472)
Non-controlling interest in subsidiaries		40,535	50,331	(317,725)
Profit (loss) for the year		2,868,185	3,915,771	(729,197)
				Basic and diluted
	Note	2018	2017	2016
Profit (loss) per share attributable to the shareholders of the Company of continued operations at the end of the year (R\$)				
Earnings (loss) per share - common	26	3.5543	4.8479	(0.5511)
Earnings (loss) per share - preferred shares class "A"		3.5543	4.8479	(0.5511)
Earnings per share - preferred shares class "B"		0.5910	0.6069	
Profit per share attributable to the shareholders of the Company of discontinued operations at the end of the year (R\$)				
Earnings per share - common			0.0112	0.0338
Earnings per share - preferred shares class "A"			0.0112	0.0338
Profit (loss) per share attributable to the shareholders of the Company at the end of the year (R\$)				
Earnings (loss) per share - common		3.5543	4.8590	(0.5173)
Earnings (loss) per share - preferred shares class "A"		3.5543	4.8590	(0.5173)
Earnings per share - preferred shares class "B"		0.5910	0.6069	

The notes are an integral part of the financial statements.

Braskem S.A.

Statement of comprehensive income
Years ended December 31
All amounts in thousands of reais

Continued

	Note	2018	2017	2016
Profit (loss) for the year		2,868,185	3,915,771	(729,197)
Other comprehensive income:				
Items that will be reclassified subsequently to profit or loss				
Fair value of cash flow hedge		(151,718)	605,204	215,510
Income tax and social contribution		54,481	(203,186)	(75,333)
Fair value of cash flow hedge from jointly-controlled		(2,329)	3,534	(3,309)
		(99,566)	405,552	136,868
Exchange variation of foreign sales hedge	19.4(a.i)	(3,145,857)	(397,045)	4,121,849
Sales Hedge - transfer to profit or loss	19.4(a.i)	1,022,782	1,022,830	1,297,910
Income tax and social contribution on exchange variation		721,845	(212,767)	(1,842,718)
Exchange variation of foreign sales hedge - Braskem Idesa	19.4(a.ii)	16,681	472,717	(1,995,065)
Sales Hedge - transfer to profit or loss - Braskem Idesa	19.4(a.ii)	236,570	163,696	59,834
Income tax on exchange variation - Braskem Idesa		(75,975)	(190,924)	581,304
		(1,223,954)	858,507	2,223,114
Foreign subsidiaries currency translation adjustment		801,223	(602)	339,296
Total		(522,297)	1,263,457	2,699,278
Items that will not be reclassified to profit or loss				
Defined benefit plan actuarial loss, net of taxes		(1,289)	(5,750)	(4,119)
Post-employment plans - Health plan, net of taxes		(280)	(2,904)	
Long term incentive plan, net of taxes		6,406		
Loss on investments		(65)		
Total		4,772	(8,654)	(4,119)
Total comprehensive income for the year		2,350,660	5,170,574	1,965,962
Attributable to:				
Company's shareholders		2,398,250	5,049,617	2,355,580
Non-controlling interest in Braskem Idesa		(47,590)	120,957	(389,618)
Total comprehensive income for the year		2,350,660	5,170,574	1,965,962

The notes are an integral part of the financial statements.

Braskem S.A.

Statement of changes in equity
All amounts in thousands of reais

Note	Attributed to shareholders' interest											Total Braskem shareholders' interest	Non-controlling interest in subsidiaries
	Revenue reserves						Additional paid in capital	Other comprehensive income	Treasury shares	Accumulated losses	Braskem shareholders' interest		
	Capital reserve	Legal reserve	Tax incentive	Retention of profits	Additional dividends proposed								
At December 31, 2015	8,043,222	232,430	229,992		2,404,663	247,364		(9,060,710)	(49,819)	(416,768)	1,630,374	(684,885)	
Comprehensive income for the year:													
Profit for the year										(411,472)	(411,472)	(317,725)	
Exchange variation of foreign sales hedge, net of taxes							2,561,596				2,561,596	(338,482)	
Fair value of cash flow hedge, net of taxes							145,878				145,878	(9,010)	
Foreign subsidiaries currency translation adjustment							63,697				63,697	275,599	
							2,771,171			(411,472)	2,359,699	(389,618)	
Equity valuation adjustments:													
Realization of additional property, plant and equipment price-level restatement, net of taxes							(27,236)			27,236			
Realization of deemed cost of jointly-controlled investment, net of taxes							(965)			965			
Actuarial loss with post-employment benefits, net of taxes							(4,119)				(4,119)		
							(32,320)			28,201	(4,119)		
Contributions and distributions to shareholders:													
Absorption of losses and adjustments					(800,039)						800,039		
Capital increase												56,623	
Additional dividends approved by the General Meeting						(247,364)					(247,364)		
Interim dividends approved by Board of Directors					(1,000,000)	(247,364)					(1,000,000)		
					(1,800,039)	(247,364)					800,039	56,623	
At December 31, 2016	8,043,222	232,430	229,992		604,624			(6,321,859)	(49,819)		2,738,590	(1,017,880)	
Comprehensive income for the year:													
Profit for the year										3,865,440	3,865,440	50,331	
Exchange variation of foreign sales hedge, net of taxes							747,135				747,135	111,372	
Fair value of cash flow hedge, net of taxes							394,251				394,251	11,301	
Foreign subsidiaries currency translation adjustment							51,445				51,445	(52,047)	
							1,192,831			3,865,440	5,058,271	120,957	
Equity valuation adjustments:													
Realization of additional property, plant and equipment price-level restatement, net of taxes							(26,847)			26,847			
Realization of deemed cost of jointly-controlled investment, net of taxes							(963)			963			
Actuarial gains post-employment benefits of subsidiaries, net of taxes							(5,750)				(5,750)		
Post-employment benefits - health plan, net of taxes							(2,904)				(2,904)		
Long-term incentive plan, net of taxes													
							(36,464)			27,810	(8,654)		
Contributions and distributions to shareholders:													
Lapsed dividends											482	482	
Tax incentive reserve				71,745							(71,745)		
Prepaid dividends										(1,000,000)	(1,000,000)		
Legal reserve			204,150								(204,150)		
Additional dividends proposed						1,500,000					(1,500,000)		
Retained earnings					1,335,387						(1,335,387)		
Goodwill on the acquisition of a subsidiary under common control							(488,388)				(488,388)		
Non-controlling interest in subsidiaries												69,422	
			204,150	71,745	1,335,387	1,500,000	(488,388)				(4,110,800)	(1,487,906)	
At December 31, 2017	8,043,222	232,430	434,142	71,745	1,940,011	1,500,000	(488,388)	(5,165,492)	(49,819)	(217,550)	6,300,301	(827,501)	

The notes are an integral part of the financial statements.

Braskem S.A.

Statement of changes in equity
All amounts in thousands of reais

Note	Attributed to shareholders' interest										Total Braskem shareholders' interest	Non-controlling interest in subsidiaries
	Revenue reserves					Additional dividends proposed	Additional paid in capital	Other comprehensive income	Treasury shares	Accumulated losses		
	Capital reserve	Legal reserve	Tax incentive	Retention of profits								
At December 31, 2017	<u>8,043,222</u>	<u>232,430</u>	<u>434,142</u>	<u>71,745</u>	<u>1,940,011</u>	<u>1,500,000</u>	<u>(488,388)</u>	<u>(5,165,492)</u>	<u>(49,819)</u>	<u>(217,550)</u>	<u>6,300,301</u>	<u>(827,501)</u>
Comprehensive income for the year:												
Profit for the year										2,827,650	2,827,650	40,531
Exchange variation of foreign sales hedge, net of taxes								(1,268,273)			(1,268,273)	44,315
Fair value of cash flow hedge, net of taxes								(112,241)			(112,241)	12,672
Foreign currency translation adjustment								946,342			946,342	(145,119)
								(434,172)		2,827,650	2,393,478	(47,590)
Equity valuation adjustments:												
Realization of additional property, plant and equipment price-level restatement, net of taxes								(26,717)		26,717		
Realization of deemed cost of jointly-controlled investment, net of taxes								(962)		962		
Actuarial gains post-employment benefits of subsidiaries, net of taxes								(1,289)			(1,289)	
Post-employment benefits - health plan, net of taxes								(280)			(280)	
Long term incentive plan, net of taxes								6,406			6,406	131
Fair value adjustments of trade accounts receivable								(449)			(449)	
								(23,291)		27,679	4,388	131
Contributions and distributions to shareholders:												
Prescribed dividends										460	460	
Additional dividends approved in the board meeting	25(d.2)					(1,500,000)				(73)	(1,500,073)	(1,396)
Reversal of fiscal incentive				(130)						130		
Legal reserve	25(d.1)		143,334							(143,334)		
Tax incentive reserve	25(d.1)			81,863						(81,863)		
Mandatory minimum dividends	25(d.1)									(667,419)	(667,419)	
Additional dividends proposed	25(d.1)					2,002,255				(2,002,255)		
Loss on investments								(65)			(65)	61
Sale of investments												(111)
			143,334	81,733		502,255		(65)		(2,894,354)	(2,167,097)	(1,442)
At December 31, 2018	<u>8,043,222</u>	<u>232,430</u>	<u>577,476</u>	<u>153,478</u>	<u>1,940,011</u>	<u>2,002,255</u>	<u>(488,388)</u>	<u>(5,623,020)</u>	<u>(49,819)</u>	<u>(256,575)</u>	<u>6,531,070</u>	<u>(876,400)</u>

The notes are an integral part of the financial statements.

Braskem S.A.
Statement of cash flows
Years ended December 31
All amounts in thousands of reais

	Note	2018	2017	2016
Profit (loss) before income tax and social contribution and for the result with discontinued operations		3,604,736	5,264,577	(99,250)
Adjustments for reconciliation of profit				
Depreciation, amortization and depletion		2,990,577	2,928,855	2,683,100
Results from equity investments	12(c)	888	(39,956)	(30,078)
Interest, monetary and exchange variations, net		6,013,944	3,697,714	3,026,008
Gain from divestment in subsidiary			(276,816)	
Leniency agreement			375,476	2,853,230
Reversal of provisions		23,725	(223,340)	
PIS and COFINS credits - exclusion of ICMS from the calculation basis	10(c)	(519,830)		
Provision for losses and write-offs of long-lived assets		72,470	213,184	41,016
		12,186,510	11,939,694	8,474,026
Changes in operating working capital				
Financial investments		98,349	(953,228)	(649,535)
Trade accounts receivable		130,113	(1,598,392)	1,007,875
Inventories		(1,537,290)	(1,351,028)	862,338
Taxes recoverable		1,022,242	469,293	1,058,104
Prepaid expenses		(105,163)	(30,521)	64,029
Other receivables		(242,691)	25,802	353,981
Trade payables		1,343,375	(1,642,649)	(4,254,575)
Taxes payable		(977,248)	(215,514)	(292,131)
Advances from customers		(199,958)	(13,512)	216,850
Leniency agreement	23.3(a)	(330,006)	(1,343,803)	
Sundry provisions		(116,458)	194,596	558,231
Other payables		833,227	55,541	38,464
		12,105,002	5,536,279	7,437,657
Cash from operations				
Interest paid		(1,916,801)	(2,154,053)	(1,826,942)
Income tax and social contribution paid		(937,831)	(920,606)	(1,152,847)
		9,250,370	2,461,620	4,457,868
Net cash generated by operating activities				
Proceeds from the sale of fixed assets		95,133	39,660	564
Proceeds from the sale of investments	1(a)	81,000	450,000	
Funds received in the investments' capital reduction		2,254		
Dividends received		41,791		
Additions to investments in subsidiaries			(608,181)	
Acquisitions to property, plant and equipment and intangible assets		(2,706,328)	(2,273,197)	(2,586,511)
Premium in the dollar put option		(2,167)	(14,683)	(4,856)
Held-for-maturity financial investments				38,353
		(2,488,317)	(2,406,401)	(2,552,450)
Net cash used in investing activities				
Short-term and Long-term debt				
Acquired		4,301,626	8,492,341	4,107,626
Payments		(6,592,197)	(8,779,091)	(4,901,593)
Derivative transactions				
Payments			(810,279)	
Braskem Idesa borrowings				
Acquired			187,959	503,921
Payments		(812,929)	(1,080,502)	(469,282)
Dividends paid		(1,499,900)	(998,893)	(1,997,984)
		(4,603,400)	(2,988,465)	(2,757,312)
Net cash used in financing activities				
Exchange variation on cash of foreign subsidiaries		(386,109)	6,475	586,642
		1,772,544	(2,926,771)	(265,252)
Increase (decrease) in cash and cash equivalents				
Represented by				
Cash and cash equivalents at the beginning of the year		3,775,093	6,701,864	7,043,262
Cash and cash equivalents at the end of the year		5,547,637	3,775,093	6,778,010
		1,772,544	(2,926,771)	(265,252)
Increase (decrease) in cash and cash equivalents				

The notes are an integral part of the financial statements.

Braskem S.A.

Notes to the financial statements at December 31, 2018

All amounts in thousands, except as otherwise stated

1 Operations

Braskem S.A. is a public corporation headquartered in Camaçari, Bahia (“BA”), which jointly with its subsidiaries (hereinafter “Braskem” or “Company”), is controlled by Odebrecht S.A. (“Odebrecht”), which directly and indirectly holds interests of 50.11% and 38.32% in its voting and total capital, respectively. The Company operates in industrial units in Brazil, the United States, Germany and Mexico. These units produce thermoplastic resins – polyethylene (“PE”), polypropylene (“PP”) and polyvinyl chloride (“PVC”), as well as basic petrochemicals.

Braskem is also engaged in the manufacture, trading, import and export of chemicals, petrochemicals and fuels, the production, supply and sale of utilities such as steam, water, compressed air, industrial gases, as well as the provision of industrial services and the production, supply and sale of electric energy for its own use and use by other companies. Braskem also invests in other companies, either as equity method investees or associates.

(a) Significant corporate and operating events impacting these financial statements

In April 2018, the Company received the amount of R\$81,000, adjusted by inflation, related to the outstanding balance of the R\$100 million provided for in the sale made, in 2017, of the subsidiaries Quantiq Distribuidora Ltda and IQAG Armazéns Gerais Ltda. The difference between the expected amount and the received amount was recognized in the second quarter of 2018 in the line “Other income (expenses), net,” in the amount of R\$19,558, resulted from an adjustment provided in the agreement.

2 Summary of significant accounting policies

Except for the changes that occurred with the adoption of the new standards (Note 2.3), accounting practices were applied consistently in the preparation of these financial statements and are described in the respective notes.

2.1 Basis of preparation and presentation of the financial statements

The financial statements have been prepared under the historical cost convention and were adjusted, when required, to reflect the fair value of assets and liabilities.

The consolidated financial statements presented in this 20-F are not equivalent to the statutory financial statements of the Company as issued under the requirements of the Brazilian jurisdiction. The date of authorization for issue of these consolidated financial statements is different from the date when the consolidated financial statements were issued in Brazil, there are differences due to adjusting and non adjusting events after the reporting period, under IAS 10 – Events after the Reporting Period.

The statutory financial statements (parent company and consolidated) for the year ended December 31, 2018 were authorized for issue on March 11, 2019, in accordance with the accounting practices adopted in Brazil and the International Financial Reporting Standards (“IFRS”), filed with the Brazilian Securities and Exchange Commission (Comissão de Valores Mobiliários – “CVM”) on March 13, 2019.

The preparation of financial statements requires the use of certain estimates. It also requires Management to exercise its judgment in the process of applying the Company’s accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 3.

Issue of these financial statements was authorized by the Executive Board on October 17, 2019.

2.1.1 Consolidated financial statements

The consolidated financial statements were prepared and presented in accordance with the International Financial Reporting Standards (“IFRS”) issued by the International Accounting Standards Board (“IASB”).

Braskem S.A.

Notes to the financial statements

at December 31, 2018

All amounts in thousands, except as otherwise stated

(a) Consolidation

The consolidated financial statements comprise the financial statements of the Braskem S.A. and the following entities:

		Headquarters	Total and voting interest - %		
			2018	2017	2016
Direct and Indirect subsidiaries					
Alclor Química de Alagoas Ltda ("Alclor")	(i)	Brazil			100.00
BM Insurance Company Limited ("BM Insurance")	(ii)	Bermuda	100.00		
Braskem America Finance Company ("Braskem America Finance")		EUA	100.00	100.00	
Braskem America, Inc. ("Braskem America")		EUA	100.00	100.00	100.00
Braskem Argentina S.A. ("Braskem Argentina")		Argentina	100.00	100.00	100.00
Braskem Austria Finance GmbH ("Braskem Austria Finance")	(iii)	Austria			100.00
Braskem International GmbH ("Braskem Austria")	(iv)	Austria		100.00	100.00
Braskem Europe GmbH ("Braskem Alemanha")		Germany	100.00	100.00	100.00
Braskem Finance Limited ("Braskem Finance")		Cayman Islands	100.00	100.00	100.00
Braskem Idesa S.A.P.I. ("Braskem Idesa")		Mexico	75.00	75.00	75.00
Braskem Idesa Servicios S.A. de CV ("Braskem Idesa Serviços")		Mexico	75.00	75.00	75.00
Braskem Incorporated Limited ("Braskem Inc")		Cayman Islands	100.00	100.00	100.00
Braskem Mexico Proyectos S.A. de C.V. SOFOM ("Braskem México Sofom")		Mexico	100.00	100.00	100.00
Braskem Mexico, S. de RL de CV ("Braskem México")		Mexico	100.00	100.00	100.00
Braskem Mexico Servicios S. RL de CV ("Braskem México Serviços")		Mexico	100.00	100.00	100.00
Braskem Netherlands B.V. ("Braskem Holanda")		Netherlands	100.00	100.00	100.00
Braskem Netherlands Finance B.V. ("Braskem Holanda Finance")		Netherlands	100.00	100.00	100.00
Braskem Netherlands Inc. B.V. ("Braskem Holanda Inc")		Netherlands	100.00	100.00	100.00
Braskem Petroquímica Chile Ltda. ("Braskem Chile")		Chile	100.00	100.00	100.00
Braskem Petroquímica Ltda. ("Braskem Petroquímica")	(v)	Brazil			100.00
Cetrel S.A. ("Cetrel")		Brazil	63.66	63.66	
Distribuidora de Água Camaçari S.A. ("DAC")		Brazil	63.66	63.66	
Lantana Trading Co. Inc. ("Lantana")		Bahamas	100.00	100.00	100.00
Special Purpose Entity ("SPE")					
Fundo de Investimento Caixa Júpiter Multimercado Crédito Privado Longo Prazo ("FIM Júpiter")		Brazil	100.00	100.00	100.00
Fundo de Investimento Multimercado Crédito Privado Sol ("FIM Sol")	(vi)	Brazil			100.00
Fundo de Investimento Santander Netuno Multimercado Crédito Privado Longo Prazo ("FIM Netuno")	(vii)	Brazil	100.00	-	

(i) Merged into the subsidiary Braskem Petroquímica in April 2016.

(ii) Created in October 2018.

(iii) Terminated in January 2016.

(iv) Terminated in June 2018.

(v) Merged into the Braskem in December 2017.

(vi) Contract terminated in 2016.

(vii) Multi-asset fund created in December 2018.

Braskem S.A.

Notes to the financial statements at December 31, 2018

All amounts in thousands, except as otherwise stated

2.2 Functional and foreign currency

(a) Functional and presentation currency

The functional currency of the Company is the real. The presentation currency is also real.

(b) Functional currency other than the Brazilian real

Certain subsidiaries have a different functional currency from that of the Braskem S.A., as follows:

	<u>Functional currency</u>
Subsidiaries	
Braskem Alemanha	Euro
BM Insurance, Braskem America, Braskem America Finance, Braskem Holanda, Braskem Holanda Finance, Braskem Holanda Inc. and Braskem México Sofom	U.S.dollar
Braskem Idesa , Braskem Idesa Serviços, Braskem México and Braskem México Serviços	Mexican peso

The other subsidiaries adopt the Brazilian real as functional currency.

(c) Exchange variation effects

The effects from exchange variation on the Company's transactions are mainly due to the variation in the rates of the following currencies:

	<u>End of period rate at December 31</u>			<u>Average rate</u>				
	<u>2018</u>	<u>2017</u>	<u>Variation</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2018 - 2017</u>	<u>2017 - 2016</u>
U.S. dollar - Brazilian real	3.8748	3.3080	17.13%	3.6558	3.1925	3.4833	14.51%	-8.35%
Euro - Brazilian real	4.4390	3.9693	11.83%	4.3094	3.6089	3.8543	19.41%	-6.37%
Mexican peso - Brazilian real	0.1972	0.1681	17.31%	0.1901	0.1694	0.1871	12.24%	-9.50%
U.S. dollar - Mexican peso	19.6655	19.6890	-0.12%	19.2363	18.9142	18.6987	1.70%	1.15%
U.S. dollar - Euro	0.8729	0.8464	3.13%	0.8471	0.8871	0.9041	-4.50%	-1.89%

2.3 Changes in accounting policies

The Company adopted IFRS 15 – Revenue from Contracts with Customers” and “IFRS 9 – Financial Instruments” as of January 1, 2018.

Due to the transition methods chosen by the Company to apply these accounting standards, the comparative information throughout these financial statements has not been restated to reflect the requirements of the new standards.

The effects from the adoption of these standards are mainly due to the following:

- Change in the impairment calculation methodology in accordance with IFRS 9 (Note 7);
- Presentation of the variable considerations (bonuses) deducted directly from gross revenue (Note 27);
- Change in the classification and measurement of financial assets (Note 2.3(a.2.i));

Braskem S.A.

**Notes to the financial statements
at December 31, 2018**

All amounts in thousands, except as otherwise stated

- Change in the accounting of operations involving dollar put and call options designated for hedge accounting (Note 19.3.1(a.i)).

(a.1) IFRS 15 – Revenue from Contracts with Customers

IFRS 15 introduces a comprehensive framework to determine if and when revenue must be recognized, and by how much the revenue is measured. IFRS 15 replaces the standards IAS 18 – Revenue.

The Company adopted IFRS 15 using the cumulative effect method, with initial application of the standard on the initial date (i.e., January 1, 2018). As a result, the Company did not apply the requirements of IFRS 15 to the comparative period reported (2017).

The Company did not incur significant changes at the time or when measuring its sales revenue for the performance obligations identified, which are:

- Delivery of goods sold – the performance obligation ends when the ownership of the good is transferred to the client. For the Company, there was no difference between IAS 18 – Revenue and IFRS 15 upon recognition of the revenue associated with this performance obligation.
- Contracting freight to deliver goods - the performance obligation of the Company to contract freight to deliver the goods sold ends when the service is completed. The Company did not change the time of recognition, and continue to recognize at the time of the delivery of goods sold. The Company consider immaterial on its profit and loss any change in the time of recognition the performance obligation associated with freight.

The Company adopts the practice of contracting with certain clients bonuses for achieving sales targets. For clients which the Company expects will meet such targets and accordingly will receive a bonus are accrued the amounts due on a monthly basis. This provision, which until December 31, 2017 was recognized as a deduction from sales revenue, is presented, as of January 1, 2018, as a deduction from gross revenue.

The Company considers commercial discounts included on client invoices as part of the fair value of the revenue recognized, according to that established by the accounting standard (IAS 18) applicable until December 31, 2017. Therefore, the commercial discounts included on client invoices did not result in any changes as a result of adoption or measurement of its accounting recognition in accordance with IFRS 15.

Braskem S.A.

**Notes to the financial statements
at December 31, 2018**

All amounts in thousands, except as otherwise stated

(a.2) IFRS 9 – Financial Instruments

IFRS 9 – Financial Instruments establishes requirements for recognition and measurement of financial assets, liabilities and some contracts to buy or sell non-financial items. This standard replaces IAS 39 – Financial Instruments: Recognition and Measurement.

(a.2.i) Classification – Financial Assets

IFRS 9 has a new approach for the classification and measurement of financial assets that reflects the business model in which assets are managed and its cash flow characteristics.

IFRS 9 has three main classification categories for financial assets: measured at amortized cost (“AC”), at fair value through other comprehensive income (“FVTOCI”) and at fair value through profit and loss (“FVTPL”). The standard eliminates IAS 39 classifications of held-to-maturity, loans and receivables and available-for-sale. IFRS 9 requires the classification of financial assets based on the business model of the entity for managing their financial assets.

Pursuant to IFRS 9, embedded derivatives in contracts where the host is a financial asset under the standard’s scope are never separated. Instead, the hybrid financial instrument is assessed in its entirety for classification.

Based on its assessment, the Company did not have a relevant impact on the accounting of its financial investments resulting from new requirements of IFRS9. However, because some trade accounts receivables are sold to financial institutions and derecognized before the maturity date (Note 7), the Company classified part of its trade accounts receivables that could be sold at fair value under FVTOCI. The effect of this new classification on January 1, 2018 was R\$601.

The following table and corresponding notes explain the original measurement categories, in accordance with IAS 39 and the new categories of measurement in accordance with IFRS 9, for each class of financial asset on January 1, 2018.

The effect from the adoption of IFRS 9 on the accounting balance of financial assets as of January 1, 2018 is related to the following:

- (i) New impairment calculation methodology
- (ii) Calculation of the fair value for receivables that, in accordance with the Company’s Business Model, may be sold before their maturities.

Braskem S.A.

**Notes to the financial statements
at December 31, 2018**

All amounts in thousands, except as otherwise stated

	Classification by category		Book value	
	IAS 39	IFRS 9	IAS 39	IFRS 9
Cash and cash equivalents				
Cash and banks	Loans and receivables	Amortized cost	1,428,766	1,428,766
Financial investments in Brazil	Loans and receivables	Fair value through profit or loss	1,706,784	1,706,784
Financial investments abroad	Held-for-trading	Fair value through profit or loss	639,543	639,543
			3,775,093	3,775,093
Financial investments				
LFT's and LF's	Held-for-trading	Fair value through profit or loss	1,816,889	1,816,889
Time deposit investments	Loans and receivables	Amortized cost	440,616	440,616
Time deposit investments	Held-for-trading	Fair value through profit or loss	15,764	15,764
Other	Held-for-trading	Fair value through profit or loss	39,739	39,739
			2,313,008	2,313,008
Trade accounts receivable	Loans and receivables	Amortized cost	3,244,851	3,235,463
Trade accounts receivable	Loans and receivables	Fair value through other comprehensive income	73,841	73,240
Derivatives	Financial assets measured at fair value	Fair value through profit or loss	74,378	74,378

(a.2.ii) Impairment – Financial and Contractual Assets

IFRS 9 replaced the “incurred loss” model from IAS 39 for a prospective model of “expected credit losses.” This requires a relevant judgment regarding the way in which changes in economic factors affect the expected credit losses, which are determined based on weighted probabilities.

The new expected losses model will apply to financial assets measured at AC or FVTPL, excluding investments in equity instruments and contractual assets.

According to IFRS 9, provisions for expected losses are measured using one of the following bases:

- The 12-month expected credit losses, i.e. expected credit losses from possible default events within 12 months after the reporting date, and whose credit risk does not increase significantly since initial recognition; and
- The full lifetime expected credit losses (expected credit losses that result from all possible default events over the life of the financial instrument). The measurement of these credit losses applies when the credit risk of a financial asset at the reporting date has increased significantly since initial recognition.

The Company’s assessment indicated that the adoption of the expected credit loss model as required by IFRS 9 on January 1, 2018 resulted in an incremental amount of R\$9,388, net of taxes.

The judgments of how changes in economic factors affect the expected credit losses of the Company are determined by stages that can be observed in Note 7.

(a.2.iii) Hedge Accounting

IFRS 9 requires that the Company ensure that hedge accounting relationships are aligned with the Company’s risk management objectives and strategies, and that a more qualitative and prospective approach is applied to assess hedge effectiveness. IFRS 9 also introduces new requirements for rebalancing hedge relations and prohibits the voluntary discontinuation of hedge accounting.

Upon adopting IFRS 9, the Company elected to account for changes to fair value of forward points separately, as hedge cost. Thus, as of January 1, 2018, these changes are recognized in other comprehensive income (loss) and accrued in a hedge cost reserve as a separate component in equity and subsequently accounted for in the same way as the cumulative gains or losses in the cash flow hedge reserve.

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The types of hedge accounting relations presently designated by the Company meet the IFRS 9 requirements and are aligned with the organization's risk management objective and strategy.

(a.2.iv) Transition

The changes to accounting policies stemming from the adoption of IFRS 9 were applied prospectively, including:

- (i) Allowed exemption to not restate comparative information from prior periods due to changes in classification and measurement financial instruments, including expected credit losses.
- (ii) New requirements for hedge accounting.
- (iii) The following assessments were made based on facts and circumstances in place on the adoption date:
 - Determination of business model in which the financial asset is held.
 - Designation and revoking of prior designations of specific financial assets and liabilities measured at FVTPL.

2.4 New or revised pronouncements that are not yet effective

(a) IFRS 16 – Leases

This pronouncement replaces the previous standards on leases, including IAS 17 – Leases and the corresponding interpretations, such as IFRIC 4 / SIC 15 and SIC 27.

The standard introduces a single and standardized model for the accounting of leases in the balance sheet of the lessees, in which it recognizes a right-of-use asset representing the right to use the leased asset and a lease liability that represents the obligation to pay the lease are recognized. Exemptions from recognition will be allowed for low-value and short-term contracts.

In addition, the expenses related to these leases are no longer linear operating lease expense, going in accordance with IFRS 16 to be a cost of depreciation of use rights assets and interest expense on lease obligations.

The definition of leasing includes all contracts that entitle the use and control of an identifiable asset, including lease contracts and, potentially, some components of service agreements.

The variable elements of the payments related to leases (e.g., a machinery and/or equipment rental contract with part of the payments based on the asset's productivity) are not considered in the calculation of the liability, and are recorded as operating expenses.

The Company will make the transition using the modified retrospective approach, i.e., it will apply the requirements of the commercial lease standard to all existing agreements on the initial adoption date, i.e. January 1, 2019. Therefore, information and balances will not be restated for comparison purposes.

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The new accounting standard provides practical expedients whose election is optional. The Company intends to adopt the following accounting policies during the transition:

- Not to reevaluate whether the contract is or contains any lease on the initial adoption date. Instead, will apply IAS 17 to agreements that have been previously identified as leases, using IAS 17 and IFRIC 4;
- Opt not to separate non-lease components from lease components, considering them, therefore, as a single lease component;
- Not to record contracts with terms above 12 months, that at the transition date, will end within 12 months as from the initial adoption date;
- Not to record low-value agreements (R\$30 for the company in Brazil or US\$10 for foreign subsidiaries), in accordance with the policy defined by the Management.
- Exclude the initial costs with measuring the asset from the right of use on the initial adoption date;
- Use hindsight, such as determining the term of the lease, if the contract contains options to postpone or terminate the lease, among others; and
- Apply a single discount rate to the lease portfolio with reasonably similar characteristics (such as leases with similar remaining lease terms, for a similar class of underlying asset in a similar economic environment and similar financing currencies – “portfolios”).

In this context, the Company expects the initial adoption of IFRS 16 to affect its financial statements and internal processes. The most significant impacts are related to:

- (1) recognition of new assets of right-of-use assets and lease liabilities in the balance sheet;
- (2) the disclosure of new significant information on lease activities.

The Company does not expect significant changes in lease activities in the period between the issuance of these financial statements and the date of initial adoption.

The effects expected as of January 1, 2019 are as follows:

- Recognition of additional liabilities ranging between R\$1,700,000 and R\$1,900,000 as corresponding entries to the recognition of right-of-use assets. The amounts reflect the present value of the remaining minimum payments of the rent of existing operating leases;
- The agreements that are exempt from recognition because they are short term and/or low value amount to an annual operating expense of approximately R\$85,000.

Furthermore, as of the reporting date of these Financial Statements, the Company is developing processes and controls to meet the new requirements.

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(b) IFRIC 23 – Uncertainty on Income Tax Treatment

The new interpretation, that Company is obliged to adopt starting from January 1, 2019, establishes requirements for recognition and measurement in situations where the Company has determined, during the process of calculating taxes on net income (income tax and social contribution), the use of tax treatments that could be construed as uncertain and, therefore, could be questioned by the tax authorities.

The Company concluded its analyses of the adoption of this standard and did not identify impacts on the financial statements.

3 Application of critical estimates and judgments

Critical estimates and judgments are those that require the most difficult, subjective or complex judgments by management, usually as a result of the need to make estimates that affect issues that are inherently uncertain. Estimates and judgments are continually reassessed and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Actual results can differ from planned results due to differences in the variables, assumptions or conditions used in making estimates.

The Company makes a series of other estimates that are presented in the respective notes, such as allowance for doubtful accounts and provision for repairing environmental damage.

In order to provide an understanding of the way the Company forms its judgments on future events, the variables and assumptions used in critical estimates are presented below:

3.1 Deferred income tax (“IR”) and social contribution (“CSL”)

The recognition and the amount of deferred taxes assets depend on the generation of future taxable income, which requires the use of an estimate related to the Company's future performance. These estimates are included in the business plan, which is annually prepared by the Executive Board and submitted to the Board of Directors for approval. This plan uses as main variables projections for the price of the products manufactured by the Company, price of inputs, growth of the gross domestic product of each country where the Company operates, exchange variation, interest rate, inflation rate and fluctuations in the supply and demand of inputs and finished products. These projections are made based on specialized external consulting firms and on the Company's historical performance and in strategic planning.

Information on deferred income tax and social contribution is presented in Note 21(c).

3.2 Fair value of derivative and non-derivative financial instruments

The Company evaluates the derivative financial instruments at their fair value and the main sources of information are the stock exchanges, commodities and futures markets, disclosures of the Central Bank of Brazil and quotation services, like Bloomberg and Reuters. Nevertheless, the volatility of the foreign exchange and interest rate markets in Brazil has been causing significant changes in future rates and interest rates over short periods of time, leading to significant changes in the market value of swaps and other financial instruments.

The fair values of non-derivative, quoted financial instruments are based on current bid prices. If the market for a financial asset and for unlisted securities is not active, the Company establishes fair value by using valuation techniques. These include the use of recent arm's length transactions, reference to other instruments that are substantially the same, discounted cash flow analysis, and option pricing models that make maximum use of market inputs and rely as little as possible on information provided by the Company's Management.

Information on derivative and non-derivative financial instruments is presented in Note 19.

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3.3 Useful life of assets

- (a) The Company recognizes the depreciation and depletion of its tangible and intangible assets with defined useful lives based on their estimated useful life approved by the Company's experts with experience in the management of Braskem's plants. The useful lives of the assets are reviewed at the end of every year by the Company's experts in order to confirm whether they need to be changed.

The main factors that are taken into consideration in the definition of the useful life of the assets that compose the Company's industrial plants are the information of manufacturers of machinery and equipment, level of the plants' operations, quality of preventive and corrective maintenance and the prospects of technological obsolescence of assets.

The Company's management also decided that: (i) depreciation should cover all assets value because when the equipment and installations are no longer operational, they are sold by amounts that are immaterial; and (ii) land is not depreciated because it has an indefinite useful life.

The useful lives applied to the assets determined the following average (%) depreciation and depletion rates:

	<u>2018</u>	<u>2017</u>
Buildings and improvements	3.42	3.36
Machinery, equipment and installations	8.04	8.34
Mines and wells	8.84	8.84
Furniture and fixtures	10.03	10.13
IT equipment	20.13	20.09
Lab equipment	9.53	9.56
Security equipment	9.72	9.77
Vehicles	17.83	17.51
Other	18.82	18.17

Information on property, plant and equipment is presented in Note 12.

3.4 Impairment test and analysis

(a) Tangible and intangible assets with defined useful lives

Annually or when there is an indication that an asset may be impaired, the Company conducts an analysis to determine the existence of any indication that the carrying amount of tangible assets and intangible assets with defined useful lives may not be recoverable. This analysis is conducted to assess the existence of scenarios that could adversely affect its cash flow and, consequently, its ability to recover the investment in such assets. These scenarios arise from issues of a macroeconomic, legal, competitive or technological nature.

Some significant and notable aspects considered by the Company in this analysis include: (i) the possibility of an oversupply of products manufactured by the Company or of a significant reduction in demand due to adverse economic factors; (ii) the prospects of material fluctuations in the prices of products and inputs; (iii) the likelihood of the development of new technologies or raw materials that could materially reduce production costs and consequently impact sales prices, ultimately leading to the full or partial obsolescence of the industrial facilities of the Company; and (iv) changes in the general regulatory environment that make the production process of Braskem infeasible or that significantly impact the sale of its products. For this analysis, the Company maintains an in-house team with a strategic vision of the business and also remains in permanent contact with a team of external consultants. If the aforementioned variables indicate any material risk to cash flows, the Management of Braskem conducts impairment tests in accordance with Note 3.4(b).

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The Company's assets are grouped initially under operating Segments, based on product lines and production site location. Within each Segment, assets are grouped into Cash-Generating Units ("CGU") as follows:

Reportable operating segments:

Chemicals:

- CGU Chemicals Bahia: represented by assets of the chemicals plants located in the state of Bahia;
- CGU Chemicals South: represented by assets of the chemicals plants located in the state of Rio Grande do Sul;
- CGU Chemicals Southeast: represented by assets of the chemicals plants located in the states of Rio de Janeiro and São Paulo;

Polyolefins:

- CGU Polyethylene: represented by assets of the PE plants located in Brazil;
- CGU Polypropylene: represented by assets of the PP plants located in Brazil;
- CGU Renewables: represented by the assets of the Green PE plant located in Brazil;

Vinyls:

- CGU Vinyls: represented by assets of PVC and chloride soda plants located in Brazil;

USA and Europe:

- CGU Polypropylene USA: represented by assets of PP plants located in the United States;
- CGU Polypropylene Europe: represented by assets of PP plants located in Germany;

Mexico:

- Represented by the assets of the ethylene and PE plants located in Mexico.

(b) Intangible assets with indefinite useful lives

The balances of goodwill from future profitability arising from business combinations are tested for impairment once a year. These tests are based on the projected cash generation in each operating segment (except for Chemicals Sul CGU which is tested at the cash generation unit level), for a five-year period, which are extracted from the business plan of the Company and cited in Note 3.1. In addition to the projected cash flow for the period from 2019 to 2023, perpetuity is also calculated based on the long-term vision and excluding real growth. Cash flows and perpetuity are adjusted to present value at a discount rate based on the Weighted Average Cost of Capital ("WACC").

The goodwill allocated to the Polyolefins operating segment was generated in a business combination that resulted in the simultaneous acquisition of polypropylene and polyethylene plants. The main raw materials of these plants were already supplied by the Company, which resulted in significant synergies in the operation. These synergies were one of the main drivers of that acquisition. Accordingly, the Company's management tested this goodwill for impairment, at operating segment level, since the benefits of the synergies are associated with all units acquired.

The remaining existing goodwill is allocated to the Chemicals Sul CGU and to the Vinyls operating segment.

Goodwill from future profitability are presented in Note 13. Said note also presents the results of impairment tests.

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3.5 Contingencies

Existing contingent liabilities and provisions are mainly related to discussions in the judicial and administrative spheres arising from primarily labor, pension, civil and tax lawsuits and administrative procedures.

The Management of Braskem, based on the opinion of its external legal advisors, classifies these proceedings in terms of probability of loss as follows:

Probable loss – these are proceedings for which there is a higher probability of loss than of a favorable outcome, i.e., the probability of loss exceeds 50%. For these proceedings, the Company recognizes a provision that is determined as follows:

- (i) tax and social security claims – the amount of the provision corresponds to the amount of the claim, plus interests and penalties; and
- (ii) labor and other claims - the amount of the provision corresponds to the disbursement amount estimated, plus interests and penalties.

Possible loss – these are proceedings for which the possibility of loss is greater than remote and lesser than probable. The loss may occur, however, the elements available are not sufficient or clear to allow for a conclusion on whether the trend is for a loss or a gain. In percentage terms, the probability of loss is between 25% and 50%. For these claims, except for the cases arising from business combinations, the Company does not recognize a provision and mentions the most significant matters in a note to the financial statements (Note 23.2).

In business combination transactions, in accordance with the provision in IFRS 3, the Company records the fair value of the claims based on the assessment of loss. The amount of the provision corresponds to the value of the matter, plus charges corresponding to the variation in the Selic rate, multiplied by the probability of loss.

The Company's management believes that the estimates related to the outcome of the proceedings and the possibility of future disbursement may change in view of the following: (i) higher courts may decide in a similar case involving another company, adopting a final interpretation of the matter and, consequently, advancing the termination of the of a proceeding involving the Company, without any disbursement or without implying the need of any financial settlement of the proceeding; and (ii) programs encouraging the payment of the debts implemented in Brazil at the Federal and State levels, in favorable conditions that may lead to a disbursement that is lower than the one that is recognized in the provision or lower than the value of the matter.

The Company's contingencies are presented in Note 23.

3.6 Hedge accounting

The Company designated non-derivate financial liabilities in foreign currency to hedge the future cash flows generated by its exports. This decision was based on two important concepts and judgments: (i) the performance of exports according to its business plan, which are inherent to the market and business where it operates, and (ii) the ability of the Company to refinance its liabilities in U.S. dollar, since the priority financing in U.S. dollar is part of the Company's guidelines and strategy and the maintenance of a minimum level of net liabilities in U.S. dollar is envisaged in the Financial Policy of the Company.

The subsidiary Braskem Idesa designated all of the financing it obtained from financial institutions for the construction of its industrial plant to protect part of its sales to be made in the same currency as said financing, the U.S. dollar. The sales estimate is included in the project that was presented to the banks/lenders, which, due to the consistency of the projection, granted Braskem Idesa a financing line should be paid exclusively using the cash generated by these sales. All the commercial considerations of the project were based on market studies conducted by expert consulting firms during the feasibility-analysis phase.

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All hedge transactions conducted by the Company are in compliance with the accounting procedures and practices adopted by Braskem, and effectiveness tests are conducted for each transaction every quarter, which prove the effectiveness of its hedge strategy.

The Company determined that hedged items will be characterized by the first sales in U.S. dollars in each quarter until the amount designated for each period is reached (Notes 19.4(a.i) e 19.4(a.ii), respectively). The liabilities designated for hedge will be aligned with the hedging maturity schedule and the Company's financial strategy.

According to the Financial Policy, the Company may contract derivatives (swaps, NDFs, options, etc.) to hedge against the volatility of the foreign exchange and interest rate. These derivatives may be designated for hedge accounting based on the judgment of Management and when such designation is expected to significantly improve the demonstration of the compensatory effect on the fluctuations in the items protected by the hedge. The Company currently has derivatives designated for cash flow hedge accounting, as reported in Note 19.3.

4 Risk management

Braskem is exposed to market risks arising from variations in commodity prices, foreign exchange rates and interest rates, credit risks of its counterparties in cash equivalents, financial investments and trade accounts receivable, and liquidity risks to meet its obligations from financial liabilities.

Braskem adopts procedures for managing market and credit risks that are in conformity with its Financial Policy which is periodically reviewed by the Board of Directors. The purpose of risk management is to protect the Company's cash flows and reduce the threats to the financing of its operating working capital and investment programs.

4.1 Market risks

Braskem prepares a sensitivity analysis for foreign exchange rate and interest rate risks to which it is exposed, which is presented in Note 19.6(c.2).

(a) Exposure to commodity risks

Most of Braskem's feedstocks (naphtha, ethane, propane and propylene) and main products (PE, PP and PVC) are commodities quoted on international markets. A series of factors determine the dynamics of these quotes which directly impacts Braskem's results and cash generation. Nevertheless, the Company believes such risk is inherent to the petrochemical business and, therefore, in general, it does not seek financial instruments to hedge against commodity price fluctuations.

(b) Exposure to foreign exchange risk

Considering the dynamics of the international petrochemical market, where prices are mostly pegged to international dollar-denominated references, even Braskem's sales in Brazil are strongly correlated to the U.S. currency. Therefore, the maintenance of a portion of costs in Brazilian real (fixed expenses with personnel, freight and energy, etc.) tends to generate a net exposure loss to the local currency.

Therefore, with the goal of partially mitigating the long-term exchange risk, as of September 2016, the Company started to contract financial derivatives to compose a Long-Term Foreign Exchange Hedge Program. The Program mainly aims to mitigate dollar call and put option contracts, hedging expected flows over a 24-month horizon, as described in greater detail in Note 19.3.

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In addition to the Hedge Program, to balance the composition between dollar-denominated assets and liabilities, Braskem's Financial Policy requires the Company to maintain a percentage of at least 70% of the dollar-denominated portion of net debt. If convenient, the company may maintain a percentage of more than 70%, although subject to a sensitivity analysis of key financial indicators and proof of the inexistence of significant risk of deterioration of these indicators.

On December 31, 2018, Braskem prepared a sensitivity analysis for its exposure to the fluctuation in the U.S. dollar, as informed in Note 19.6.

(c) Exposure to interest rate risk

Braskem is exposed to the risk that a variation in floating interest rates causes an increase in its financial expense due to payments of future interest. Debt denominated in foreign currency subject to floating rates is mainly subject to fluctuations in Libor. Debt denominated in local currency is mainly subject to the variation in the Interbank Certificate of Deposit ("CDI") rate.

In 2018, Braskem held swap contracts (Note 19.3.1) in which it receives Libor and pays a fixed rate.

On December 31, 2018, Braskem prepared a sensitivity analysis for the exposure to the floating interest rates Libor, CDI and TJLP, as informed in Notes 19.6(c.1) and (c.2).

4.2 Exposure to credit risk

The transactions that subject Braskem to the concentration of credit risks are mainly in current accounts with banks, financial investments and trade accounts receivable in which Braskem is exposed to the risk of the financial institution or customer involved. In order to manage this risk, Braskem maintains bank current accounts and financial investments with major financial institutions, weighting concentrations in accordance with the credit rating and the daily prices observed in the Credit Default Swap market for the institutions, as well as netting contracts that minimize the total credit risk arising from the many financial transactions entered into by the parties.

On December 31, 2018, approximately 34.5% of the amounts recorded as "Cash and cash equivalents" (Note 5) and Financial investments (Note 6) were allocated to financial institutions that had offset agreements with the Company. The obligations under these agreements are accounted for under "Borrowings" (Note 15). The effective netting of these amounts is possible only in the event of default by one of the parties.

With respect to the credit risk of customers, Braskem protects itself by performing a rigorous analysis before granting credit and obtaining secured and unsecured guarantees when considered necessary, including credit insurance.

The maximum exposure to credit risk of non-derivative financial instruments on the reporting date is the sum of their carrying amounts less any provisions for impairment losses. On December 31, 2018, the balance of trade accounts receivable was net of allowance for doubtful accounts (Note 7).

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4.3 Liquidity risk

Braskem has a calculation methodology to determine a minimum cash “monthly vision” (30-day horizon) and a minimum cash “yearly vision” (up to 12-month horizon) for the purpose of, respectively: (i) ensuring the liquidity needed to comply with obligations of the following month; and (ii) ensuring that the Company maintains liquidity during potential crises. The amounts to determine the minimum cash “yearly vision” are calculated mainly based on the projected operating cash generation, less short-term debts and working capital needs. The amounts used for determining the minimum cash “monthly vision” consider the projected operating cash disbursement, debt service and contributions to projects, as well as the planned disbursement for derivatives maturing in the period, among other items. The Company uses as minimum cash in its financial policy the greater of these two references.

In May 2018, the Company, in keeping with its commitment to maintain its financial liquidity, contracted an international revolving credit facility in the amount of US\$1 billion, which expires in 2023. This line may be used without restrictions to improve the Company’s credit quality or in the event of deterioration in the macroeconomic scenario.

The two facilities held by the Company before, in the amounts of R\$750 million with expiration in December 2019 and of R\$500 million with expiration in September 2019, were cancelled.

As of December 31, 2018, the new credit line had not been used.

On December 31, 2018, the subsidiary Braskem Idesa continued to record as current liabilities its financial obligations whose original maturities were long term. Such reclassification is due to the failure to comply with certain contractual covenants set forth in the financing contract of Braskem Idesa (Note 16). Note that Braskem Idesa has been settling all its obligations in accordance with the original debt maturity schedule and none of its creditors has requested or showed any intention of requesting the immediate reimbursement of said obligations or the early amortization of the debt.

In case Braskem Idesa’s group of lenders decide to request the early amortization of this debt, Braskem’s financial liabilities by maturity, including the amounts due under the Leniency Agreement (Note 23.3), are as shown in the table below. These amounts are calculated from undiscounted cash flows and may not be reconciled with the balance sheet.

	<u>Until</u>	<u>Between one and</u>	<u>Between two and</u>	<u>Maturity</u>	
	<u>one year</u>	<u>two years</u>	<u>five years</u>	<u>More than</u>	<u>Total</u>
				<u>five years</u>	
Trade payables	8,435,246	37,252			8,472,498
Borrowings	806,418	6,469,288	5,479,526	26,182,832	38,938,064
Debentures	34,760	118,457	141,972	106,316	401,505
Braskem Idesa borrowings	10,504,592				10,504,592
Derivatives	76,355	55,449	128,765		260,569
Loan to non-controlling shareholder of Braskem Idesa				2,183,830	2,183,830
Leniency agreement (Note 23.3)	341,308	341,308	897,376	409,876	1,989,868
At December 31, 2018	20,198,679	7,021,754	6,647,639	28,882,854	62,750,926

Considering that Braskem Idesa’s group of lenders will remain not requesting the early amortization of this debt, Braskem’s financial liabilities by maturity, including the amounts due under the Leniency Agreement (Note 23.3), are as shown in the table below. These amounts are calculated from undiscounted cash flows and may not be reconciled with the balance sheet.

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	Maturity				Total
	Until one year	Between one and two years	Between two and five years	More than five years	
Trade payables	8,435,246	37,252			8,472,498
Borrowings	806,418	6,469,288	5,479,526	26,182,832	38,938,064
Debentures	34,760	118,457	141,972	106,316	401,505
Braskem Idesa borrowings	995,741	2,482,602	2,835,154	7,353,752	13,667,249
Derivatives	76,355	55,449	128,765		260,569
Loan to non-controlling shareholder of Braskem Idesa				2,183,830	2,183,830
Leniency agreement (Note 23.3)	341,308	341,308	897,376	409,876	1,989,868
At December 31, 2018	10,689,828	9,504,356	9,482,793	36,236,606	65,913,583

4.4 Capital management

The ideal capital structure, according to Braskem's Management, considers the balance between own capital and the sum of all payables less the amount of cash and cash equivalents and financial investments. This composition meets the Company's objectives of perpetuity and of offering an adequate return to shareholders and other stakeholders. This structure also permits borrowing costs to remain at adequate levels to maximize shareholder remuneration.

Due to the impact of the U.S. dollar on the Company's operations, the Management of Braskem believes that the own capital used for capital management purposes should be measured in this currency and on a historical basis. Moreover, the Company may temporarily maintain a capital structure that is different from this ideal. This occurs, for example, during periods of growth, when the Company may finance a large portion of its projects through borrowings, provided that this option maximizes return for shareholders once the financed projects start operating. In order to adjust and maintain the capital structure, the Management of Braskem may also consider the sale of non-strategic assets, the issue of new shares or even adjustments to dividend payments.

As is also the case of liquidity, capital is not managed at the Parent Company level, but rather at the consolidated balance sheet level, except for the liquidity and capital of Braskem Idesa, which are managed specifically within the subsidiary.

5 Cash and cash equivalents

	2018	2017
Cash	(i) 2,228,964	1,428,766
Cash equivalents:		
Domestic market	1,754,561	1,706,784
Foreign market	(i) 1,564,112	639,543
Total	<u>5,547,637</u>	<u>3,775,093</u>

(i) On December 31, 2018, cash includes R\$963,357 (R\$247,286 of cash and R\$47,400 of cash equivalents on December 31, 2017) held by subsidiary Braskem Idesa, available for use exclusively in its subsidiary.

This item includes cash, bank deposits and highly liquid financial investments available for redemption within three months. These assets are convertible into a known cash amount and are subject to insignificant risk of change in value.

Cash equivalents in Brazil are mainly represented by fixed-income instruments and time deposits held by the funds FIM Jupiter and FIM Netuno. Cash equivalents abroad mainly comprise fixed-income instruments issued by highly rated financial institutions (time deposit).

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6 Financial investments

		<u>2018</u>	<u>2017</u>
Amortized cost			
Time deposit investments	(i)	49,630	440,616
Fair value through profit or loss			
Time deposit investments			15,764
<i>Letras financeiras do tesouro - LFT's and Letras Financeiras - LF's</i>	(ii)	2,247,272	1,816,889
Restricted funds investments	(iii)	9,998	12,404
Other		60,711	27,335
Total		<u>2,367,611</u>	<u>2,313,008</u>
Current assets		2,357,613	2,302,672
Non-current assets		9,998	10,336
Total		<u>2,367,611</u>	<u>2,313,008</u>

- (i) In 2017, the amount of R\$440,616 was given as guarantee to cover Braskem's obligation related to the constitution of a reserve account for the project finance of the subsidiary Braskem Idesa. The guarantee was withdrawn in April 2018.
- (ii) These refer to Brazilian floating-rate government bonds ("LFTs") issued by the Brazilian federal government and floating-rate bonds ("LFs") issued by financial institutions. These bonds have original maturity above three months, immediate liquidity in the secondary market and Management expects their realization in the short term.
- (iii) Restricted funds represent bank deposits with yields of approximately 100% of the Interbank Deposit Rate ("CDI"), and their use is related to the fulfillment of the contractual obligations of the debentures.

7 Trade accounts receivable

The Company's billing period is generally 30 days; therefore, the amount of the trade accounts receivable corresponds to their fair value. The Company realizes part of its trade accounts receivable through the sale of trade notes to funds and financial institutions that acquire receivables. These operations are not entitled to recourse and the risks and benefits over the receivables are substantially transferred, for which reason the trade notes are written-off at the moment of the sale.

		<u>2018</u>	<u>2017</u>
Customers			
Domestic market		1,425,444	1,459,623
Foreign market		1,901,184	2,209,094
Expected credit loss	(i)	(233,625)	(350,025)
Total		<u>3,093,003</u>	<u>3,318,692</u>
Current assets		3,075,218	3,281,196
Non-current assets		17,785	37,496
Total		<u>3,093,003</u>	<u>3,318,692</u>

- (i) As disclosed in Note 2.4, the IFRS 9 replaced, as from January 1, 2018, the "incurred losses" model of IAS 39 with a prospective model of "expected credit losses," which requires greater judgment of how the changes in economic factors affect the expected credit losses, which are determined based on the following stages:

Stage 1 – when the securities are still performing at this stage, expected credit losses are calculated based on the actual experience of credit loss (write-off) over the last five years, segregating customers in accordance with their Operating Risk.

Stage 2 – when there is deterioration in the credit risk of the customer since the initial recognition; at this stage, the Company considers as deterioration of credit risk any credits that were renegotiated and that must be collected in court, regardless of their maturity.

Braskem S.A.

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Stage 3 – includes financial assets that have objective evidence of impairment; the trigger for evidence of impairment is an unprecedented delay of more than 90 days.

The following table shows the Company's expected credit loss for each stage:

		<u>Estimated loss percentage</u>	<u>Trade accounts receivable</u>	<u>Allowance for doubtful accounts</u>
Stage 1 (Performing)	Operation risk 1	No risk	1,977,941	
	Operation risk 2	No risk	635,549	
	Operation risk 3	0.27%	268,156	752
	Operation risk 4	0.63%	199,499	1,218
	Operation risk 5	100%	24	24
			<u>3,081,169</u>	<u>1,994</u>
Stage 2 (Significant Increase in Loss Risk)	1st Renegotiation lower than 24 months	12% or 100%	10,533	1,554
	2nd Renegotiation greater than 24 months	91% or 100%	2,915	2,876
	Legal	100%	172,189	172,189
			<u>185,637</u>	<u>176,619</u>
Stage 3 (No payment performance - Indicative of impairment)	Between 90 and 180 days	50% or 100%	10,014	5,204
	Above 180 days	100%	49,808	49,808
			<u>59,822</u>	<u>55,012</u>
Total			<u><u>3,326,628</u></u>	<u><u>233,625</u></u>

The changes in the expected credit loss are presented below:

	<u>2018</u>	<u>2017</u>
Balance of provision at the beginning of the year	(350,025)	(380,559)
Reversal in the year	99,975	18,573
Write-offs	16,425	22,878
Addition through merger of Cetrel		(10,917)
Balance of provision at the end of the year	<u>(233,625)</u>	<u>(350,025)</u>

Braskem S.A.**Notes to the financial statements
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The breakdown of trade accounts receivable by maturity is as follows:

	<u>2018</u>	<u>2017</u>
Accounts receivables not past due	2,616,104	2,886,546
Past due securities:		
Up to 90 days	492,265	567,590
91 to 180 days	10,941	3,673
As of 180 days	<u>207,318</u>	<u>210,908</u>
	3,326,628	3,668,717
Expected credit loss	<u>(233,625)</u>	<u>(350,025)</u>
Total customers portfolio	<u>3,093,003</u>	<u>3,318,692</u>

8 Inventories

	<u>2018</u>	<u>2017</u>
Finished goods	5,542,220	4,255,114
Raw materials, production inputs and packaging	1,578,523	1,715,757
Maintenance materials	465,684	365,803
Advances to suppliers	93,445	275,169
Imports in transit	838,099	74,670
Total	<u>8,517,971</u>	<u>6,686,513</u>
In current assets	8,486,577	6,640,049
In non-current assets	<u>31,394</u>	<u>46,464</u>
Total	<u>8,517,971</u>	<u>6,686,513</u>

Inventories of finished products are stated at average cost of purchase or production or the estimated price of sale or acquisition, excluding taxes, whichever is lower.

The value of finished products includes raw materials, ancillary and maintenance materials used, depreciation of industrial facilities, expenses with Company's and third-party personnel involved in industrial production and maintenance, and logistics expenses with the transfer of these products from the plants to the sale terminals.

Finished goods are measured at the lower of cost and net realizable value, and, when necessary, a provision is recorded. For this estimate, the Company considers the sale price projected, reduced by all costs of sale, for the period during which it expects to sell the product. This period is determined based on the historical data for the turnover of the respective inventory. In 2018, the net effect of this provision is R\$13,906.

Braskem S.A.

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9 Related parties

	Balances at December 31, 2018				Balances at December 31, 2017							
	Associates companies, Jointly-controlled investment and Related companies				Associates companies, Jointly-controlled investment and Related companies				Associates companies, Jointly-controlled investment and Related companies			
	Odebrecht and subsidiaries and associates	Petrobras and subsidiaries	Other	Total	Odebrecht and subsidiaries and associates	Petrobras and subsidiaries	Other	Total	Odebrecht and subsidiaries and associates	Petrobras and subsidiaries	Other	Total
Balance sheet												
Assets												
Current												
Trade accounts receivable		20,119	2,687	22,806	7,634	45,184	60,502	113,320				
Inventories	8,665	9(c.i) and 30,193		38,858	250,904	118		251,022				
Dividends and interest on capital		(c.ii)	890	890			10,859	10,859				
Total assets	8,665	50,312	3,577	62,554	258,538	45,302	71,361	375,201				
Liabilities												
Current												
Trade payables	16,851	160,324		177,175	21,530	149,058	700	171,288				
Other payables	2,841	484		3,325	2,338	562	7,591	10,491				
Total liabilities	19,692	160,808		180,500	23,868	149,620	8,291	181,779				
Transactions												
Twelve-month period ended December 31, 2018												
Twelve-month period ended December 31, 2017												
Twelve-month period ended December 31, 2016												
	Odebrecht and subsidiaries and associates	Petrobras and subsidiaries	Other	Total	Odebrecht and subsidiaries and associates	Petrobras and subsidiaries	Other	Total	Odebrecht and subsidiaries and associates	Petrobras and subsidiaries	Other	Total
Sales of products		1,225,443	736,192	1,961,635	27,467	1,810,789	629,302	2,467,558	49,051	2,023,815	562,709	2,635,575
Purchases of raw materials, finished goods services and utilities	460,480	15,540,144	3,800	16,004,424	742,161	12,795,819	5,664	13,543,644	1,564,103	12,291,190	56,170	13,911,463
Financial income (expenses)		(49)		(49)	2,056	(39,433)		(37,377)	(21)	6,452		6,431
Other income	4,214			4,214								
General and administrative expenses												
Post-employment benefits plan ("EPE")												
Odebrecht Previdência Privada ("Odeprev")			48,514				36,725	36,725			41,845	41,845
Acquisition of subsidiary					610,000			610,000				

Notes to the financial statements

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(a) New and/or renewed agreements with related companies

As provided for in the Company's bylaws, the Board of Directors has the exclusive power to decide on any contract with related parties that exceed R\$20,000 per operation or R\$60,000 altogether per fiscal year. This is valid for contracts between Braskem and its subsidiaries and: (i) direct or indirect subsidiaries of Braskem in whose capital an interest is held by the controlling shareholder, by any direct or indirect subsidiaries thereof or by Key Personnel of such entities; (ii) affiliates of Braskem and subsidiaries of such entities; and (iii) joint ventures in which Braskem participates and any subsidiaries thereof.

Pursuant to Federal Law 6,404/76, officers and directors are prohibited from: (i) performing any acts of liberality with the use of the Company's assets and in its detriment; (ii) intervening in any operations in which these officers and directors have a conflict of interest with the Company or in resolutions in which they participate; and (iii) receiving, based on their position, any type of personal advantage from third parties, directly or indirectly, without an authorization under the Bylaws or by the shareholders' meeting.

As part of its control to identify related parties, Key Personnel annually inform whether they, or their close relatives, hold full or shared control of any company. All companies that conducted transactions with Braskem and its subsidiaries, are provided in this Note.

The related parties that have significant relationship with the Company are as follows:

Odebrecht and its direct and indirect subsidiaries:

- Atvos Agroindustrial S.A. ("Atvos").
- Agro Energia Snata Luzia S.A. ("USL").
- Construtora Norberto Odebrecht S.A. ("CNO").
- Usina Conquista do Pontal S.A. ("UCP").

Petrobras and its direct and indirect subsidiaries:

- Petróleo Brasileiro S.A. ("Petrobras").
- Petrobras Distribuidora ("BR Distribuidora").

Joint ventures of Braskem:

- Refinaria de Petróleo Riograndense S.A. ("RPR").

Associate of Braskem:

- Borealis Brasil S.A. ("Borealis").

The main transactions between the Company and related parties, in the fiscal years ended December 31, 2018 and December 31, 2017, all conducted under normal market terms and conditions (arm's length basis), are as follows:

- Odebrecht and its subsidiaries:
 - (i) In March 2017, the Company entered into an agreement for supply of hydrous ethanol with UCP and USL. Ethanol is the feedstock consumed by Braskem to produce green ethylene. The agreement is guaranteed by Atvos and Rio Claro Agroindustrial S.A.. The agreement also provides for a commercial discount and other flexibilities in the process of Braskem's acquisition of the product.

**Notes to the financial statements
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In December 2017, the Company entered into an amendment that changed the billing for raw material acquisitions to future delivery, so as to bring forward the billing of the volume of the goods to be delivered between January and March 2018. The amendment determines that the price practiced at time of delivery is the lesser of the ceiling established in the amendment and the reference established in the original contract. The agreement was valid until April 30, 2018.

- (ii) In December 2017, an agreement was entered into with USL, UCP, Atvos and Brenco Companhia Brasileira de Energia Renovável, with the purpose of ensuring the supply of hydrous ethanol volumes, which included a commercial discount on the supply and established contractual flexibilities for acquisition. The contract includes an advance of R\$200,000, which is guaranteed by a pledge of the sugarcane crop, its products and sub-products at a net market value greater than the amount of the advance, with the pledged asset insured by a policy contracted from a premium insurer and with a provision for subrogation to the Company, with duration through April 30, 2019. The balance of the advance on December 31, 2018 is R\$8,665.
 - (iii) In December 2017, the Company signed an industrial maintenance services agreement with CNO that encompassed boilers and the welding of tubing and static equipment, as well as operational and maintenance services on cargo machinery to be performed at the Braskem Units located in Rio Grande do Sul. The agreement has an estimated maximum amount of R\$120,000 and is valid through December 1, 2021. In 2018, the transactions amounted to R\$19,054.
 - (iv) In May 2018, Braskem entered into an agreement for caustic soda movement and storage services with Liquiport Vila Velha S.A., a wholly owned subsidiary of Odebrecht Transport S.A. The agreement has an estimated maximum value of R\$93,000 and is valid for 10 years. Sales in the period amounted to R\$5,844.
- Petrobras and its subsidiaries:
 - (i) Since December 2015, the Company has maintained an agreement with Petrobras for the annual supply of 7 million tons of petrochemical naphtha, which has a duration of five years.
 - (ii) Braskem maintains agreements for the sale of gasoline to BR Distribuidora, which is renewed on a monthly basis.
 - Braskem joint venture:
 - (i) In 2018, sales of gasoil to RPR amounted to R\$127,342. The product is used as feedstock in the diesel production process.
 - (ii) Braskem has maintained monthly negotiations for the sale of gasoline to RPR. Sales in fiscal year 2018 amounted to R\$313,460.

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(b) Key management personnel

Income statement transactions	2018	2017	2016
Remuneration			
Short-term benefits	60,922	60,303	44,277
Post-employment benefit	989	664	515
Long term incentive plan	4,404		
Total	66,315	60,967	44,792

10 Taxes recoverable

	2018	2017
Parent Company and subsidiaries in Brazil		
IPI	9,050	18,226
Value-added tax on sales and services (ICMS) - normal operations	(a) 427,331	483,248
ICMS - credits from PP&E	170,998	140,904
Social integration program (PIS) and social contribution on revenue (COFINS) - normal operations	482	22,389
PIS and COFINS - credits from PP&E	255,739	223,297
IR e CSL	553,740	691,697
REINTEGRA program	(b) 20,615	102,166
Federal supervenience	(c) 688,111	140,537
Other	2,852	4,322
Foreign subsidiaries		
Value-added tax ("IVA")	173,051	92,119
IR	111,948	46,939
Other	7,750	4,021
Total	2,421,667	1,969,865
Current assets	847,088	982,629
Non-current assets	1,574,579	987,236
Total	2,421,667	1,969,865

(a) ICMS – normal operations

Accumulated ICMS credits over the past few years arises mainly from domestic sales subject to deferred taxation and export sales.

The Management of the Company has been prioritizing a series of actions to maximize the use of these credits and currently does not expect losses on the realization of cumulative balances.

(b) REINTEGRA Program

The REINTEGRA program aims to refund to exporters the federal taxes levied on the production chain for goods sold abroad. The amount to be refunded is equivalent to the following percentages of all export revenue, in accordance with Federal Law 13,043/14 and Executive Order 8,543/15:

- (i) 3%, between October 1, 2014 and February 28, 2016;
- (ii) 1%, between March 1, 2016 and November 30, 2016;
- (iii) 0.1% between December 1, 2016 and December 31, 2016;
- (iv) 2% between January 1, 2017 and May 31, 2018; and
- (v) 0.1% as of June 1, 2018.

Such credits may be realized in two ways: (i) by offsetting own debits overdue or undue related to taxes levied by the Federal Revenue Service; or (ii) by a cash reimbursement.

In the fiscal year ended December 31, 2018, the Company recognized credits in the amount of R\$69,055 (R\$178,716 in 2017) and offset the amount of R\$144,957 (R\$138,531 in 2017). In the Statement of profit or loss, credits were recognized in the item "Cost of products sold."

(c) Recovery of Federal Tax Credits

In March 2017, the Federal Supreme Court (STF) decided, in connection with the Extraordinary Appeal indicated by STF itself as the leading case of this discussion, that ICMS tax should not be included in the calculation base of PIS/COFINS. Despite the filing of a motion for clarification by the Federal Government requesting the prospective effects of the decision, the STF itself and all Regional Federal Appellate Courts in Brazil have applied the decision of the lead case indiscriminately. On December 31, 2018, the Extraordinary Appeal of the Federal Government, filed in a lawsuit brought by Braskem S/A itself, was ruled moot, therefore increasing the legal certainty of the Company for recognizing its right. In this scenario, Braskem recognized, as of December 31, 2018, a tax credit in the amount of R\$519,830 related to PIS and COFINS for the period from March 2017 to November 2018, of which R\$265,438 was recorded under "Net revenue," R\$235,919 under "Other operating income (expenses)" and R\$18,473 under "Financial income."

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11 Investments

(a) Information on investments

	Interest in total and voting capital (%) - 2018	Net profit (loss) for the year			Equity		
		Direct and indirect	2018	2017	2016	2018	2017
Jointly-controlled investment							
RPR	33.20	6,358	106,109	86,682	99,672	201,038	
Odebrecht Comercializadora de Energia S.A. ("OCE") (i)		(48)	(543)	(5,720)		5,178	
Associates							
Borealis	20.00	(2,900)	17,752	10,538	163,884	166,630	

(i) Terminated in June, 2018.

(b) Changes in investments

	Balance at 2017	Dividends and interest on equity	Equity in results of investees	Goodwill amortization	Equity valuation adjustments	Balance at 2018
			Effect of results			
Domestic associate						
Borealis	33,325		(549)			32,776
OCE	1,036		(9)	(1,027)		
RPR	66,752	(32,060)	2,106		(3,704)	33,094
Other	145			(61)		84
	101,258	(32,060)	1,548	(1,088)	(3,704)	65,954

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(c) Impact on the consolidation of Braskem Idesa

In compliance with IFRS 12, the Company is presenting the financial information of the subsidiary in which there is interest held by non-controlling shareholder with material effects in the Company's consolidated statements.

	Consolidated Braskem without the effect of Braskem Idesa consolidated		Braskem Idesa consolidated (i)		Eliminations		C
	2018	2017	2018	2017	2018	2017	
Assets							
Current							
Cash and cash equivalents	4,584,280	3,480,407	963,357	294,686			5,547,637
Financial investments	2,357,613	2,302,672					2,357,613
Trade accounts receivable	2,574,791	2,809,034	627,879	620,531	(127,452)	(148,369)	3,075,218
Inventories	7,907,429	6,293,324	579,148	346,725			8,486,577
Taxes recoverable	737,399	919,600	109,689	63,029			847,088
Other receivables	379,560	392,750	340,122	44,630			719,682
	18,541,072	16,197,787	2,620,195	1,369,601	(127,452)	(148,369)	21,033,815
Non-current							
Taxes recoverable	1,574,518	987,184	61	52			1,574,579
Deferred tax	114,000	129,469	990,158	1,036,257			1,104,158
Related parties	6,137,206	5,051,706			(ii) (6,137,206)	(5,051,706)	
Other receivables	546,892	637,549	47,217	33,207			594,109
Property, plant and equipment	20,102,981	19,180,263	12,365,063	11,228,346	(iii) (708,154)	(646,999)	31,759,890
Intangible	2,562,722	2,575,567	178,260	151,930			2,740,982
	31,038,319	28,561,738	13,580,759	12,449,792	(6,845,360)	(5,698,705)	37,773,718
Total assets	49,579,391	44,759,525	16,200,954	13,819,393	(6,972,812)	(5,847,074)	58,807,533
Liabilities and shareholders' equity							
Current							
Trade payables	8,099,755	5,047,293	368,949	159,872	(127,452)	(148,369)	8,341,252
Borrowings	737,436	1,184,781					737,436
Debentures	27,732	27,183					27,732
Braskem Idesa Borrowings			10,504,592	9,691,450			10,504,592
Payroll and related charges	617,079	609,883	28,317	20,634			645,396
Taxes payable	488,472	881,702	12,801	13,067			501,273
Other payables	1,932,548	1,019,346	75,849	57,581			2,008,397
	11,903,022	8,770,188	10,990,508	9,942,604	(127,452)	(148,369)	22,766,078
Non-current							
Loan agreements	24,160,720	22,176,640					24,160,720
Braskem Idesa Borrowings	266,777	286,141					266,777
Accounts payable to related parties			6,147,768	5,065,971	(ii) (6,147,768)	(5,065,971)	
Loan to non-controlling shareholders of Braskem Idesa			2,183,830	1,756,600			2,183,830
Provision for losses on subsidiaries	2,871,819	2,689,769			(iv) (2,871,819)	(2,689,769)	
Other payables	3,765,110	4,467,398	10,348	7,842			3,775,458
	31,064,426	29,619,948	8,341,946	6,830,413	(9,019,587)	(7,755,740)	30,386,785
Shareholders' equity							
Attributable to the Company's shareholders	6,531,070	6,300,300	(3,131,500)	(2,953,624)	3,131,500	2,953,625	6,531,070
Non-controlling interest on subsidiaries	80,873	69,089			(957,273)	(896,590)	(876,400)
	6,611,943	6,369,389	(3,131,500)	(2,953,624)	2,174,227	2,057,035	5,654,670
Total liabilities and shareholders' equity	49,579,391	44,759,525	16,200,954	13,819,393	(6,972,812)	(5,847,074)	58,807,533

(i) Consolidation of Braskem Idesa with its direct subsidiary Braskem Idesa Serviços.

(ii) Loan from Braskem Holanda as part of shareholders' contribution to the Braskem Idesa project.

(iii) Adjustment corresponding to the capitalization of a portion of financial charges of the abovementioned loan.

(iv) Provision recorded in the subsidiary Braskem Holanda for the negative shareholders' equity of Braskem Idesa.

(v) Loan owed to the non-controlling shareholder as part of shareholders' contribution to the project.

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Statement of profit or loss

	Consolidated Braskem						Eliminations				
	Ex consolidated Braskem Idesa			Braskem Idesa consolidated							
	2018	2017	2016	2018	2017	2016	2018	2017	2016	2018	2017
Net revenue	54,851,243	46,207,109	46,343,171	3,766,371	3,656,801	1,495,018	(617,748)	(603,316)	(174,201)	57,999,866	49,260,59
Cost of products sold	(44,783,284)	(34,675,494)	(34,040,770)	(2,314,998)	(2,125,031)	(1,109,020)	667,062	623,117	164,221	(46,431,220)	(36,177,408)
	<u>10,067,959</u>	<u>11,531,615</u>	<u>12,302,401</u>	<u>1,451,373</u>	<u>1,531,770</u>	<u>385,998</u>	<u>49,314</u>	<u>19,801</u>	<u>(9,980)</u>	<u>11,568,646</u>	<u>13,083,18</u>
Income (expenses)											
Selling and distribution	(1,355,986)	(1,287,817)	(1,286,558)	(189,582)	(171,791)	(117,115)				(1,545,568)	(1,459,608)
General and administrative	(1,524,480)	(1,336,072)	(1,201,489)	(108,191)	(122,043)	(123,855)	(332)	23,843	39,731	(1,633,003)	(1,434,272)
Research and development	(199,821)	(167,456)	(162,010)							(199,821)	(167,456)
Results from equity investments	76,821	191,949	(923,096)				(77,709)	(151,993)	953,174	(888)	39,95
Other income (expenses), net	(208,252)	(887,185)	(3,913,567)	299,104	32,305	7,613				90,852	(854,880)
	<u>6,856,241</u>	<u>8,045,034</u>	<u>4,815,681</u>	<u>1,452,704</u>	<u>1,270,241</u>	<u>152,641</u>	<u>(28,727)</u>	<u>(108,349)</u>	<u>982,925</u>	<u>8,280,218</u>	<u>9,206,92</u>
Financial results											
Financial expenses	(2,227,544)	(3,044,668)	(3,054,334)	(1,090,019)	(973,952)	(688,868)	310,012	271,403	172,240	(3,007,551)	(3,747,217)
Financial income	867,185	850,367	955,423	31,879	24,666	3,193	(310,012)	(271,403)	(268,494)	589,052	603,63
Exchange rate variations, net	(2,014,205)	(936,804)	(2,115,993)	(232,064)	132,186	(1,094,424)	(10,714)	5,856		(2,256,983)	(798,762)
	<u>(3,374,564)</u>	<u>(3,131,105)</u>	<u>(4,214,904)</u>	<u>(1,290,204)</u>	<u>(817,100)</u>	<u>(1,780,099)</u>	<u>(10,714)</u>	<u>5,856</u>	<u>(96,254)</u>	<u>(4,675,482)</u>	<u>(3,942,349)</u>
Profit before income tax and social contribution	<u>3,481,677</u>	<u>4,913,929</u>	<u>600,777</u>	<u>162,500</u>	<u>453,141</u>	<u>(1,627,458)</u>	<u>(39,441)</u>	<u>(102,493)</u>	<u>886,671</u>	<u>3,604,736</u>	<u>5,264,57</u>
IR and CSL - current and deferred	(639,394)	(1,057,699)	(1,039,107)	(97,157)	(299,983)	423,061				(736,551)	(1,357,682)
	<u>(639,394)</u>	<u>(1,057,699)</u>	<u>(1,039,107)</u>	<u>(97,157)</u>	<u>(299,983)</u>	<u>423,061</u>				<u>(736,551)</u>	<u>(1,357,682)</u>
Profit (loss) for the year of continued operations	<u>2,842,283</u>	<u>3,856,230</u>	<u>(438,330)</u>	<u>65,343</u>	<u>153,158</u>	<u>(1,204,397)</u>	<u>(39,441)</u>	<u>(102,493)</u>	<u>886,671</u>	<u>2,868,185</u>	<u>3,906,89</u>
Discontinued operations results											
Profit from discontinued operations		13,499	40,760								13,49
IR and CSL - current and deferred		(4,623)	(13,901)								(4,623)
		<u>8,876</u>	<u>26,859</u>								<u>8,87</u>
Profit (loss) for the year	<u>2,842,283</u>	<u>3,865,106</u>	<u>(411,471)</u>	<u>65,343</u>	<u>153,158</u>	<u>(1,204,397)</u>	<u>(39,441)</u>	<u>(102,493)</u>	<u>886,671</u>	<u>2,868,185</u>	<u>3,915,77</u>

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Statement of cash flows	Consolidated Braskem									Consolidated		
	Ex consolidated			Braskem Idesa			Eliminations					
	2018	2017	2016	2018	2017	2016	2018	2017	2016	2018	2017	2016
Profit (loss) before income tax and social contribution and for the result with discontinued operations	3,481,677	4,913,929	641,537	162,500	453,141	(1,627,458)	(39,441)	(102,493)	886,671	3,604,736	5,264,577	(99,250)
Adjustments for reconciliation of profit (loss)												
Depreciation, amortization and depletion	2,228,978	2,230,466	2,381,160	810,581	742,033	331,691	(48,982)	(43,644)	(29,751)	2,990,577	2,928,855	2,683,100
Results from equity investments	(76,821)	(191,949)	923,096				77,709	151,993	(953,174)	888	(39,956)	(30,078)
Interest and monetary and exchange variations, net	4,658,342	2,900,745	1,851,033	1,344,888	802,825	1,229,219	10,714	(5,856)	(54,244)	6,013,944	3,697,714	3,026,008
Gain on sale of investment in subsidiary		(276,816)									(276,816)	
Leniency agreement		375,476	2,853,230								375,476	2,853,230
Reversal of provisions	23,725	(223,340)								23,725	(223,340)	
PIS and COFINS credits - exclusion of ICMS from the calculation basis	(519,830)									(519,830)		
Provision for losses and write-offs of long-lived assets	69,270	212,759	40,530	3,200	425	486				72,470	213,184	41,016
	9,865,341	9,941,270	8,690,586	2,321,169	1,998,424	(66,062)			(150,498)	12,186,510	11,939,694	8,474,026
Changes in operating working capital												
Financial investments	98,349	(953,228)	(649,535)							98,349	(953,228)	(649,535)
Trade accounts receivable	158,378	(1,304,474)	1,083,117	(7,348)	(373,066)	(126,617)	(20,917)	79,148	51,375	130,113	(1,598,392)	1,007,875
Inventories	(1,337,618)	(1,387,696)	966,974	(199,672)	36,668	(104,636)				(1,537,290)	(1,351,028)	862,338
Taxes recoverable	1,068,637	415,923	976,770	(46,395)	53,370	81,334				1,022,242	469,293	1,058,104
Prepaid expenses	(67,051)	(21,732)	64,029	(38,112)	(8,789)					(105,163)	(30,521)	64,029
Other receivables	(6,299)	34,500	332,673	(236,392)	(8,698)	21,308				(242,691)	25,802	353,981
Trade payables	1,113,381	(1,444,468)	(4,052,705)	209,077	(119,033)	(150,495)	20,917	(79,148)	(51,375)	1,343,375	(1,642,649)	(4,254,575)
Taxes payable	(828,222)	(132,697)	(674,466)	(149,026)	(82,817)	382,335				(977,248)	(215,514)	(292,131)
Advances from customers	(218,623)	(3,089)	207,020	18,665	(10,423)	9,830				(199,958)	(13,512)	216,850
Leniency agreement	(330,006)	(1,343,803)								(330,006)	(1,343,803)	
Other payables	299,010	124,050	430,714	417,759	126,087	165,981				716,769	250,137	596,695
Cash from operations	9,815,277	3,924,556	7,375,177	2,289,725	1,611,723	212,978			(150,498)	12,105,002	5,536,279	7,437,657
Interest paid	(1,328,420)	(1,648,971)	(1,611,718)	(588,381)	(505,082)	(215,224)				(1,916,801)	(2,154,053)	(1,826,942)
Income tax and social contribution paid	(937,557)	(919,236)	(1,152,847)	(274)	(1,370)					(937,831)	(920,606)	(1,152,847)
Net cash generated by operating activities	7,549,300	1,356,349	4,610,612	1,701,070	1,105,271	(2,246)			(150,498)	9,250,370	2,461,620	4,457,868
Proceeds from the sale of fixed assets and intangible assets	95,133									95,133		
Proceeds from the sale of investments	81,000	450,000								81,000	450,000	
Funds received in the investments' capital reduction	2,254									2,254		
Dividends received	41,791									41,791		
Additions to investments in subsidiaries		(608,181)									(608,181)	
Acquisitions to property, plant and equipment and intangible assets	(2,635,906)	(2,185,567)	(1,844,510)	(70,422)	(87,630)	(892,499)			150,498	(2,706,328)	(2,273,197)	(2,586,511)
Other investments	(2,167)	24,977	34,061							(2,167)	24,977	34,061
Net cash used in investing activities	(2,417,895)	(2,318,771)	(1,810,449)	(70,422)	(87,630)	(892,499)			150,498	(2,488,317)	(2,406,401)	(2,552,450)
Short-term and long-term debt												
Acquired	4,301,626	8,492,341	4,107,626							4,301,626	8,492,341	4,107,626
Payments	(6,592,197)	(8,779,091)	(4,901,593)							(6,592,197)	(8,779,091)	(4,901,593)
Derivative transactions - payments		(810,279)									(810,279)	
Braskem Idesa borrowings												
Acquired					187,959	503,921					187,959	503,921
Payments				(812,929)	(1,080,502)	(469,282)				(812,929)	(1,080,502)	(469,282)
Related parties												
Acquired loans (payment of loans)	72,880	20,637	(882,158)	(72,880)	(20,637)	882,158						
Dividends paid	(1,499,900)	(998,893)	(1,997,984)							(1,499,900)	(998,893)	(1,997,984)
Net provided (used) in financing activities	(3,717,591)	(2,075,285)	(3,674,109)	(885,809)	(913,180)	916,797				(4,603,400)	(2,988,465)	(2,757,312)
Exchange variation on cash of foreign subsidiaries	(309,941)	17,849	541,734	(76,168)	(11,374)	44,908				(386,109)	6,475	586,642
Increase (decrease) in cash and cash equivalents	1,103,873	(3,019,858)	(332,212)	668,671	93,087	66,960				1,772,544	(2,926,771)	(265,252)
Represented by												
Cash and cash equivalents at the beginning of the year	3,480,407	6,500,265	6,908,623	294,686	201,599	134,639				3,775,093	6,701,864	7,043,262
Cash and cash equivalents at the end of the year	4,584,280	3,480,407	6,576,411	963,357	294,686	201,599				5,547,637	3,775,093	6,778,010
Increase (decrease) in cash and cash equivalents	1,103,873	(3,019,858)	(332,212)	668,671	93,087	66,960				1,772,544	(2,926,771)	(265,252)

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12 Property, plant and equipment

(a) Change

	Land	Buildings and Improvements	Machinery, Equipment and Facilities	Projects and Stoppage in Progress (i)	Other	Total
Cost	471,655	5,530,714	36,804,409	3,495,965	1,404,759	47,707,502
Accumulated depreciation/depletion		(1,111,642)	(16,595,497)		(663,653)	(18,370,792)
Balance as of December 31, 2016	471,655	4,419,072	20,208,912	3,495,965	741,106	29,336,710
Acquisitions			149,018	2,090,157	6,066	2,245,241
Additions for acquisition of subsidiary	14,937	122,846	63,081	46,833	92,052	339,749
Capitalized financial charges				130,272		130,272
Foreign currency translation adjustment	5,600	168,554	387,757	56,425	4,877	623,213
Transfers by concluded projects	29,703	145,622	2,216,704	(2,539,041)	147,012	
Disposals	(21,249)	(5,149)	(166,585)	(5,946)	(12,342)	(211,271)
Cost	(21,249)	(7,444)	(525,724)	(5,946)	(21,368)	(581,731)
Depletion		2,295	359,139		9,026	370,460
Depreciation / depletion		(280,448)	(2,275,788)		(146,068)	(2,702,304)
Net book value	500,646	4,570,497	20,583,099	3,274,665	832,703	29,761,610
Cost	500,646	6,058,259	39,211,042	3,274,665	1,755,092	50,799,704
Accumulated depreciation/depletion		(1,487,762)	(18,627,943)		(922,389)	(21,038,094)
Balance as of December 31, 2017	500,646	4,570,497	20,583,099	3,274,665	832,703	29,761,610
Cost - previously disclosed	500,646	6,058,259	39,211,042	3,274,665	1,755,092	50,799,704
Cost - reclassification	68,902	(70,296)	1,038,042	186,606	(92,650)	1,130,604
Cost - reclassified	569,548	5,987,963	40,249,084	3,461,271	1,662,442	51,930,308
Accumulated depreciation/depletion - previously disclosed		(1,487,762)	(18,627,943)		(922,389)	(21,038,094)
Accumulated depreciation/depletion - reclassification		(88,244)	(964,517)		(77,843)	(1,130,604)
Accumulated depreciation/depletion - reclassified		(1,576,006)	(19,592,460)		(1,000,232)	(22,168,698)
Balance as of January 1, 2018	569,548	4,411,957	20,656,624	3,461,271	662,210	29,761,610
Acquisitions		372	201,492	2,439,286	13,199	2,654,349
Capitalized financial charges				178,055		178,055
Foreign currency translation adjustment	32,751	593,228	1,433,855	137,551	30,411	2,227,796
Cost	32,751	674,720	1,727,164	137,551	52,242	2,624,428
Depletion		(81,492)	(293,309)		(21,831)	(396,632)
Transfers by concluded projects		16,477	1,022,560	(1,106,975)	67,938	
Cost		16,477	1,022,560	(1,106,975)	67,938	
Depletion						
Transfers to intangible				(2,922)	(1,539)	(4,461)
Cost				(2,922)	(1,539)	(4,461)
Depreciation						
Other		(2,009)	(40,503)	(3,873)	(1,675)	(48,060)
Depreciation / depletion		(370,035)	(2,487,820)		(151,544)	(3,009,399)
Net book value	602,299	4,649,990	20,786,208	5,102,393	619,000	31,759,890
Cost	602,299	6,676,549	43,024,738	5,102,393	1,784,807	57,190,786
Accumulated depreciation/depletion		(2,026,559)	(22,238,530)		(1,165,807)	(25,430,896)
Balance as of December 31, 2018	602,299	4,649,990	20,786,208	5,102,393	619,000	31,759,890

- (i) On December 31, 2018, the main amounts recorded under this item corresponded to expenses with scheduled maintenance shutdowns in Brazil and at overseas plants that are either in the preparation phase or ongoing (R\$975,509), capitalized financial charges (R\$293,697), inventories of spare parts (R\$441,133), strategic projects in Brazil (R\$125,541) and the strategic projects of Braskem America (R\$1,547,870). The remainder corresponds mainly to various operational projects for maintaining the production capacity of plants.

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The machinery, equipment and facilities of the Company require inspections, replacement of components and maintenance in regular intervals. The Company makes shutdowns in regular intervals that vary from two to six years to perform these activities. These shutdowns can involve the plant as a whole, a part of it, or even only relevant pieces of equipment, such as industrial boilers, turbines and tanks. Shutdowns that take place every six years, for example, are usually made for the maintenance of industrial plants as a whole. Expenses with each scheduled shutdown are included in property, plant and equipment items that were the subject matter of the stoppage and are fully depreciated until the beginning of the following related stoppage. The expenditures with personnel, the consumption of small materials, maintenance and the related services from third parties are recorded, when incurred, as production costs. Property, plant and equipment items are depreciated on a straight-line basis. Projects in progress are not depreciated. Depreciation begins when the assets are available for use.

Based on the analysis cited in Note 3.4(a), the Management of Braskem believes that the plants will operate at their full capacity, or close to it, within the projected period, therefore additional impairment tests of these assets were not necessary. The prices of products manufactured by the Company are quoted in international markets, in the short or medium term, and adjust to the prices of raw materials to preserve the historical margins of the business.

Financial charges are capitalized on the balance of ongoing projects using: (i) the average rate of all financings; and (ii) the exchange variation portion that corresponds to any positive difference between the average rate of financing in the domestic market and the rate cited in item (i).

In 2018, charges amounting to R\$178,055 (R\$130,272 in 2017) were capitalized. The average rate of these charges in the year was 8.78% p.a. (7.78% p.a. in 2017).

(b) Property, plant and equipment by country

	<u>2018</u>	<u>2017</u>
Brazil	16,278,608	16,665,988
Mexico	11,656,910	10,581,347
United States of America	3,539,495	2,275,987
Germany	273,987	229,328
Other	10,890	8,960
	<u>31,759,890</u>	<u>29,761,610</u>

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13 Intangible assets

	Goodwill based on expected future profitability	Brands and Patents	Software licenses	Customers and Suppliers Agreements	Total
Cost	3,187,722	339,512	566,673	772,888	4,866,795
Accumulated amortization	(1,128,848)	(110,880)	(364,336)	(453,644)	(2,057,708)
Balance as of December 31, 2016	2,058,874	228,632	202,337	319,244	2,809,087
Acquisitions		340	27,319	297	27,956
Additions through acquisition on subsidiary			1,316	402	1,718
Foreign currency translation adjustment		8,357	4,759	(932)	12,184
Other		1,107	(124)		983
Cost		1,107	269		1,376
Amortization			(393)		(393)
Amortization		(8,349)	(43,467)	(72,615)	(124,431)
Net book value	2,058,874	230,087	192,140	246,396	2,727,497
Cost	3,187,722	349,316	607,528	772,253	4,916,819
Accumulated amortization	(1,128,848)	(119,229)	(415,388)	(525,857)	(2,189,322)
Balance as of December 31, 2017	2,058,874	230,087	192,140	246,396	2,727,497
Cost - reclassification	(44)	58,515	117,743	121,861	298,075
Cost - reclassified	3,187,678	407,831	725,271	894,114	5,214,894
Accumulated amortization - reclassification	44	(61,252)	(108,644)	(128,223)	(298,075)
Accumulated amortization - reclassified	(1,128,804)	(180,481)	(524,032)	(654,080)	(2,487,397)
Balance as of January 1, 2018	2,058,874	227,350	201,239	240,034	2,727,497
Acquisitions			51,707	272	51,979
Foreign currency translation adjustment		23,966	10,037	(185)	33,818
Cost		27,021	21,053	94,351	142,425
Amortization		(3,055)	(11,016)	(94,536)	(108,607)
Transfers from property, plant and equipment projects and stoppage in progress	-	2,532	1,929		4,461
Other				(1,003)	(1,003)
Cost				(596,557)	(596,557)
Amortization				595,554	595,554
Amortization		(7,551)	(30,780)	(37,439)	(75,770)
Net book value	2,058,874	246,297	234,132	201,679	2,740,982
Cost	3,187,678	437,384	799,960	392,180	4,817,202
Accumulated amortization	(1,128,804)	(191,087)	(565,828)	(190,501)	(2,076,220)
Balance as of December 31, 2018	2,058,874	246,297	234,132	201,679	2,740,982
Average annual rates of amortization		4.96%	11.71%	6.00%	

The Company adopts the following accounting practice for each class of intangible assets:

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(a) Goodwill based on future profitability

The existing goodwill was determined in accordance with the criteria established by the accounting practices adopted in Brazil before the adoption of the IASB pronouncements and represent the excess of the amount paid over the amount of equity of the companies acquired. Such goodwill was systematically amortized until December 2008. As from 2009, it has been subject to annual impairment tests. In November 2018, Braskem conducted an impairment test of the goodwill using the value in use method (discounted cash flow) and did not identify any loss, as shown in the table below:

	<u>Allocated goodwill</u>	<u>Cash flow (CF)</u>	<u>Book value (with goodwill and work capital)</u>	<u>CF/Book value</u>
CGU and operating segments				
CGU - Chemicals South	926,854	9,628,209	2,479,778	3.9
Operating segment - Polyolefins	939,667	21,750,937	8,189,204	2.7
Operating segment - Vinyls	192,353	4,617,326	2,763,882	1.7

(i) The carrying amount includes, in addition to goodwill, tangible and intangible assets with defined useful lives and working capital from each operating segment.

The assumptions adopted to determine the discounted cash flow are described in Note 3.4(b). The WACC used was 11.72% p.a. The inflation rate considered for perpetuity was 3.7%.

Given the potential impact on cash flows of the “discount rate” and “perpetuity”, Braskem conducted a sensitivity analysis based on changes in these variables, with cash flows shown in the table below:

	<u>+0.5% on discount rate</u>	<u>-0.5% on perpetuity</u>
CGU and operating segments		
CGU - Chemicals South	9,099,954	9,249,202
Operating segment - Polyolefins	20,455,434	20,798,767
Operating segment - Vinyls	4,351,801	4,424,347

The main assumptions used for projecting cash flows are related to the projection of macroeconomic indicators, international prices and global and local demand in the countries where Braskem has operational production plants.

Macroeconomic indicators are provided by a widely recognized consulting firm and include items such as: exchange, inflation and interest rates, among others.

Prices for key petrochemical products are obtained from projections made by an international consulting firm. However, final prices take into consideration meetings of specific internal committees and the knowledge of the Company’s experts in preparing the benchmarks for each market. In most cases, for the projected period, the internally projected prices have gone through a new revision compared to those originally projected by the international consulting firm.

Similar to for prices, global demand also is contracted from a specific consulting firm and, in the markets where the Company operates more directly, they consider additional variables for the composition of local demand.

In the Vinyls segment, whose main product is PVC, the projected cash flow exceeded the book value of assets by 67%. The main variables impacting this business are related to fluctuations in the exchange rate, international spreads (especially those related to the prices of naphtha, PVC and Caustic Soda) and Brazilian demand. Effective deviations of these important variables from the Company’s projections could lead to cash flows being lower than the value of the assets.

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(b) Intangible assets with defined useful lives**(b.1) Trademarks and patents**

The technologies acquired from third parties, including those acquired through business combination, are recorded at the cost of acquisition and/or fair value and other directly attributed costs, net of accumulated amortization and provision for impairment, when applicable. Technologies that have defined useful lives and are amortized using the straight-line method based on the term of the purchase agreement (between 10 and 20 years). Expenditures with research and development are accounted for in profit and loss as they are incurred.

(b.2) Contractual customer and supplier relationships

Contractual customer and supplier relationships arising from a business combination were recognized at fair value at the respective acquisition dates. These contractual customer and supplier relationships have a finite useful life and are amortized using the straight-line method over the term of the respective purchase or sale agreement (between 14 and 28 years).

(b.3) Software

All software booked has defined useful life estimated between 3 and 10 years and is amortized using the straight-line method. Costs associated with maintaining computer software programs are recognized in profit and loss as incurred.

(c) Intangible assets by country

	<u>2018</u>	<u>2017</u>
Brazil	2,510,503	2,502,231
Mexico	178,261	151,930
United States of America	26,791	47,357
Germany	25,373	25,948
Other	54	31
	<u>2,740,982</u>	<u>2,727,497</u>

14 Trade account payables

	<u>2018</u>	<u>2017</u>
Trade payables:		
Domestic market	1,551,554	2,287,767
Foreign market	(i) 6,934,598	2,817,917
Present value adjustment - foreign market	(107,648)	(46,888)
	<u>8,378,504</u>	<u>5,058,796</u>
Current liabilities	8,341,252	5,058,796
Non-current liabilities	37,252	
	<u>8,378,504</u>	<u>5,058,796</u>

(i) Considers R\$5.6 billion in purchases of raw material maturing in up to 360 days, for which the Company provides letters of credit issued by financial institutions, where suppliers are the beneficiaries.

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15 Borrowings

(a) Borrowings

	Annual financial charges	2018	2017
Foreign currency			
Bonds	Note 15 (b)	21,930,575	20,082,588
Export prepayment	Note 15 (c)	810,542	781,573
Export credit notes	Exchange variation + 7.30		679,895
Working capital	US dollar exchange variation + 3.15%		883,181
Working capital	Argentine Peso exchange variation	48	
Investments	Note 15 (d)	620,160	
Other - SACE	Note 15 (e)	1,147,397	
Transactions costs		(346,921)	(285,657)
		24,161,801	22,141,580
Current liabilities		610,922	985,639
Non-current liabilities		23,550,879	21,155,941
Total		24,161,801	22,141,580
Local currency			
Export credit notes	100.00 of CDI + 0.70	406,258	
Export credit notes	105.00 and 108.00 of CDI		508,146
BNDES	TJLP + interest between 0.00 and 2.62		31,347
BNDES	SELIC + 2.32		22,039
BNDES	Interest between 3.50 and 4.00	52,081	132,020
BNB/ FINEP/ FUNDES/FINISA/FINAME	5.83%	239,969	486,227
FINAME	TJLP + 6.00	555	2,293
Fundo de Desenvolvimento do Nordeste (FDNE)	6.5%	37,099	42,045
Other	19.14%	426	655
Transactions costs		(33)	(4,931)
		736,355	1,219,841
Current liabilities		126,514	199,142
Non-current liabilities		609,841	1,020,699
Total		736,355	1,219,841
Foreign currency and local currency			
Current liabilities		737,436	1,184,781
Non-current liabilities		24,160,720	22,176,640
Total		24,898,156	23,361,421

(i) Contracts with advanced settlement.

(ii) Contracts partially settled in advance in the amount of R\$32.287.

(iii) Contracts partially settled in advance in the amount of R\$138.230.

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(b) Bonds

Issue date	Issue amount		Maturity	Interest (% per year)	Interest	
	US\$				2018	2017
June-2008	500,000		June-2018	7.25		440,274
May-2010	400,000		May-2020	7.00	81,434	159,341
May-2010	350,000		May-2020	7.00	1,370,156	1,169,732
October-2010	450,000	(i)	no maturity date	7.38	985,767	1,514,826
April-2011	750,000		April-2021	5.75	2,676,195	2,502,351
July-2011	500,000		July-2041	7.13	1,997,984	1,705,722
February-2012	250,000		April-2021	5.75	980,304	836,907
February-2012	250,000		no maturity date	7.38	985,767	841,570
May-2012	500,000		May-2022	5.38	1,954,177	1,668,323
July-2012	250,000		July-2041	7.13	998,992	852,861
February-2014	500,000		February-2024	6.45	1,988,773	1,697,859
May-2014	250,000		February-2024	6.45	994,387	848,929
October-2017	500,000		January-2023	3.50	1,969,609	1,667,025
October-2017	1,250,000		January-2028	4.50	4,947,030	4,176,868
Total	6,700,000				21,930,575	20,082,588

(i) Part of the contracts settled in the amount of R\$825,720.

(c) Export pre-payment

Issue date	Initial amount of the transaction (US\$ thousand)	Maturity	Charges (% per year)	Interest	
				2018	2017
January-2013	200,000	November-2022	US dollar exchange variation + semiannual Libor + 1.10	311,082	331,701
September-2017	135,000	March-2017	US dollar exchange variation + semiannual Libor + 1.61	499,460	449,872
Total	335,000			810,542	781,573

(d) Capital raised for investments

The subsidiary Braskem America contracted a credit facility in the amount of up to US\$225 million that is secured by Euler Hermes, a German export credit agency, which will be used to finance a portion of the investment in the new PP plant located in La Porte, Texas, United States. The funds will be released in accordance with the progress of the project's construction and the total amount funded is expected to be disbursed by December 30, 2020.

Issue date	Initial amount of the transaction (US\$)	Maturity	Charges (% per year)	Interest	
				2018	2017
July-2018	158,150	December-2028	Us dollar exchange variation + semiannual Libor + 0.65	620,160	
Total	158,150			620,160	

(i) US\$130,650 released in July 2018, US\$13,677 released in September 2018 and US\$13,823 released in December 2018.

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(e) Others - SACE

The subsidiary Braskem Netherlands B.V. secured a financing facility of US\$295 million guaranteed by SACE Covered Facility Agreement, the Italian export credit agency.

Issue date	Initial amount of the transaction (US\$)	Maturity	Charges (% per year)	2018	2017
November-2018	295,125	November-2028	Us dollar exchange variation + semianual Libor + 0.90	1,147,397	
Total	295,125			1,147,397	

(f) Payment schedule

The maturity profile of the long-term amounts is as follows:

	2018	2017
2019		1,245,895
2020	1,748,531	2,199,869
2021	3,933,857	3,655,465
2022	2,256,444	1,801,844
2023	2,355,549	1,709,587
2024	3,336,032	2,539,216
2025	234,270	45,994
2026	234,296	44,239
2027	205,157	17,586
2028 and thereafter	9,856,584	8,916,945
Total	24,160,720	22,176,640

(g) Guarantees

Braskem gave collateral for part of its borrowings as follows:

Loans	Maturity	Total debt 2018	Total guaranteed	Guarantees
BNB	December-2022	88,909	88,909	Mortgage of plants, pledge of machinery and equipment
BNB	March-2023	32,093	32,093	Bank surety
BNDES	January-2021	52,081	52,081	Mortgage of plants, land and property, pledge of machinery and equipment
FUNDES	June-2020	47,929	47,929	Mortgage of plants, land and property, pledge of machinery and equipment
FINEP	July-2024	61,725	61,725	Bank surety
FINEP	December-2019	2,872	2,872	Bank surety, pledge of equipment and current account lockout (restricted fund).
FINAME	April-2021	1,496	1,496	Pledge of equipment
FINISA	December-2023	5,500	5,500	Bank surety
OTHER	July-2021	424	424	Pledge of equipment
Total		293,029	293,029	

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16 Braskem Idesa Financing

Identification	Initial value of operation US\$	Maturity	Charges (% per year)	2018	2017
Project finance (i)					
Project finance I	700,000	February-2027	Us dollar exchange variation + quarterly Libor + 3.25	2,335,825	2,179,981
Project finance II	210,000	February-2027	Us dollar exchange variation + 6.17	657,689	621,140
Project finance III	600,000	February-2029	Us dollar exchange variation + 4.33	1,983,113	1,827,811
Project finance IV	660,000	February-2029	Us dollar exchange variation + quarterly Libor + 3.88	2,225,042	2,032,093
Project finance V	400,000	February-2029	Us dollar exchange variation + quarterly Libor + 4.65	1,326,901	1,221,997
Project finance VI	89,994	February-2029	Us dollar exchange variation + quarterly Libor + 2.73	297,158	273,887
Project finance VII	533,095	February-2029	Us dollar exchange variation + quarterly Libor + 4.64	1,768,389	1,627,479
Transactions costs				(89,525)	(92,938)
Total	3,193,089			10,504,592	9,691,450
Current liabilities				10,504,592	9,691,450
Total				10,504,592	9,691,450

In keeping with the Company's Financial Policy, the investment in the Braskem Idesa petrochemical complex has been financed under a Project Finance structure, in which the construction loan must be repaid using exclusively the cash generated by Braskem Idesa and with the shareholders pledging limited guarantees. Accordingly, this financing structure includes guarantees typical to transactions of this kind, such as assets, receivables, cash generation and other rights of Braskem Idesa.

Project Finance borrowings include various contractual obligations (covenants) that are typical in contracts of this kind.

On the reporting date of the financial statements of December 31, 2018, the company remains in breach of part of its non-financial contractual obligations. As a result, remains the reclassification to the current liability the entire balance of the non-current portion of the loan outstanding, in the amount of R\$9,554,476, in accordance with IAS 1 (Presentation of Financial Statements).

In accordance with the aforementioned accounting standards, reclassification is required in situations in which the breach of certain contractual obligations entitles creditors to request from Braskem Idesa the prepayment of obligations in the short term. In this context, note that none of the creditors requested said prepayment of obligations and that Braskem Idesa has been settling its debt service obligations in accordance with their original maturity schedule.

As described in note 35.1, on October 9, 2019, Braskem Idesa obtained the waiver for such breaches with its creditors, therefore the long term debt will be reclassified from current liabilities back to non-current liabilities, in the next annual financial statements

The following amortization schedule presents the original long-term maturities, excluding the reclassification to current liabilities arising from the aforementioned breach of contractual obligations.

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	<u>2018</u>	<u>2017</u>
2019		748,071
2020	1,016,916	877,450
2021	1,161,108	1,002,270
2022	968,519	835,009
2023	1,280,154	1,105,295
2024	1,385,087	1,195,682
2025	1,381,192	1,195,096
2026	1,194,964	1,052,156
2027	582,393	474,438
2028 and thereafter	584,143	422,266
Total	<u>9,554,476</u>	<u>8,907,733</u>

17 Debentures

<u>Issue date</u>	<u>Series</u>	<u>Maturity</u>	<u>Annual financial charges (%)</u>	<u>2018</u>	<u>2017</u>
March-2013	Single	March-2025	IPCA + 6%	210,506	216,968
September-2013	Single	September-2025	126,5% of CDI	84,003	96,356
				<u>294,509</u>	<u>313,324</u>
Current liabilities				27,732	27,183
Non-current liabilities				266,777	286,141
Total				<u>294,509</u>	<u>313,324</u>

(a) Payment schedule

The amount of debentures with long-term maturities, is as follows:

	<u>2018</u>	<u>2017</u>
2019		26,629
2020	44,811	43,674
2021	50,722	49,326
2022	50,745	49,326
2023	50,769	49,326
2024	50,796	49,326
2025	18,934	18,534
Total	<u>266,777</u>	<u>286,141</u>

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(b) Guarantees

The Company entered into agreements for the fiduciary assignment of receivables, with the maintenance of collection accounts in order to meet the debt service equivalent for up to three months of future installments, in accordance with the respective assignment agreements.

18 Reconciliation of financing activities in statement of cash flow

	Current and non-current					
	Borrowings, debentures and Braskem Idesa financing					
	Borrowings	Debentures	Total borrowings and debentures	Braskem Idesa financing	Total	Dividends
Balance at December 31, 2017	23,361,421	313,324	23,674,745	9,691,450	33,366,195	3,850
Acquired	4,301,626		4,301,626		4,301,626	
Payments	(6,569,073)	(23,124)	(6,592,197)	(812,929)	(7,405,126)	(1,499,900)
Cash used in financing activities	(2,267,447)	(23,124)	(2,290,571)	(812,929)	(3,103,500)	(1,499,900)
Other changes						
Interest paid	(1,304,811)	(23,609)	(1,328,420)	(588,381)	(1,916,801)	
Interest and monetary and exchange variations, net	3,703,892	27,918	3,731,810	604,837	4,336,647	
Currency translation adjustments	1,405,101		1,405,101	1,609,615	3,014,716	
Additional dividends approved in the board meeting						1,500,000
Mandatory minimum dividends						667,419
Prescribed dividends / other						1,026
	3,804,182	4,309	3,808,491	1,626,071	5,434,562	2,168,445
Balance at December 31, 2018	24,898,156	294,509	25,192,665	10,504,592	35,697,257	672,395

19 Financial instruments

19.1 Fair Value

(a) Fair value calculation

The fair value of financial assets and liabilities is estimated as the amount for which a financial instrument could be exchanged in an arm's length transaction and not in a forced sale or settlement. The following methods and assumptions were used to estimate the fair value:

- (i) Financial assets classified as fair value through profit and loss or as fair value through other comprehensive income are measured in accordance with the fair value hierarchy (Level 1 and Level 2), with inputs used in the measurement processes obtained from sources that reflect the most recent observable market prices.
- (ii) Trade accounts receivable and trade payables, mostly classified as amortized cost, corresponds to their respective carrying amounts due to the short-term maturity of these instruments. When purchase or sale prices include material financial charges, the securities are adjusted to their present value.
- (iii) The fair value of borrowings is estimated by discounting future contractual cash flows at the market interest rate, which is available to Braskem in similar financial instruments.
- (iv) The fair value of bonds is based on prices negotiated in financial markets, plus the respective carrying amount of interests.

The fair values of the remaining assets and liabilities correspond to their carrying amount.

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(b) Fair value hierarchy

The Company adopts IFRS 7 to measure the fair value of financial instruments recorded in the balance sheet; this requires disclosure in accordance with the following fair value measurement hierarchy:

Level 1 – fair value obtained through prices quoted (without adjustments) in active markets for identical assets or liabilities, such as the stock exchange; and

Level 2 – fair value obtained from financial models using directly observable market data, such as discounted cash flow, when the instrument is a forward purchase/sale or a swap contract, or such as the Black-Scholes model, when the instrument has the characteristics of an option. To measure the credit risk of the parties involved in derivative instruments, Braskem uses CVA (Credit Valuation Adjustment) or DVA (Debt Valuation Adjustment) models, applied flow by flow on the mark-to-market value of each instrument. The Company adopts the ratings of the other parties for positive flows and its own rating for negative flows, both available in the market and disclosed by renowned rating agencies, as a necessary assumption to define the probability of default.

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19.2 Non-derivative financial instruments and leniency agreement (Note 23.3)

	Note	Classification by category	Fair value hierarchy	Book value		Fair value	
				2018	2017	2018	2017
Cash and cash equivalents	5						
Cash and banks		Amortized cost		2,228,964	1,428,766	2,228,964	1,428,766
Financial investments in Brazil		Fair value through profit or loss	Level 2	1,754,561	1,706,784	1,754,561	1,706,784
Financial investments abroad		Fair value through profit or loss	Level 2	1,564,112	639,543	1,564,112	639,543
				5,547,637	3,775,093	5,547,637	3,775,093
Financial investments	6						
<i>Letras financeiras do tesouro - LFT</i>		Fair value through profit or loss	Level 2	2,247,272	1,816,889	2,247,272	1,816,889
Time deposit investments		Amortized cost	Level 2	49,630	440,616	49,630	440,616
Time deposit investments		Fair value through profit or loss	Level 2		15,764		15,764
Other		Fair value through profit or loss	Level 2	70,709	39,739	70,709	39,739
				2,367,611	2,313,008	2,367,611	2,313,008
Trade accounts receivable	6	Amortized cost		3,045,463	3,244,851	3,045,463	3,244,851
Trade accounts receivable	6	Fair value through profit or loss	Level 2	47,540	73,841	47,540	73,240
Trade payables	14	Amortized cost		8,378,504	5,058,796	8,378,504	5,058,796
Borrowings	15	Amortized cost					
Foreign currency - Bond			Level 1	21,930,575	20,082,588	22,028,040	21,230,567
Foreign currency - other borrowings			Level 2	2,578,147	2,344,649	2,277,069	2,228,608
Local currency			Level 2	736,388	1,224,772	598,926	1,039,873
				25,245,110	23,652,009	24,904,035	24,499,048
Braskem Idesa borrowings	16	Amortized cost	Level 2	10,594,117	9,784,388	9,367,878	8,675,711
Debentures	17	Amortized cost	Level 2	294,509	313,324	239,976	214,815
Loan ton non-controlling shareholder of Braskem Idesa		Amortized cost		2,183,830	1,756,600	2,183,830	1,756,600
Leniency agreement	23.3	Amortized cost		1,842,518	2,004,590	1,842,518	2,004,590

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19.3 Derivative financial instruments

19.3.1 Changes

Identification	Note	Fair value hierarchy	Operation characteristics		Accumulated OCI (equity)	Net (Asset)/ Liability 2017	Change in fair value	Financial settlement	Net (Asset)/ Liability 2018
			Principal exposure	Derivatives					
Non-hedge accounting transactions									
Exchange swap		Level 2	Argentine peso	Dollar			752	(235)	517
NCE swap		Level 2	Real	Dollar			5,231		5,231
							5,983	(235)	5,748
Hedge accounting transactions									
Dollar put option	19.3.1 (a.i)	Level 2	Real	Dollar	(40,338)	(3,793)	39,932		36,139
Dollar swap	19.3.1 (a.ii)	Level 2	CDI	Dollar+Interests	(183,808)		183,398		183,398
Interest rate swaps	19.3.1 (a.iii)	Level 2	Libor	Fixed rates	(209,067)	(25,791)	(41,590)	(283)	(67,664)
					(433,213)	(29,584)	181,740	(283)	151,873
Derivatives									
Current assets						(3,793)			(27,714)
Non-current assets						(32,666)			(46,664)
Current liabilities						6,875			70,305
Non-current liabilities									161,694
						(29,584)			157,621

The counterparties in these contracts are constantly monitored based on the analysis of their respective ratings and Credit Default Swaps – CDS. Braskem has many bilateral risk mitigators in its derivative contracts, such as the possibility of depositing or requesting deposits of a guarantee margin from the counterparties it deems convenient.

Derivative financial instruments designated for hedge accounting are presented in the balance sheet at their fair value in an asset or liability account depending on whether the fair value represents a positive or a negative balance to Braskem, respectively, and are necessarily classified as "fair value through profit and loss".

All hedge financial instruments held at December 31, 2018 were contracted on Over the Counter - OTC markets with large financial counterparties under global derivative contracts in Brazil or abroad.

Braskem's Financial Policy provides for the active management and continued protection against undesired fluctuations in currencies and rates arising from its operations and financial items, with the possibility of contracting derivative instruments (swaps, NDFs, options, etc.). The other market risks are addressed on a case-by-case basis for each transaction. In general, Braskem assesses the need for hedging in the analysis of prospective transactions and seeks to customize the hedge and keeps it in place for the same period of the hedged transaction.

Braskem may elect derivatives for the application of hedge accounting in accordance with IFRS 9. The hedge designation is not mandatory. In general, Braskem will elect to designate financial instruments as hedges when the application is expected to provide a significant improvement in the presentation of the offsetting effect on the changes in the hedged items.

The effective portion of the changes in the fair value of hedge derivatives and of the exchange variation of financial liabilities designated and qualified as sales flow hedge is recognized in equity, under "Other comprehensive income". These amounts are transferred to profit and loss for the periods in which the hedged item affects the financial results. The ineffective portion is recognized immediately in profit and loss as "Financial result."

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When a hedge instrument matures or is sold or when it no longer meets the criteria for hedge accounting, it is prospectively discontinued and any cumulative gain or loss in equity remains in equity and is recognized in financial result when the hedged item or transaction affects profit and loss. If the hedged item or transaction is settled in advance, discontinued or is not expected to occur, the cumulative gain or loss in equity is immediately transferred to financial result.

(a) Hedge accounting transactions

(a.i) Dollar call and put option

On December 31, 2018, Braskem held a total notional amount of put options of R\$2.2 billion, with an average strike price of 3.29 R\$/US\$. Simultaneously, the Company also held a total notional amount of call options of R\$1.6 billion, with an average strike price of R\$/US\$4.61. The operations have a maximum term of 24 months. Dollar-denominated future sales in Brazilian real were designated for hedge accounting, with the months of revenue recognition always coinciding with the months of the options.

According to IFRS 9, the accounting standard in force as from January 1, 2018, the amount of the mark-to-market (“MtM”) adjustment, as well as the amount of the premium of the operation, is recognized as “Other comprehensive income” (“OCI”) under shareholders' equity. The fair value of the options is composed of the notional value of the operations multiplied by the sum of the intrinsic value, which refers to the amount by which the option exceeded the exercise price at the time of evaluation, and the time value of the derivative until its maturity. From the beginning of operations and their respective designations as hedge accounting, the Company began to recognize in OCI all possible premiums paid on the options purchased, in the form of hedge costs. On December 31, 2018, the amount recorded in OCI as cost of hedge is R\$4.1 million.

(a.ii) Dollar Swap

To remain aligned with its risk management strategy, the Company contracted foreign exchange derivative operations (“swaps”) in the aggregate amount of R\$1.3 billion, with annual maturities over the following 5 years starting January 30, 2019. These operations were designated to cash flow hedge accounting, where the hedging instruments are foreign exchange derivatives and the hedged objects are highly probable future revenues in the domestic market subject to fluctuations in Brazilian real/U.S. dollar price. Accordingly, the mark-to-market adjustment of the effective portion of the hedge will be recognized under shareholders equity in the line “Other comprehensive income” and will be recognized in the financial result only upon the maturity of each installment.

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(a.iii) Hedge operation by Braskem Idesa related to Project finance**Interest rate swap linked to Libor**

<u>Identification</u>	<u>Nominal value</u> US\$	<u>Hedge</u> (interest rate per year)	<u>Maturity</u>	<u>Fair value</u>	
				<u>2018</u>	<u>2017</u>
Swap Libor I to VI	1,312,892	1.9825%	May-2025	(67,664)	(25,791)
Total	1,312,892			(67,664)	(25,791)
Derivatives					
Current assets				(21,000)	
Non-Current assets				(46,664)	(32,666)
Current liabilities					6,875
Total				(67,664)	(25,791)

Braskem Idesa contracted swap operations with the purpose of offsetting part of the Libor variation arising from the financings mentioned in Note 16. This hedge operation shares the same guarantees with the Project finance.

19.4 Non-derivative financial liabilities designated to hedge accounting**(a.i) Future exports in U.S. dollars**

On May 1, 2013, Braskem S.A. designated non-derivative financial instrument liabilities, denominated in U.S. dollars, as hedge for the flow of its highly probable future exports. Thus, the impact of exchange rates on future cash flows in dollars derived from these exports is offset by the foreign exchange variation on the designated liabilities, partly eliminating the volatility of results. The exchange rate on the date of the designation was US\$ 1: R\$2.0017. In addition to this hedge accounting, on October 10, 2017, Braskem S.A. designated new financial instruments for the hedging of future sales, which mature in 2028. The hedged exchange rate was US\$1: R\$3.1688.

Therefore, on December 31, 2018, exports that were designated not yet realized and not discontinued are shown below:

	<u>Total nominal value</u> US\$
2019	733,980
2020	723,999
2021	716,000
2022	719,000
2023	718,372
2024	688,854
2028	1,250,000
	5,550,205

There were no changes in financial instruments designated for this hedge in the period ended December 31, 2018.

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The Company considers these exports in the selected period (2019/2028) as highly probable, based on the following factors:

- In recent years, Braskem S.A. exported an average US\$3.1 billion per year, which represents around 3 to 4 times the annual exports of the hedged exports.
- Hedged exports represent between 20% and 30% of the export flows planned by the Company.

The exports of the Company are not sporadic or occasional, but constitute an integral part of its strategy and of the petrochemical business, in which competition is global.

On December 31, 2018, the maturities of financial liabilities designated were as follows:

	Total nominal value US\$
2019	733,980
2020	723,999
2021	716,000
2022	719,000
2023	718,372
2024	688,854
2028	1,250,000
	5,550,205

To ensure the continuity of the hedging relationship, the Company plans to refinance and/or substitute these hedge instruments to adjust them to the schedule and value of the hedged exports. The rollover or replacement of the hedge instrument are provided for in IFRS 9. This explains the fact that liabilities designated for hedge are not necessarily equivalent to the exports designated in the year.

The following table provides the balances of exchange variation recognized in the Company's net financial income (expenses) due to the realization of exports designated for this hedge in the 12-month period ended December 31, 2018:

	Total nominal value US\$	Conversion rate at Inception R\$/US\$	Closing rate R\$/US\$	Gross nominal value
First quarter	189,325	2.0017	3.3082	247,353
Second quarter	208,405	2.0017	3.2769	265,758
Third quarter	193,190	2.0017	3.3080	252,364
Fourth quarter	196,973	2.0017	3.3080	257,307
	787,893			1,022,782

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The changes in foreign exchange variation and Income Tax and Social Contribution under “Other comprehensive income” of this hedge are as follows:

	<u>Exchange variation</u>	<u>IR and CSL</u>	<u>Net effect</u>
At December 31, 2017	(6,814,142)	2,316,808	(4,497,334)
Exchange variation recorded in the period on OCI / IR and CSL	(3,145,857)	1,069,591	(2,076,266)
Exchange variation transferred to profit or loss / IR and CSL	1,022,782	(347,746)	675,036
At December 31, 2018	(8,937,217)	3,038,653	(5,898,564)

The realizations expected for 2019 will occur through the payments of financial instruments in conformity with exports made, and the exchange variation recorded in “Other comprehensive income” will be written off to the financial results. For all quarters of the year, realizations will be made at the discounted cash flow rates. The quarterly schedule of hedged exports in 2019 follows:

	<u>Total nominal value US\$</u>
First quarter	150,000
Second quarter	183,495
Third quarter	183,495
Fourth quarter	216,990
	<u>733,980</u>

(a.ii) Liabilities related to the Project finance of future sales in U.S. dollar

On October 1, 2014, the subsidiary Braskem Idesa designated its liabilities in the amount of R\$2,878,936 related to Project Finance, denominated in U.S. dollar, as hedge instruments to protect highly probably future sales flows. Due to the disbursements by the project's financiers in 2015, Braskem Idesa designated new amounts in April and September 2015, of US\$290,545 and US\$23,608, respectively, for hedge accounting. Therefore, the impact of exchange variation on future flows of sales in U.S. dollar derived from these sales in dollar will be offset by the exchange variation on the designated liabilities, partially eliminating the volatility in the results of the subsidiary.

The Management of Braskem Idesa believes these future sales are highly probable, based on the following:

- In Mexico, domestic sales can be made in U.S. dollar. In 2016, the company began to operate and sell products, including sales in U.S. dollar in the domestic and international markets.
- The hedged flow corresponds to less than 35% of the planned revenue flow of the project over the designated period. The current amount of sales already meets the volume of designated hedge, which confirms the highly probable nature of the designated cash flow.
- The financing was obtained through a Project Finance structure and will be repaid exclusively through the cash generation of the project (Note 16). Therefore, the existence of the debit is directly associated with the highly probable nature of the future sales in U.S. dollar.

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As of December 31, 2018, designated and unrealized sales were as follows:

	Nominal value
	US\$
2019	229,270
2020	266,690
2021	303,392
2022	253,204
2023	333,093
2024	359,559
2025	357,903
2026	309,240
2027	152,103
2028	124,654
2029	31,164
	2,720,272

The following table shows the changes in financial instruments designated for this hedge in the year:

	2017	Sales in the year	Hedge discontinued	US\$
				2018
Designated balance	2,930,246	(221,790)	400	2,708,856

In 2018, the maturities of designated financial liabilities were distributed as follows:

	Nominal value
	US\$
2019	228,850
2020	266,187
2021	302,816
2022	252,723
2023	332,458
2024	358,873
2025	357,221
2026	308,650
2027	150,419
2028	124,347
2029	26,312
	2,708,856

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The following table provides the amounts of hedge accounting discontinued in the year ended December 31, 2018 (US\$11,416), which is recorded in Braskem Idesa's shareholders' equity under "Other comprehensive income" and will be transferred to financial income (expenses) according to the schedule of future hedged sales as they occur:

	<u>Total nominal value US\$</u>	<u>Conversion rate at Inception MXN/US\$</u>	<u>Closing rate MXN/US\$</u>	<u>Total nominal value MXN</u>	<u>Gross nominal value</u>
Hedge discontinued	11,416	13.4541	17.9915	51,799	8,707
				<u>51,799</u>	<u>8,707</u>

The following table provides the balances of exchange variation recognized in Braskem Idesa's financial income (expenses) due to the realization of sales designated for this hedge in the year ended December 31, 2018:

	<u>Total nominal value US\$</u>	<u>Conversion rate at Inception MXN/US\$</u>	<u>Closing rate MXN/US\$</u>	<u>Total nominal value MXN</u>	<u>Gross nominal value</u>
First quarter	53,889	13.6649	18.6631	269,348	46,934
Second quarter	55,136	13.6560	19.4484	319,370	59,371
Third quarter	56,383	13.6536	18.8320	291,974	60,810
Fourth quarter	56,382	13.6537	20.2473	371,757	69,455
	<u>221,790</u>			<u>1,252,449</u>	<u>236,570</u>

The changes in foreign exchange variation and Income Tax and Social Contribution under "Other comprehensive income" are as follows:

	<u>Exchange variation</u>	<u>IR</u>	<u>Net effect</u>
At December 31, 2017	(3,545,639)	1,064,426	(2,481,213)
Exchange variation recorded in the period on OCI / IR	16,681	(5,004)	11,677
Exchange variation transferred to profit or loss / IR	236,570	(70,971)	165,599
At December 31, 2018	<u>(3,292,388)</u>	<u>988,451</u>	<u>(2,303,937)</u>

Effectiveness tests were conducted as set forth in IFRS 9 and all operations were deemed effective in reducing the dispersion of revenue from sales designated for hedge, when evaluated in Pesos.

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The realizations expected for 2019 will occur in accordance with the payments under the project finance, and the exchange variation recorded in "Other comprehensive income" will be written off to the financial results. Below is the quarterly schedule of hedged sales in U.S. dollars in 2019:

	Nominal value US\$
First quarter	56,382
Second quarter	56,383
Third quarter	57,629
Fourth quarter	58,876
	<u>229,270</u>

19.5 Credit quality of financial assets

(a) Trade accounts receivable

Virtually none of Braskem's clients have risk ratings assigned by credit rating agencies. For this reason, Braskem developed its own credit rating system for all accounts receivable from clients in Brazil and abroad.

On December 31, 2018, the credit ratings for the domestic and foreign market were as follows:

	(%)
	<u>2018</u>
1 Minimum risk	67.50
2 Low risk	18.60
3 Moderate risk	7.61
4 High risk	5.02
5 Very high risk (i)	1.27

On December 31, 2017, the credit ratings for the domestic market were as follows:

	(%)
	<u>2017</u>
1 Minimum risk	18.84
2 Low risk	50.84
3 Moderate risk	13.33
4 High risk	13.40
5 Very high risk (i)	3.59

(i) Most clients in this group are inactive and the respective accounts are in the process of collection actions in the courts. Clients in this group that are still active buy from Braskem and pay in advance.

Default indicators:

	Last 12 months	
	<u>Domestic market</u>	<u>Export market</u>
December 31, 2018	0.08%	0.45%
December 31, 2017	0.08%	0.19%
December 31, 2016	0.18%	0.04%

This calculation considers the amount of accounts receivables overdue more than 5 days for the domestic market and 30 days for the international market, divided by consolidated gross revenue in the last 12 months.

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(b) Other financial assets

In order to determine the credit ratings of counterparties of financial assets classified under cash and cash equivalents and financial investments, Braskem uses the risk rating of agencies Standard & Poor's, Moody's and Fitch Ratings, within the limits established in its financial policy approved by the Board of Directors.

	<u>2018</u>	<u>2017</u>
Financial assets with risk assessment		
AAA	4,294,100	3,569,392
AA+	1,175,098	27,094
AA	79,136	8,047
AA-	1,076	209,389
A+	1,103,647	1,465,107
A	165,899	349,823
A-	169,580	
BBB+	917,541	453,367
BB+	252	
BB-	29	
	<u>7,906,358</u>	<u>6,082,219</u>
Financial assets without risk assessment		
Other financial assets with no risk assessment	(i) 8,890	5,882
	<u>8,890</u>	<u>5,882</u>
Total	<u><u>7,915,248</u></u>	<u><u>6,088,101</u></u>

(i) Investments approved by the Management of the Company, in accordance with the financial policy.

19.6 Sensitivity analysis

Financial instruments, including derivatives, may be subject to changes in their fair value as a result of the variation in commodity prices, foreign exchange rates, interest rates, shares and share indexes, price indexes and other variables. The sensitivity of the derivative and non-derivative financial instruments to these variables are presented below:

(a) Selection of risks

On December 31, 2018, the main risks that can affect the value of Braskem's financial instruments are:

- Brazilian U.S. dollar/real exchange rate;
- Mexican peso/Brazilian real exchange rate;
- Euro/Brazilian real exchange rate;
- Libor floating interest rate;
- Selic interest rate;
- CDI interest rate;
- TJLP interest rate; and
- IPCA interest rate.

For the purposes of the risk sensitivity analysis, Braskem presents the exposures to currencies as if they were independent, that is, without reflecting in the exposure to a foreign exchange rate the risks of the variation in other foreign exchange rates that could be directly influenced by it.

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(b) Value at risk

The value at risk of the derivatives held by Braskem which is defined as the loss that could result in one month as from December 31, 2018, with a probability of 5%, and under normal market conditions, was estimated by the Company at US\$8,279 for put options and call options (Note 19.3.1 (a.i)), US\$38,573 for the swap of Libor related to Braskem Idesa project, US\$27,756 for Dollar swap (Note 19.3.1(a.ii)) and US\$8,503 for NCE swap.

(c) Selection of scenarios

(c.1) Probable scenario

The *Focus* Market Readout published by the Central Bank of Brazil on was used to create the probable scenario for the U.S. dollar/Brazilian real exchange rate, the Selic interest rate and the CDI interest rate, based on December 28, 2018. According to the Market Readout, at the end of 2019, the U.S. dollar will depreciate by 1.93% against the year-end PTAX exchange rate on December 31, 2018, while the Selic rate will reach 7.13% p.a. The Selic rate is used as benchmark for sensitivity analysis of the CDI rate.

The probable scenario for the TJLP is an increase of 0.63 percentage point from the current rate of 7.06%, i.e., considering the same pace of decrease in the Selic basic interest rate. The Market Readout does not publish forecasts for the Libor interest rate. Therefore, to determine the probable scenario, Braskem considered a 5% increase. For adverse scenarios, Braskem considered 25% and 50% increases on current market levels.

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(c.2) Possible and extreme adverse scenario

The sensitivity values in the table below are the changes in the value of the financial instruments in each scenario.

Instrument / Sensitivity	Gain (losses)		
	Probable	Possible adverse (25%)	Extreme adverse (50%)
Brazilian real/U.S. dollar exchange rate			
Bonds	418,995	(5,426,211)	(10,852,422)
Braskem Idesa borrowings	204,511	(2,648,529)	(5,297,058)
Export prepayments	15,647	(202,635)	(405,271)
Investments	11,972	(155,040)	(310,080)
Sace	22,150	(286,849)	(573,699)
Dollar put option	31,532	(708,357)	(2,000,912)
Dollar swap	38,308	(353,647)	(717,505)
Swap NCE	7,865	(101,872)	(203,747)
Financial investments abroad	70,689	(915,461)	(1,830,922)
Libor floating interest rate			
Export prepayments	(5,133)	(25,665)	(51,330)
Swaps	13,747	67,773	133,197
Braskem Idesa borrowings	(82,386)	(411,928)	(823,857)
CDI interest rate			
Export credit notes	(884)	(21,986)	(58,762)
Debentures	9,416	232	(10,035)
Financial investments in local currency	26,228	67,665	135,371
IPCA interest rate			
Debentures	(5,879)	(21,556)	(44,125)
TJLP interest rate			
FINAME	(5)	(15)	(31)

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20 Taxes payable

	<u>2018</u>	<u>2017</u>
Brazil		
IPI	64,672	60,917
IR and CSL	57,664	405,567
ICMS	239,126	257,720
PIS and COFINS	145,090	82,140
Other	36,454	52,926
Other countries		
IR	11,604	66,059
Value-added tax	7,482	22,242
Other	25,085	
Total	<u>587,177</u>	<u>947,571</u>
Current liabilities	501,273	894,769
Non-current liabilities	85,904	52,802
Total	<u>587,177</u>	<u>947,571</u>

21 Income tax ("IR") and social contribution ("CSL")

21.1 Reconciliation of the effects of income tax and social contribution on profit and loss

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Income before IR and CSL and after discontinued operations	3,604,736	5,264,577	(140,010)
IR and CSL at the rate of 34%	(1,225,610)	(1,789,956)	47,603
Permanent adjustments to the IR and CSL calculation basis			
IR and CSL on equity in results of investees	(302)	2,201	10,227
IR and CSL accrued in previous years			(46,460)
Deferred tax losses and negative base		39,092	
Tax benefits (Sudene and PAT)		87,186	
Difference of rate applicable to each country	(i) 468,129	250,130	81,638
Fine in leniency agreement		(117,140)	(692,299)
Other permanent adjustments	21,232	170,805	(16,755)
Effect of IR and CSL on results of operations	<u>(736,551)</u>	<u>(1,357,682)</u>	<u>(616,046)</u>
Breakdown of IR and CSL:			
Current IR and CSL	(509,774)	(869,493)	(898,845)
Deferred IR and CSL	(226,777)	(488,189)	282,799
Total	<u>(736,551)</u>	<u>(1,357,682)</u>	<u>(616,046)</u>

(i) Includes the impact from the difference between IR/CSL tax rate in Brazil (34%) used for the preparation of this note and the tax rates in countries where the subsidiaries abroad are located, as follows:

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	Headquarters (Country)	Official rate - % 2018
Braskem Alemanha	Germany	31.18
Braskem America e Braskem America Finance	(i) USA	21.00
Braskem Argentina	Argentina	30.00
Braskem Chile	Chile	27.00
Braskem Holanda, Braskem Holanda Finance and Braskem Holanda Inc	Netherlands	25.00
Braskem Idesa, Braskem Idesa Serviços, Braskem México		
Braskem México Serviços and Braskem México Proyectos	Mexico	30.00

(i) In fiscal year 2018, the rate was changed from 35.00% to 21.00%.

21.2 Deferred income tax and social contribution

The income tax ("IR") and social contribution ("CSL") recorded in the year are determined on the current and deferred tax basis. These taxes are calculated on the basis of the tax laws enacted at the balance sheet date in the countries where the Company operates and are recognized in the statement of profit or loss, except to the extent they relate to items directly recorded in equity.

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(a) Movement in deferred tax balance

Assets	As of December 31, 2016	Impact on the P&L	Impact on the equity	Cetrel consolidated	As of December 31, 2017	Impact on the P&L	Impact on the equity	As of December 31, 2018
Tax losses (IR) and negative base (CSL)	2,420,376	(590,037)		48,470	1,878,809	142,769		2,021,578
Goodwill amortized	4,624	(708)		55,419	59,335	(20,053)		39,282
Exchange variations	464,947	(76,654)			388,293	(348,334)		39,959
Temporary adjustments	717,868	(564,239)	(7,946)	9,857	155,540	646,630		802,170
Business combination	191,250	(7,465)			183,785	(24,213)		159,572
Tax credits						176,290		176,290
	3,799,065	(1,239,103)	(7,946)	113,746	2,665,762	573,089		3,238,851
Liabilities								
Amortization of goodwill based on future profitability	767,277	(54,404)			712,873	10,463		723,336
Tax depreciation	867,922	92,280			960,202	49,710		1,009,912
Temporary adjustments	316,991	(85,169)			231,822	44,878		276,700
Business combination	198,381	(197,079)		8,362	9,664	(8,362)		1,302
Additional indexation PP&E	118,202	(51,130)			67,072	(9,905)		57,167
Hedge accounting		(606,877)	606,877			700,351	(700,351)	
Deferred on health plans		15,269	(15,269)					
Amortization of fair value adjustments on the assets from the acquisition of Quattor	263,808	255,815			519,623	(75,548)		444,075
Long term incentive plan - LTI						(2,072)	2,072	
Other	123,892	(104,350)	(15,269)		4,273	90,351	(90,841)	3,783
	2,656,473	(750,914)	591,608	8,362	2,505,529	799,866	(789,120)	2,516,275
Net	1,142,592	(488,189)	(599,554)	105,384	160,233	(226,777)	789,120	722,576
Presentation in the balance sheet:								
Non-current assets	1,653,115				1,165,726			1,104,158
(-) Non-current liabilities	510,523				1,005,493			381,582

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(b) Offset for the purpose of presentation in the balance sheet

			2018			
			Headquarters	IR and CSL		
			(Country)	Tax calculation	Compensation	Balance
Assets						
Braskem S.A.		Brazil	2,126,658	(2,126,658)		
Braskem Argentina		Argentina	11,337			11,337
Braskem Alemanha		Germany	11,251			11,251
Braskem Chile		Chile	308	(268)		40
Braskem Idesa		Mexico	980,762			980,762
Braskem México Serviços		Mexico	9,409			9,409
Cetrel		Brazil	26,478	(6,645)		19,833
DAC		Brazil	72,648	(1,122)		71,526
			3,238,851	(2,134,693)		1,104,158
Liabilities						
Braskem S.A		Brazil	2,239,727	(2,126,658)		113,069
Braskem America		USA	268,513			268,513
Braskem Petroquímica Chile		Chile	268	(268)		
Cetrel		Brazil	6,645	(6,645)		
DAC		Brazil	1,122	(1,122)		
			2,516,275	(2,134,693)		381,582
2017						
			Headquarters	IR and CSL		
			(Country)	Tax calculation	Compensation	Balance
Assets						
Braskem S.A.		Brazil	1,491,423	(1,491,423)		
Braskem Argentina		Argentina	3,398			3,398
Braskem Alemanha		Germany	19,353			19,353
Braskem Chile		Chile	251	(251)		
Braskem Idesa		Mexico	1,036,257			1,036,257
Braskem México Serviços		Mexico	1,334			1,334
Cetrel		Brazil	29,268	(7,454)		21,814
DAC		Brazil	84,478	(908)		83,570
			2,665,762	(1,500,036)		1,165,726
Liabilities						
Braskem S.A		Brazil	2,272,775	(1,491,423)		781,352
Braskem America		USA	223,635			223,635
Braskem Chile		Chile	757	(251)		506
Cetrel		Brazil	7,454	(7,454)		
DAC		Brazil	908	(908)		
			2,505,529	(1,500,036)		1,005,493

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(c) Realization of deferred income tax and social contribution

Assets	Note	Balance at	Realization					
		December 31, 2018	2019	2020	2021	2022	2023	2024 thereafter
Tax losses (IR) and negative base (CSL)	(i)	2,021,578	95,076	122,790	307,069	505,880	990,763	
Goodwill amortized		39,282	3,654	3,654	3,654	3,654	3,655	21,011
Exchange variations	(ii)	39,959						39,959
Temporary adjustments	(iii)	802,170	135,622	72,550	33,556	12,882	11,331	536,229
Business combination	(iv)	159,572	33,666	33,666	33,666	29,287	29,287	
Tax credits	(v)	176,290	176,290					
Total assets		3,238,851	444,308	232,660	377,945	551,703	1,035,036	597,199
Liabilities								
Amortization of goodwill based on future profitability	(vi)	723,336						717,529
Tax depreciation	(vii)	1,009,912	213,070	326,919	445,962	23,961		
Temporary differences	(viii)	276,700	65,560	23,374	10,811	4,150	3,651	169,154
Business combination	(ix)	1,302	187	187	187	187	187	6,174
Additional indexation PP&E	(x)	57,167	4,573	4,573	4,573	4,573	4,573	34,302
Amortization of fair value adjustments on the assets from the acquisition of Quattor		444,075	35,526	35,526	35,526	35,526	35,526	266,445
Other		3,783						3,783
Total liabilities		2,516,275	318,916	390,579	497,059	68,397	43,937	1,197,387
Net		722,576	125,392	(157,919)	(119,114)	483,306	991,099	(600,188)

Basis for constitution and realization:

- (i) In Brazil, the use of tax loss has limit of 30% to the amount of taxable income for the year, but the balance does not expire. In Mexico there is no limit for the year, however, the tax loss expires in 10 years.
- (ii) In Brazil, the Company opted to tax exchange variation of assets and liabilities denominated in foreign currency under the cash method. Thus, this variation will be realized as assets and liabilities are received/paid. For accounting purposes, exchange variation is recognized under the accrual basis, reason why it is recorded deferred IR and CSL.
- (iii) Accounting expenses not yet deductible for calculating income tax and social contribution, whose recognition for tax purposes occurs in subsequent periods.
- (iv) Refers to: tax-related goodwill, and contingencies recognized from business combinations. Tax realization of goodwill will occur upon the merger of the investments and contingencies arising from write-offs due to the settlement or reversal of the processes involved.
- (v) Tax credits arising from balance of tax paid on profit abroad.
- (vi) Goodwill for the future profitability of the merged companies not amortized since the adoption of Law 11,638/07. Tax realization is associated with the write-off of goodwill due to impairment or upon divestment.
- (vii) For calculation of IR and CSL, assets are depreciated at rates higher than those used for accounting purposes. As tax depreciation is exhausted, these deferred IR and CSL start to be realized.
- (viii) Accounting provisions whose taxation will occur in subsequent periods.
- (ix) Fair value adjustments on property, plant and equipment and intangible assets identified in business combinations, whose tax realization is based on the depreciation and amortization of these assets.
- (x) Additional adjustment of property, plant and equipment, whose tax realization is based on the depreciation of assets.

Annually, the Company revises its projection of taxable income based on its Business Plan (Note 3.1). If this projection indicates that the taxable income will not be sufficient to absorb the deferred taxes, the amount corresponding to portion of the asset that will not be recovered is written off.

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22 Sundry provisions

	<u>Note</u>	<u>2018</u>	<u>2017</u>
Provision for customers rebates	(a)	88,026	87,913
Provision for recovery of environmental damages	(b)	307,546	300,249
Other		28,970	25,510
Total		<u>424,542</u>	<u>413,672</u>
Current liabilities		191,536	178,676
Non-current liabilities		233,006	234,996
Total		<u>424,542</u>	<u>413,672</u>

(a) Client bonus

Some sales agreements of Braskem provide for a rebate, in products, should some sales volumes be achieved within the year, six-month period or three-month period, depending on the agreement. The bonus is recognized monthly in a provision, assuming that the minimum contractual amount will be achieved. As it is recognized based on contracts, the provision is not subject to significant uncertainties with respect to their amount or settlement.

(b) Recovery of environmental damages

Braskem has a provision for future expenses for the recovery of environmental damages in some of its industrial plants. The amount provisioned corresponds to the best estimate of the expenses required to repair the damages.

(c) Changes in provisions

	<u>Bonus</u>	<u>Recovery of environmental damage</u>	<u>Other</u>	<u>Total</u>
December 31, 2017	87,913	300,249	25,510	413,672
Additions, inflation adjustments and exchange variation, net	104,431	89,395	8,593	202,419
Write-offs through usage and payments	(104,318)	(82,098)	(5,133)	(191,549)
December 31, 2018	<u>88,026</u>	<u>307,546</u>	<u>28,970</u>	<u>424,542</u>

23 Contingencies

Braskem is a defendant in lawsuits and administrative proceedings arising from the normal course of its business. These claims are of a tax, labor and social security, civil and corporate nature. Proceedings assessed as having a probable chance of loss are provisioned for, as described in Note 3.5. Proceedings assessed as having a possible chance of loss are not provisioned for, except in relevant cases involving business combinations. Any changes in the court's understanding of the position could cause future impacts on the financial statements of the Company due to such proceedings.

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23.1 Claims with probable chance of loss and claims arising from business combinations with possible loss

		<u>2018</u>	<u>2017</u>
Labor claims	(a)	177,751	250,075
Tax claims	(b)		
Normal operations			
IR and CSL		20,717	17,313
PIS and COFINS	(i)	156,796	155,681
ICMS	(ii)	64,468	76,342
Other tax claims		<u>23,237</u>	<u>13,117</u>
		<u>265,218</u>	<u>262,453</u>
Business Combination			
IR and CSL		1,500	50,051
PIS and COFINS	(iii)	59,739	56,135
ICMS - interstate purchases	(iv)	<u>280,622</u>	<u>263,538</u>
		<u>341,861</u>	<u>369,724</u>
Corporate claims	(c)	111,049	135,779
Civil claims and other		69,438	74,614
		<u>965,317</u>	<u>1,092,645</u>

(a) Labor claims

The provision on December 31, 2018 is related to 477 labor claims, including occupational health and security cases (599 in 2017). The Company's legal advisors estimate that the term for the termination of these types of claims in Brazil exceeds five years. The estimates related to the outcome of proceedings and the possibility of future disbursement may change in view of new decisions in higher courts.

(b) Tax claims

On December 31, 2018, the main claims are the following:

(i) Non-cumulative PIS and COFINS

The Company is charged amounts arising from the compensation of Non-Cumulative PIS and COFINS tax credits that were not approved by the Federal Revenue Service of Brazil ("RFB") in Offsetting Statements ("DCOMPs"), with credits in amounts that exceeded those declared in the respective Statement of Calculation of Social Contributions ("DACONs").

In October 2017, through the federal tax amnesty program (PERT), the items related to non-acceptance of the credits were settled, due to the following reasons: (i) differences between the amounts reported in the DACONs and those in the electronic files of tax invoices; (ii) amounts not recorded in the interim balance sheets, acquisitions not taxed for contributions, recording of a credit on a portion of IPI, failure to submit tax documents; and (iii) nonpayment of amounts stated as due in tax documents. Said amounts were provisioned for.

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On December 31, 2018, the balance of this provision was R\$154,673.

The Company's external legal advisors, after considering the precedents on the matters at the Administrative Council of Tax Appeals ("CARF"), assessed that the disputes related to such matters have a probable likelihood of loss and estimated the conclusion of administrative procedures in 2020.

There are no deposits or any other type of guarantee for these procedures, since they are still being discussed at the administrative level.

(ii) ICMS – Decree 38,394/2000

The main claims provisioned in 2018 is related to the tax deficiency notice received by the Company in 2017 from the Tax Authority of the State of Alagoas, for the administrative collection by an ICMS tax that allegedly was paid below the amount due, in the period from August 2012 to April 2016, in accordance with Article 9 of Decree 38.394/2000.

On December 31, 2018, the balance of this provision was R\$45,027.

The Company's external legal advisors, considering the behavior of the administrative bodies judging the case, assessed that the disputes related to the highlighted matters have a probable likelihood of loss and estimated the conclusion of administrative proceedings in 2021.

There are no deposits or any other type of guarantee for these procedures, since they are still being discussed at the administrative level.

(iii) PIS and COFINS

The Company is assessed for the payment of these taxes in many claims, such as:

- Insufficient payment of COFINS for the period from March 1999 to December 2000, from February 2001 to March 2002, from May to July 2002 and September 2002 due to alleged calculation errors, and non-compliance with the widening the tax calculation base and increasing the contribution rate envisaged in Law 9,718/98;
- Offset of the COFINS dues relating to September and October 1999 using the credit resulting from the addition of 1% to the COFINS rate;
- Rejection of the offset of PIS and COFINS dues relating to the period from February to April 2002 using the PIS credits under Decree-Laws 2,445 and 2,449, calculated between June 1990 and October 1995, under the argument that the time period for using said credits had expired; and
- Alleged non-taxation of revenue from foreign exchange variations, determined as a result of successive reductions in the capital of the associated company.

The Company's external advisors assessed that the disputes related to the highlighted matters have a possible likelihood of loss and estimated the conclusion of administrative proceedings in 2020.

Guarantees were offered for these claims in the form of bank guarantee and finished products, which, together, cover the amount of court claims.

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(iv) ICMS - interstate purchases

In 2009, the merged company Braskem Qpar was assessed by the Finance Department of the State of São Paulo for the payment, at the administrative level, of ICMS in view of allegedly committing the following violations:

- Undue use of ICMS tax credits (i) in the amount of R\$53,478, in the periods from February 2004 to August 2005, November 2005 to February 2006, and September 2006 to January 2008, due to the recording of credits indicated on the invoices for the sale of “acrylonitrile,” issued by Acrinor Acrilonitrila do Nordeste S/A; (ii) in the amount of R\$1,581, in the period from December 2004 to August 2005, arising from the undue recording of credits on invoices for the sale of methyl acrylate, issued by Proquigel Química S/A; and (iii) in the amount of R\$3,105, in the period from August 2004 to November 2005, arising from the undue recording of credits in invoices for the sale of methyl methacrylate, issued by Proquigel Química S/A, since the products were to be exported, and therefore were exempt from payment of ICMS tax;
- The fine for the abovementioned tax offense corresponds to 100% of the principal value recorded, as per Article 527, item II, sub-item “j” jointly with paragraphs 1 and 10 of RICMS/SP;
- Fine in the amount of 30% on R\$480,389, which corresponds to the sum of the amounts indicated in tax documents whose outflow of goods was not identified by the tax authority, entered based on the provisions of Article 527, item IV, sub-item “b” jointly with paragraphs 1 and 10 of RICMS/SP; and
- Fine due to lack of presentation of tax documents requested under a specific deficiency notice, as per Article 527, item IV, sub-item “j” jointly with paragraphs 8 and 10 of RICMS/SP.

Discussions in the administrative sphere were ended in 2016, with the Company proposing lawsuits. Due to the favorable injunctions granted to the Company: (i) in one of the claims, the São Paulo Treasury Department rectified the amount of the debt to apply interest for late payment and inflation adjustment limited to the SELIC basic interest rate, which resulted in the debit being reduced by 20% and (ii) in the other claim, the tax liability was suspended.

The Company’s external advisors have assessed that the disputes related to the highlighted matters remain with a possible likelihood of loss and estimate the conclusion of legal proceedings in 2025. A performance bond was offered as a guarantee for these claims.

(c) Corporate claims

On December 31, 2018, the main claim is related to an ordinary collection claim combined with a request for damages for losses, requesting the payment of dividends and a share bonus arising from the class “A” preferred shares of the terminated company Salgema Indústrias Químicas S.A.

Once the claim was granted, the amount effectively owed by Braskem began to be calculated. During this phase, the judge recognized that dividends and bonus related to fiscal years prior to 1987 had become time-barred and were no longer owed by Braskem.

However, the Alagoas State Court of Appeals reviewed the decision and considered that amounts prior to such period also were owed. Against the decision, Braskem filed a Special Appeal with the Superior Court of Justice (“STJ”), which was partially granted, so that the possibility that the statute of limitation will be recognized in a procedure of liquidation of the award will be submitted to the STJ.

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On December 31, 2018, the balance of this provision is R\$59,577 and there is no guarantee related to this claim.

(d) Changes in claims with probable chance of loss

	<u>Labor claims</u>	<u>Tax claims</u>	<u>Corporate claims</u>	<u>Civil claims and other</u>	<u>Total</u>
December 31, 2017	250,075	632,177	135,779	74,614	1,092,645
Additions, inflation adjustments and exchange variation	80,685	77,236	8,676	5,001	171,598
Payments	(70,553)	(40,768)	(31,680)	(173)	(143,174)
Reversals	(82,456)	(61,566)	(1,726)	(10,004)	(155,752)
December 31, 2018	<u>177,751</u>	<u>607,079</u>	<u>111,049</u>	<u>69,438</u>	<u>965,317</u>

23.2 Claims with possible chance of loss

	<u>2018</u>	<u>2017</u>
Tax claims	6,082,336	6,048,462
Labor claims	992,205	812,400
Civil claims	579,145	693,188
Social security tax claims	125,338	91,824
Other lawsuits	535,802	285,944
Total	<u>8,314,826</u>	<u>7,931,818</u>

(a) Civil**(i) Excess weight**

Public-Interest Civil Action filed by the Federal Prosecution Office in Brasilia, with the objective of holding the company liable for damages caused to federal roads by trucks carrying excess weight. The action claims damages to the country for material damages and collective pain and suffering, in the amount of R\$71 million, on December 31, 2018. The action was denied in the lower court.

(ii) Caustic soda transportation

The Company is the defendant in civil lawsuits filed by the owner of a former distributor of caustic soda and by the shipping company that provided services to this former distributor, which, at December 31, 2018, totaled R\$99.2 million. The claimants seek indemnity for damages related to the alleged non-performance of the distribution agreement by the Company.

Management's evaluation, supported by the opinion of its external legal advisors who are responsible for the cases, is that the lawsuits will possibly be dismissed within a period of 8 years.

No judicial deposit or other form of guarantee was accrued for these lawsuits.

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(iii) Resale of solvents

In January 2017, the Company became defendant in a civil lawsuit filed by former reseller of solvents, claiming alleged breach of a tacit distribution agreement. On December 31, 2018, the damages claimed in the lawsuit amounted to R\$185.6 million.

Based on the opinion of external legal counsel accompanying the case, the Management believes that the lawsuit has a possible risk of loss within an eight-year period.

No judicial deposit or other form of security was made for these suits.

(iv) Hashimoto Public-Interest Civil Action

The Public-Interest Civil Action was filed in June 2018 by the São Paulo State Public Prosecutor's Office against the Company and other firms that operate in the Capuava Petrochemical Complex, claiming the reparation and/or remediation of environmental damages supposedly arising from the emission of pollutants into the air, as well as the joint judgement of companies that comprise said complex seeking environmental moral damages in the amount of R\$107.6 million.

Based on the opinion of the external legal counsel handling the case, the Management believes that the lawsuit possibly will be dismissed within a period of eight years.

No judicial deposit or other form of security was accrued for the case.

(v) Redress proceeding

Compensation action filed by the insurer of a client of the Company. The insurer seeks, in return, the reimbursement of the amount paid to the customer due to the insurance contract entered into with the client, whose amount up to December 31, 2018 is R\$73.8 million. According to the insurer, the losses incurred by the customer, for which it was reimbursed, would have been caused by the supply of off specification products by Braskem.

The Management's evaluation, based on the opinion of the external legal counsel responsible for conducting the cases, is that the lawsuits may be dismissed in a period of up to 8 years.

There is no judicial deposit or other type of guarantee for the process.

(b) Tax

(i) PIS and COFINS: taxation of tax losses and reductions in debits in connection with the installment payment program under MP 470/09

The Company was assessed for not recording as taxable the amounts of the credits from tax losses and social contribution tax loss carryforwards used to settle tax debits paid in installments under Provisional Presidential Decree 470/09. In the specific case of PIS and COFINS taxes, the assessment also includes the reductions applied to fines and interest arising from the adoption of the installment payment plan. Said tax credits and reductions of debits were not taxed, given the understanding of the Company that they did not represent taxable income.

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In November 2018, the tax-deficiency notice related to IR/CSL was fully denied in a final and unappealed decision issued by CARF.

On December 31, 2018, the inflation-adjusted amount of taxes recorded and tax effects of disallowances of income tax losses and social contribution tax loss carryforwards through said tax deficiency notices is R\$842 million.

The Company's external legal advisors estimate that the administrative proceeding should be concluded by 2020.

There are no deposits or any other type of guarantee for these procedures, since they are still being discussed at the administrative level.

(ii) Income Tax ("IR") and Social Contribution ("CSL") – Charges with goodwill amortization

The Company was served by the Brazilian Federal Revenue Service ("RFB") for deducting amortization charges, from 2007 to 2013, relating to goodwill originated from acquisitions of shareholding interests in 2002. In that year, several business groups divested their petrochemical assets, which were consolidated to enable the consequent foundation of Braskem.

In May 2018, one of the proceedings was deemed valid in a final and unappealed decision issued by CARF, which reduced liabilities by R\$166 million.

On December 31, 2018, the updated value of the taxes recorded in said tax deficiency notices amounted to R\$1.2 billion.

The assessment of risk in these claims is based on the following: (i) the equity interests were acquired with effective payment, business purpose and the participation of independent parties; and (ii) the real economic nature of the transactions that resulted in the recording of interest and exchange variation expenses.

The Company's external legal advisors estimate that the administrative proceeding should be concluded by 2022.

There are no deposits or any other type of guarantee for these procedures, since they are still being discussed.

(iii) Non-cumulative PIS and COFINS taxes

The Company received a deficiency notice from the RFB due to the use of non-cumulative PIS and COFINS tax credits in the acquisition of certain goods and services consumed in its production process. The matters whose chance of loss is deemed as possible are mainly related to the following: (i) effluent treatment services; (ii) charges on transmission of electricity; (iii) freight for storage of finished products; and (iv) extemporaneous credits from acquisitions of property, plant and equipment. These matters have already been contested at the administrative level and comprise the period from 2006 to 2011.

On December 31, 2018, the amount under discussion of these notices is R\$1.2 billion.

The Company's external legal advisors estimate that: (i) the administrative proceedings should be concluded by 2022; and (ii) in the event of an adverse ruling for the Company, which is not expected, these contingencies could be settled for up to 50% of the amounts in dispute. These estimates are based on the probability of loss of the Company's defense thesis, based on previous administrative and court precedents.

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There are no deposits or any other type of guarantee for these procedures, since they are still being discussed at the administrative level.

(iv) IR and CSL – Unlimited offsetting

In December 2009, December 2013 and March 2017, the Company received tax deficiency notices claiming that the methodology used to offset tax losses and tax loss carryforwards that failed to observe the limit of 30% of the Taxable Profit and Social Contribution calculation base when offsetting such liabilities with Income Tax and Social Contribution liabilities in merger operations, respectively, in November 2007, September 2008 and August 2013.

On December 31, 2018, the restated value of the taxes recorded amounted to R\$348 million.

The Company's external legal advisors estimate that the administrative proceedings should be concluded by 2020. The only proceeding currently under litigation is expected to be concluded in 2027.

There are no deposits or any other type of guarantee for these procedures, since they are still being discussed at the administrative level and the only one being disputed in court has had its payment suspended by a preliminary injunction, confirmed by a court decision.

(v) ICMS

The Company is involved in many ICMS collection claims drawn up in the States of São Paulo, Rio de Janeiro, Rio Grande do Sul, Bahia and Alagoas.

On December 31, 2018, the adjusted amounts of these claims total R\$644 million and the claims include the following matters:

- ICMS credit on the acquisition of assets that are considered by the Revenue Services as being of use and consumption. The Revenue Service understands that the asset has to be a physically integral part of the final product to give rise to a credit. Most of the inputs questioned do not physically compose the final product. However, the Judicial branch has a precedent that says that the input must be an integral part of the product or be consumed in the production process.
- ICMS credit arising from the acquisition of assets to be used in property, plant and equipment, which is considered by the Revenue Services as not being related to the production activity, such as laboratory equipment, material for the construction of warehouses, security equipment, etc.
- internal transfer of finished products for an amount lower than the production cost;
- omission of the entry or shipment of goods based on physical count of inventories;
- lack of evidence that the Company exported goods so that the shipment of the goods is presumably taxed for the domestic market;

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- non-payment of ICMS on the sale of products subject to tax substitution and credit from acquisitions of products subject to tax substitution;
- fines for the failure to register invoices;
- nonpayment of ICMS tax on charges related to the use of the electricity transmission system in operations conducted in the Free Market (ACL) of the Electric Power Trading Chamber (CCEE); and
- usage of ICMS tax base below the level envisaged in legislation for internal transfers to another unit in the State of Alagoas of DCE (dichloroethane), between January 2013 and May 2016, which is a product that is not subject to deferral in such transactions. The payment represents 30% of the total contingency.

The Company's legal advisors estimate that: (i) these judicial proceedings are expected to be terminated in 2023, and (ii) in the event of an unfavorable decision to the Company, which is not expected, these contingencies could be settled for up to 50% of the amounts in dispute. This estimate is based on the probability of loss of the Company's defense theory taking into consideration the case law at the administrative and judicial levels.

The Company offered assets for pledge in the amount of R\$62 million, supporting exclusively the amounts involved in the lawsuits.

(vi) IOF

The Company is a party to claims for the collection of IOF tax debits in administrative proceedings and lawsuits, which claim: (i) non-payment of IOF on operations relating to Advances for Future Capital Increase (AFAC) and checking accounts conducted by the merged companies Quattor Participações S.A. and Quattor Química S.A., which were considered loans by tax authorities; and (ii) requirement to pay IOF/credit on international fund transfers between the Company and CPN Incorporated through a checking account contract and single cash management related to the period from May 2002 to April 2004.

The current value of these notices on December 31, 2018, is R\$175 million.

The Company's external legal advisors estimate that the claims in the judicial sphere will be concluded by 2022.

The Company offered a guarantee of R\$59 million, which supports the amount involved exclusively in the claims.

(vii) PIS and COFINS sundry

The Company is involved in collection actions related to PIS and COFINS assessments in the administrative and judicial courts, which discuss the alleged undue offsetting of credits arising from other administrative proceedings and lawsuits, including: (i) Income Tax prepayments; (ii) FINSOCIAL; (iii) tax on net income (ILL); (iv) PIS-Decreets; and (v) the COFINS tax arising from the undue payment or payment in excess.

The current value of these notices on December 31, 2018, is R\$144 million.

The Company's external legal advisors estimate that: (i) these judicial proceedings are expected to be terminated in 2022; and (ii) in the event of an unfavorable decision to the Company, which is not expected, these contingencies could be settled for up to 50% of the amounts in dispute. This estimate is based on the probability of loss of the Company's defense theory taking into consideration the case law at the administrative and judicial levels.

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The Company offered assets in guarantee, in the amount of R\$144 million, that cover the entire amount of the claims.

(viii) IRRF, IR and CSL – Commission expenses

In December 2017, the Company received a tax deficiency notice from the RFB arising from: (i) the disallowance of commission expenses paid by Braskem in 2011; (ii) the disallowance of commission expenses paid by Braskem Inc. in 2013 and 2014; (iii) lack of payment of withholding income tax (IRRF) on the payments referred to in the previous item; and (iv) the disallowance of advertising expenses incurred in 2013.

On December 31, 2018, the restated amount of taxes and tax effects from disallowances of income tax losses and social contribution tax loss carryforwards through said tax deficiency notice is R\$122 million.

The assessment of success in this claim is based on the following: (i) the expenses incurred in 2011 already are subject to the statute of limitations. Furthermore, the tax credit recognized by the Tax Authority considered the sum of the disallowances disputed in other administrative proceedings that are pending a final decision, which do not belong in the claim in question; (ii) the expenses incurred by Braskem INC already were paid by the Company itself, which led only to the reduction of its tax loss backlog, without the need to pay additional taxes; (iii) the IRRF claimed by the Tax Authority aims to reach a taxpayer located abroad, which as such is not subject to Brazilian tax law; and (iv) the disallowed advertising expenses are related to the Company's business activities.

The Company's external legal advisors estimate that the administrative proceeding should be concluded in 2022.

There are no judicial deposits or any other type of guarantee for this procedure, since it is still being discussed at the administrative level.

(ix) IR and CSL – Exchange variation on naphtha imports

In December 2017, the Company received a tax deficiency notice related to the disallowance of exchange variation expenses between the due date of commercial invoices and the effective payment of obligations related to naphtha imports. The Company disallowed expenses in calendar year 2012, since they were considered unnecessary, which caused adjustments in the tax loss and in social contribution tax loss carryforwards.

On December 31, 2018, the restated value of this deficiency notice amounted to R\$104 million.

The Company's external legal advisors estimate that the administrative proceeding should be concluded in 2022.

There are no deposits or any other type of guarantee for these procedures, since they are still being discussed at the administrative level.

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(x) Isolated fine – failure to ratify DCOMPS

In 2016 through 2018, the Company was notified of isolated fines corresponding to 50% of non-cumulative COFINS tax credits: i) non-cumulative PIS/COFINS; ii) Negative Balance of IR/CSL; iii) REINTEGRA and iv) other credits, which were offset with federal taxes and not approved by the RFB.

The matter is assessed as having a possible chance of loss due to favorable court precedents on the matter.

On December 31, 2018, the restated value of these deficiency notices amounted to R\$215 million.

The Company's external legal counsels estimate that the conclusion in the administrative level will occur in 2022.

No deposit or other form of security was accrued for most of these claims, as they are still being discussed administratively.

(xi) IR/CSL – Negative Balance – Offset

The Company claims, at the administrative level, that RFB denies Offset Statements seeking to settle federal taxes with credits arising from negative balance of IR and CSL.

On December 31, 2018, the restated value of the taxes whose offset was not approved amounted to R\$182 million.

The Company's external legal advisors estimate that the administrative proceeding should be concluded by 2022.

There are no deposits or any other type of guarantee for this proceeding, since it is still being disputed at the administrative level.

(xii) IPI and II – Customs difference

In October 2002, the merged company Ipiranga Petroquímica received a tax-deficiency notice from RFB for contracting two different companies, one to provide parts and technology and the other to provide specialized labor for technical support, on the occasion of the construction of an industrial plant in Rio Grande do Sul, which, according to RFB, was allegedly conducted only to reduce the price of parts and technology used and, consequently, decrease the IPI and II payable.

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On December 31, 2018, the restated value of the taxes recorded amounted to R\$68 million.

The Company's external legal advisors estimate that the administrative proceeding should be concluded by 2022.

There are no judicial deposits or any other type of guarantee for this procedure, since it is still being discussed at the administrative level.

(c) Corporate

The Company currently is subject to a settlement of judgement related to an lawsuit filed in 1988, which sentenced Polialden Petroquímica S.A., merged into Braskem, to pay its non-controlling preferred shareholders the distribution of the remaining profits of the company.

The purpose of the liquidation is to determine the value of the award calculated in accordance with the sentence, which will occur through an arbitration procedure, as determined by the court, and was appealed against by the judgment winner, which is pending trial. The procedure is awaiting the beginning of the expert analysis.

The amount of provision on December 31, 2018 is R\$16 million. The amount in dispute with a possible likelihood of loss is R\$186 million.

(d) Other lawsuits

(i) Social Security Contributions – Withholding of 11%

The Company was assessed by the RFB for allegedly withholding social security at the rate of 11% on the gross amount of invoices, bills or trade notes related to services executed through assigned labor, in the period from February 1999 to June 2002, amounting to R\$52 million, on December 31, 2018.

The Company's legal advisors, in view of prior decisions by the Administrative Council of Tax Appeals (CARF) and the evidence provided by the Company, assess as possible the chances of loss at the administrative level. The conclusion is supported, among other things, by the following: (i) the nullity and time-barring of the debits; (ii) the mismatch between the service provided and the tax substitution system under Article 31 of Federal Law 8,212/1991; (iii) the lack of the requirements to characterize assignment of labor, and other matters that would have to be evidenced through a tax diligence.

The Company's external legal advisors estimate that the administrative proceeding should be concluded still in 2019.

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23.3 Leniency Agreement

(a) Global Settlement with authorities

In the context of the allegations of undue payments in connection with Operation Car Wash in Brazil, the Company has engaged experts in internal investigations to conduct an independent investigation into such allegations (“Investigation”) and report their findings. The Company has cooperated and continues to cooperate with authorities in various jurisdictions, including the U.S. Department of Justice (DoJ), the U.S. Securities and Exchange Commission (SEC), the Federal Prosecution Office of Brazil (MPF) and the Office of the Attorney General in Switzerland (OAG).

In December, 2016, the Company entered into a Leniency Agreement (“Agreement”) with the Federal Prosecution Office (“MPF Agreement”) and with the authorities in the United States and Switzerland (“Global Settlement”), in the approximate value of US\$957 million (approximately R\$3.1 billion at the time), which were approved as follows:

1. In Brazil, the Agreement was ratified by the 5th Coordination and Review Chamber of the MPF on December 15, 2016, with ratification by the 13th Federal Court of Curitiba on June 6, 2017.
2. The agreement with the U.S. Department of Justice (“DoJ”) was confirmed by a U.S. court ruling on January 26, 2017.
3. The agreement with the Securities and Exchange Commission (“SEC”) was confirmed on February 28, 2017.
4. The agreement with Swiss authorities did not require ratification to produce effect. On December 21, 2016, the OAG concluded its investigations and issued an order to close the case based on the Company's collaboration.

The MPF agreed to allocate most of the amounts received under the MPF Agreement to reparation of the victims of the wrongdoings, including other authorities and government agencies, and to coordinate with these third parties with which Braskem can begin negotiations related to the facts described in the Global Settlement, with the goal of avoiding duplicate payment of reparations.

In this respect, as per the notice to the market dated July 10, 2018 and the material fact notice dated May 27, 2019, the Company engaged in a cooperation and negotiation process with the Ministry of Transparency, the Office of the Federal Controller General (“CGU”) and the Office of the General Counsel for the Federal Government (“AGU”), which culminated in the signing of a leniency agreement with said authorities on May 31, 2019 (“CGU/AGU Agreement”).

The CGU/AGU Agreement addresses the same facts that are the subject of the Global Settlement entered into in December 2016 and provides for an additional disbursement of approximately R\$410 million (net effect of present value recorded at December 31, 2018 is R\$ 399.5 million) due to the calculations and parameters adopted by CGU/AGU. In response to a request by the Company and the MPF, the Federal Courts ratified the allocation of funds under the MPF Agreement to the payment of the CGU/AGU Agreement, with the outstanding installments restated by the variation of the SELIC basic interest rate as of the execution of the CGU/AGU Agreement.

The additional disbursement of approximately R\$410 million will be paid in two annual installments at the end of the payment schedule of the MPF Agreement, in 2024 and 2025. The CGU/AGU Agreement jointly with the Global Settlement are referred to as the “Agreements.”

Until December 31, 2018 of the aggregate amount of the Global Settlement, the Company already has paid approximately R\$2.0 billion, as follows:

1. US\$94,894 (R\$296,591) to the DoJ, paid on February 8, 2017;
2. US\$65,000 (R\$206,460) to the SEC, paid on April 27, 2017;
3. CHF30,240 (R\$104,307) to the Swiss Office of the Attorney General, paid on June 27, 2017;
4. R\$736,445 to the MPF, paid on July 6, 2017;
5. R\$267,985 to the MPF, related to the first of six annual installments due by 2023, paid on January 30, 2018;
6. CHF16,065 (R\$62,021) to the Swiss Office of the Attorney General, related to the first of four annual installments due by 2021, paid on June 28, 2018;

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7. R\$278,034 to the MPF, related to the second of six annual installments due by 2023, paid on January 30, 2019; and
8. CHF 16,065 (R\$58,034) to the Swiss Office of the Attorney General, related to the second of four annual installments due by 2021, paid on June 27, 2019.

The outstanding amount on the date of issuance of these financial statements, of approximately R\$1.6 billion, will be paid as follows:

1. CHF32,130 to the Swiss Office of the Attorney General, related to three remaining annual installments of CHF16,065 due on June 30 of each year as from 2020;
2. Approximately R\$1 billion as a result of the MPF Agreement and the CGU/AGU Agreement in four equal, annual and successive installments adjusted by the SELIC, due on January 30 of each year as from 2020. To guarantee payment of the installments coming due, Braskem gave as collateral assets from its property, plant and equipment corresponding to one annual installment; and
3. R\$409,876 as a result of the CGU/AGU Agreements, adjusted by the SELIC, the first installment of R\$284,665 due on January 30, 2024 and the second installment of R\$125,211 due on January 30, 2025.

Braskem has been complying with its obligations provided for in the Global Settlement and collaborating with authorities.

(b) Reimbursement for damages and other considerations

A significant portion of the total of R\$2.2 billion of the Agreement entered into with MPF will be allocated to paying redress to third parties for damages incurred due to the facts that are the subject-matter of the Agreement.

Under the Agreement, the MPF undertook to coordinate actions with other authorities or government agencies, as well as state-owned companies and state-controlled companies with which Braskem comes to negotiate for entering into agreements based on the subject-matter of the collaboration.

Furthermore, other authorities with jurisdiction over the Company may seek to impose additional monetary sanctions or fines or commence new investigations against the Braskem. Finally, as a result of the Global Settlement, the Company may be subject to increased operating costs in connection with its obligations to improve its governance and anti-corruption practices. In this context, as communicated to the market on July 10, 2018, the Company is currently negotiating with the Ministry of Transparency, Supervision and Controller General (CGU) and with the Office of the General Counsel of the Federal Government (AGU) to enter into a similar agreement with regard to the object of the Global Settlement.

Under the Global Settlement, the Company will continue to cooperate with the authorities and to implement improvements to its compliance practices and efforts to combat corruption. The Company is subject to external monitorship for a period of three years, two of which already have transpired, during which period the monitors will verify compliance with the Global Settlement, including the efficacy of controls, policies and internal procedures to reduce the risk of any breach of anticorruption law. The monitorship period could end earlier or be extended for another year, at the discretion of the authorities, depending on the progress made by the Company in its compliance with the Global Settlement.

It is not possible to predict the impacts on Braskem of others investigations or any decision or action taken by authorities involving its largest shareholders, namely Odebrecht S.A. and Petróleo Brasileiro S.A. – Petrobras, or any of their subsidiaries.

In connection with the execution of the CGU/AGU Agreement, Braskem originally took a tax deduction in its 2019 quarterly financial statements for the full amount of the payments to be paid under the CGU/AGU Agreement, as under Brazilian tax law the execution of such agreement provides a right to take a tax deduction on the compensation amount that is due to be paid in Brazil under this type of agreement. The plea agreement entered into with the DoJ as part of the Global Settlement prohibits Braskem from seeking tax deduction in connection with the payment of any part of the aggregate amount of the total criminal penalty contained in the plea agreement, which includes a credit for a portion of the payments to be made in Brazil. After further consideration, in light of the language in the plea agreement, Braskem voluntarily decided to reverse such tax deduction so that no part of the prior tax deduction would be inconsistent with the plea agreement entered into with DOJ. Under the Plea Agreement, it is the DoJ's sole discretion to determine whether the Company has breached the Plea Agreement and to determine the consequences of such breach. Currently, based on the advice of its counsel, the Company believes that it is unlikely that it will incur in losses as a result of this matter.

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(c) Class action

On July 1, 2015, a putative class action lawsuit was filed in the United States District Court for the Southern District of New York against the Company and certain of its then-current and former officers and directors. In the current lawsuit, entitled *In Re Braskem Securities Litigation*, the Lead Plaintiff, Boilermaker-Blacksmith National Pension Trust, alleges that the Defendants made misrepresentations or omissions that inflated the price of the Company's stock in violation of U.S. securities laws.

After the decision on the motion to dismiss filed by the Company, partially granting its arguments, the Company and the Lead Plaintiff signed the proposed settlement agreement ("Proposed Settlement"), which was ratified by the applicable Court, which issued a final decision ending all claims from all members of the class of Investors (as defined below).

Under the terms of the Proposed Settlement, Braskem paid US\$10 million (approximately R\$31,680) to resolve all claims arising out of or relating to the subject matter of the class action of a settlement class consisting of all persons who purchased or otherwise acquired a legal or beneficial ownership interest in Braskem American Depositary Receipts ("ADRs") between July 15, 2010 and March 11, 2015 ("Investors"), inclusive. The amount of the agreement was deposited by Braskem in the account designated by the judge ("Escrow Account") on October 2, 2017.

On February 21, 2018, a hearing was held in which a decision was handed down for the final approval of the agreement regarding the entire class of investors and the dismissal of the case. Said decision became final and unappealable. The individual distribution of the amount of the agreement is the responsibility of the manager of the Escrow Account, as determined by the Court and in accordance with the ratified allocation plan.

The Proposed Settlement was signed solely to avoid the risk, uncertainty, and expense of further litigation and does represent the admission of any wrongdoing or liability by Braskem.

The Company may be named as a defendant in other legal actions. The Company may be required, in accordance with any applicable legal and regulatory limits, to indemnify directors, officers and employees that are defendants in this securities class action and any other related actions that may arise in the future.

24 Benefits offered to team members

24.1 Short-term benefits

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Health care	162,338	140,553	139,412
Private pension	84,525	67,008	61,593
Transport	64,714	58,825	55,223
Feeding	33,537	30,916	28,874
Training	27,463	18,285	20,589
Other	18,271	16,173	13,237
	<u>390,848</u>	<u>331,760</u>	<u>318,928</u>

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Notes to the financial statements at December 31, 2018

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(a) Long-term incentive plan (“ILP Plan”)

On March 21, 2018, the Extraordinary Shareholders' Meeting approved the ILP Plan, which aims to align the interests of its participants with those of the Company's shareholders and to encourage participants' retention at the Company by offering eligible participants an opportunity to receive restricted shares in the Company by voluntarily investing own funds and holding such shares through the end of the three-year vesting period.

On March 28, 2018, the Board of Directors approved the “ILP Plan 2018,” in accordance with the terms and conditions of the ILP Plan, which includes the list of eligible persons, the deadline for acquiring own shares by participants and the number of restricted shares to be delivered to participants as matching contribution for each own share acquired. The maximum number of shares the Company expects to deliver to the participants of the ILP Program 2018, after the vesting period and subject to compliance with all necessary requirements, is 727,688 shares. The program's grant date is April 6, 2018. The shares to be delivered by the Company to participants of the ILP Program 2018 are those currently held in treasury or acquired through repurchase programs, and in the event said shares cannot be delivered, the Company will pay participants in cash the amount corresponding to the shares, based on the quote on the stock exchange on the second business day immediately prior to the respective payment date.

The fair value of the Company's matching contribution is the market price of the equity instruments quoted on the grant date. For eligible persons of the Company, the fair value is based on the quoted price of the class “A” preferred shares (R\$46.62). For eligible persons of subsidiaries abroad, the fair value is based on the quoted price of the American Depository Receipts - ADR (US\$27.56).

The fair value, net of taxes, recorded on equity at December 31, 2018, is R\$6,406.

24.2 Post-employment benefits

24.2.1 Retirement plans - defined benefit plans and health plants

For each of the below plans, based on the experts actuarial report, the Company measures its future obligations. The assumptions adopted are in full compliance with IAS 19.

(a) Braskem America

The subsidiary Braskem America is the sponsor of Novamont, which is a defined benefit plan of the employees of the plant located in the State of West Virginia. At December 31, 2018, the plan has 38 active participants and 172 assisted participants (39 active participants and 166 assisted participants in 2017). The contributions by Braskem America in the year amount to R\$20,544 (R\$4,069 in 2017). The participants made no contributions in 2018 and 2017.

(b) Braskem Alemanha and Braskem Holanda

The subsidiaries Braskem Alemanha and Braskem Holanda are the sponsor of the defined benefit plans of its employees. At December 31, 2018, the plan has 158 participants (139 in 2017) and no contributions were made by Braskem Alemanha and Braskem Holanda in 2018 and 2017. The participants made no contributions in 2018 and 2017.

(c) Braskem Idesa Servicios

Braskem Idesa employees are granted a government retirement benefit plan when they retire or reach retirement age. On December 31, 2018, all 812 employees of Braskem Idesa were active participants in this government retirement plan. On May 2018, Braskem Idesa implemented a private pension plan (defined benefit obligation); by the end of that year we had the participation of 339 employees out of 812.

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(d) Health plan

According to Brazilian laws, the type of health plan offered by the Company, named contributory plan, ensures to the participant who retires or is dismissed without cause the right to remain in the plan with the same assistance coverage conditions they had during the employment term, provided they assume the full payment of the plan (company's part + participant's part).

(i) Amounts in balance sheet

	<u>2018</u>	<u>Consolidated 2017</u>
Defined benefit		
Novamont Braskem America	68,904	62,963
Braskem Alemanha and Netherlands	114,705	93,994
	<u>183,609</u>	<u>156,957</u>
Health care		
Bradesco saúde	90,679	83,233
Total obligations	<u>274,288</u>	<u>240,190</u>
Fair value of plan assets		
Novamont Braskem America	(66,073)	(44,823)
Braskem Alemanha	(1,842)	(1,592)
	<u>(67,915)</u>	<u>(46,415)</u>
Consolidated net balance (non-current liabilities)	<u>206,373</u>	<u>193,775</u>

(ii) Change in obligations

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Balance at beginning of year	240,190	201,516	216,632
Health care	7,446	11,334	2,203
Current service cost	5,842	5,058	4,576
Interest cost	4,906	4,139	3,983
Benefits paid	(3,845)	(3,399)	(3,156)
Change plan	1,391		
Actuarial losses (gain)	(3,713)	9,661	3,590
Exchange variation	22,071	11,881	(26,312)
Balance at the end of the year	<u>274,288</u>	<u>240,190</u>	<u>201,516</u>

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(iii) Change in fair value plan assets

	2018	2017	2016
Balance at beginning of year	46,415	39,380	46,395
Actual return on plan assets	(3,200)	5,115	221
Employer contributions	20,544	4,069	3,569
Benefits paid	(3,712)	(2,915)	(3,087)
Exchange variation	7,868	766	(7,718)
Balance at the end of the year	67,915	46,415	39,380

(iv) Amounts recognized in profit and loss

	2018	2017	2016
Health care	7,446	11,334	2,203
Current service cost	5,842	5,058	4,576
Interest cost	4,906	4,139	3,983
Expected return on plan assets		(28)	(31)
Actuarial losses	2,077	6,069	2,472
	20,271	26,572	13,203

(v) Actuarial assumptions

	2018				2017				2016			
	Health insurance	United States	Germany	Netherlands	Health insurance	United States	Germany	Netherlands	Health insurance	United States	Germany	Netherlands
Discount rate	5.03	4.45	2.00	2.00	5.45	3.70	2.00	2.00	4.18	4.35	2.00	2.00
Inflation rate	4.50	n/a	2.00	2.00	4.50	n/a	n/a	n/a	6.00	n/a	2.00	2.00
Expected return on plan assets	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Rate of increase in future salary levels	n/a	n/a	3.00	3.00	n/a	n/a	2.50	2.50	n/a	n/a	3.00	3.00
Rate of increase in future pension plan	n/a	n/a	1.75	1.75	n/a	n/a	1.75	1.75	n/a	n/a	1.75	1.75
Aging factor	2.50	n/a	n/a	n/a	2.50	n/a	n/a	n/a	2.50	n/a	n/a	n/a
Medical inflation	3.50	n/a	n/a	n/a	3.50	n/a	n/a	n/a	3.50	n/a	n/a	n/a
Duration	19.66	n/a	n/a	n/a	18.84	n/a	n/a	n/a	29.24	n/a	n/a	n/a

(vi) Hierarchy of fair value assets

On December 31, 2018, the balance of the fair value of assets is represented by the assets of the Novamont defined benefit plan, which has a level-1 fair value hierarchy.

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(vii) Sensitivity analysis

	Premise change				Premise increase				Impact on the defined benefit obligation			
	Health insurance	United States	Germany	Netherlands	Health insurance	United States	Germany	Netherlands	Premise reduction			
									Health insurance	United States	Germany	Netherlands
Discount rate	1.0%	1.0%	0.5%	0.5%	10,428	7,261	10,802	563	(12,868)	(8,802)	(11,971)	(626)
Real medical inflation	n/a	n/a	n/a	n/a	15,698	n/a	n/a	n/a	(12,454)	n/a	n/a	n/a
Rate of increase in future salary levels	n/a	n/a	1%	1%	n/a	n/a	6,256	336	n/a	n/a	(5,934)	(318)
Rate of increase in future pension plan	1%	n/a	0%	0%	n/a	n/a	3,087	166	n/a	n/a	(3,006)	(161)
Life expectancy	1%	n/a	1 year	1 year	n/a	n/a	2,848	144	n/a	n/a	(2,973)	(150)
Mortality rate	n/a	10%	n/a	n/a	n/a	1,984	n/a	n/a	n/a	(2,164)	n/a	n/a

Health insurance - Impact on cost of services and interests costs

	Premise change		Premise increase		Premise reduction	
	Cost of services	Interests costs	Cost of services	Interests costs	Cost of services	Interests costs
Discount rate	1.0%	1.0%	381	198	(488)	(193)
Real medical inflation	1.0%	1.0%	344	1,532	(288)	(1,215)
Rate of increase in future pension plan	1.0%	1.0%	66	216	(67)	(221)

24.2.2 Retirement plan - defined contribution

The Company and the subsidiaries in Brazil sponsor a defined contribution plan for its team members managed by ODEPREV, a private pension plan entity. ODEPREV offers its participants, which are employees of the sponsoring companies, an optional defined contribution plan in which monthly and additional participant contributions and monthly and annual sponsor contributions are made to individual pension savings accounts. For this plan, the sponsors pay contributions to private pension plan on contractual or voluntary bases. As soon as the contributions are paid, the sponsors do not have any further obligations related to additional payments.

At December 31, 2018, the number of active participants in ODEPREV totals 5,725 (5,280 in 2017) and the contributions made by the sponsors in the year amount to R\$50,610 (R\$38,332 in 2017) and the contributions made by the participants amounted to R\$69,058 (R\$60,038 in 2017).

25 Equity

(a) Capital

On December 31, 2018, the Company's subscribed and paid up capital stock amounted to R\$8,043,222 and comprised 797,218,554 shares with no par value, distributed as follows:

	Common shares		Preferred shares class A		Preferred shares class B		Total	
	Amount	%	Amount	%	Amount	%	Amount	%
Odebrecht	226,334,623	50.11	79,182,498	22.95			305,517,121	38.32
Petrobras	212,426,952	47.03	75,761,739	21.96			288,188,691	36.15
ADR	(i)		48,780,072	14.14			48,780,072	6.12
Other	12,907,077	2.86	140,090,605	40.59	500,230	100.00	153,497,912	19.26
Total	451,668,652	100.00	343,814,914	99.64	500,230	100.00	795,983,796	99.85
Treasury shares			1,234,758	0.36			1,234,758	0.15
Total	451,668,652	100.00	345,049,672	100.00	500,230	100.00	797,218,554	100.00

(i) American Depositary Receipts traded on the New York Stock Exchange (USA);

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(b) Legal reserve

Under Brazilian Corporation Law, companies must transfer 5% of net profit for the year to a legal reserve until this reserve is equivalent to 20% of the paid-up capital. The legal reserve can be used for capital increase or absorption of losses.

(c) Share rights

Preferred shares carry no voting rights but they ensure priority, non-cumulative annual dividend of 6% of their unit value, according to profits available for distribution. The unit value of the shares is obtained through the division of capital by the total number of outstanding shares. Only class "A" preferred shares will have the same claim on the remaining profit as common shares and will be entitled to dividends only after the priority dividend is paid to preferred shareholders. Only class "A" preferred shares also have the same claim as common shares on the distribution of shares resulting from capitalization of other reserves. Only class "A" preferred shares can be converted into common shares upon resolution of majority voting shareholders present at a General Meeting. Class "B" preferred shares can be converted into class "A" preferred shares at any time, at the ratio of two class "B" preferred shares for one class "A" preferred share, upon a simple written request to the Company, provided that the non-transferability period provided for in specific legislation that allowed for the issue and payment of such shares with tax incentive funds has elapsed. In 2018, 78,100 class "B" preferred shares were converted into 39,050 class "A" preferred shares.

In the event of liquidation of the Company, class "A" and "B" preferred shares will have priority in the reimbursement of capital.

Shareholders are entitled to receive a mandatory minimum dividend of 25% on profit for the year, adjusted under Federal Law 6,404/76.

(d) Profit allocation and payment of dividends

Under the Company's bylaws, profit for the year, adjusted according to Federal Law 6,404/76, is appropriated as follows:

- (i) 5% to a legal reserve;
- (ii) 25% to pay for mandatory, non-cumulative dividends, provided that the legal and statutory advantages of the Class "A" and "B" preferred shares are observed. When the amount of the priority dividend paid to class "A" and "B" preferred shares is equal to or higher than 25% of profit for the year calculated under Article 202 of Federal Law 6,404/76, it is the full payment of the mandatory dividend.

Any surplus remaining after the payment of the priority dividend will be used to:

- pay dividends to common shareholders up to the limit of the priority dividends of preferred shares; and
- if there still is any surplus, distribute additional dividends to common shareholders and class "A" preferred shareholders so that the same amount of dividends is paid for each common share or class "A" preferred share.

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(d.1) Profit allocation and dividends proposed

	<u>2018</u>
Net income for the year of Company's shareholders	2,866,675
Amounts recorded directly to retained earnings	
Legal reserves distribution	(143,334)
Tax incentive reserve distribution	(81,863)
Realization of additional property, plant and equipment	27,679
Prescribed dividends / other	517
	<u>2,669,674</u>
Allocations:	
Minimum dividends - 25% adjusted net income	(667,419)
Additional dividends proposed	(2,002,255)
	<u>(2,669,674)</u>

Per-share dividend of R\$3.35565826658 per common and class "A" preferred share and R\$0.60628536320 per class "B" preferred share.

(d.2) Additional dividends related to fiscal year 2017

The Annual Shareholders' Meeting held on April 30, 2018 approved the declaration of additional dividends on profit related to fiscal year 2017 in the amount of R\$ 1,500,000, the payment of which commenced on May 10, 2018, of which R\$851,729 was paid to holders of common shares and R\$648,271 to holders of class "A" preferred shares.

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(e) Other comprehensive income

	Attributed to shareholders' interest							Non Br
	Deemed cost and additional indexation of PP&E (ii)	Fair value adjustments of trade accounts receivable (iii)	Gain (loss) on interest in subsidiary (i)	Foreign sales hedge (iv)	Fair value of hedge (iv)	Defined benefit plans actuarial Gain (loss) (v)	Foreign currency translation adjustment (vi)	
On December 31, 2015	234,904		(9,404)	(9,666,973)	(685,396)	(39,232)	1,105,391	(9,060,710)
Additional indexation								
Realization by depreciation or write-off assets	(41,268)							(41,268)
Income tax and social contribution	14,032							14,032
Deemed cost of jointly-controlled investment								
Realization by depreciation or write-off assets	(1,461)							(1,461)
Income tax and social contribution	496							496
Foreign sales hedge								
Exchange rate				2,625,551				2,625,551
Transfer to result				1,342,785				1,342,785
Income tax and social contribution				(1,406,740)				(1,406,740)
Fair value of Cash flow hedge								
Change in fair value					247,815			247,815
Transfer to result					(19,434)			(19,434)
Income tax and social contribution					(79,194)			(79,194)
Fair value of cash flow hedge from jointly-controlled					(3,309)			(3,309)
Actuarial loss with post-employment benefits, net of taxes						(4,119)		(4,119)
Foreign currency translation adjustment							63,697	63,697
On December 31, 2016	206,703		(9,404)	(7,105,377)	(539,518)	(43,351)	1,169,088	(6,321,859)
Additional indexation								
Realization by depreciation or write-off assets	(40,678)							(40,678)
Income tax and social contribution	13,831							13,831
Deemed cost of jointly-controlled investment								
Realization by depreciation or write-off assets	(1,459)							(1,459)
Income tax and social contribution	496							496
Foreign sales hedge								
Exchange rate				(42,507)				(42,507)
Transfer to result				1,145,602				1,145,602
Income tax and social contribution				(355,960)				(355,960)
Fair value of Cash flow hedge								
Change in fair value					876,636			876,636
Transfer to result					(287,576)			(287,576)
Income tax and social contribution					(198,343)			(198,343)
Fair value of cash flow hedge from jointly-controlled					3,534			3,534
Actuarial loss with post-employment benefits, net of taxes						(8,654)		(8,654)
Foreign currency translation adjustment							51,445	51,445
On December 31, 2017	178,893		(9,404)	(6,358,242)	(145,267)	(52,005)	1,220,533	(5,165,492)

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	Attributed to shareholders' interest								Total	
	Deemed cost and additional indexation of PP&E (ii)	Fair value adjustments of trade accounts receivable (iii)	Gain (loss) on interest in subsidiary (i)	Foreign sales hedge (iv)	Fair value of hedge (iv)	Defined benefit plans actuarial Gain (loss) (v)	Foreign currency translation adjustment (vi)	Total Braskem shareholders' interest		Non-controlling interest in Braskem Idesa
On December 31, 2017	178,893		(9,404)	(6,358,242)	(145,267)	(52,005)	1,220,533	(5,165,492)	(477,975)	(5,643,467)
Additional indexation										
Realization by depreciation or write-off assets	(40,481)							(40,481)		(40,481)
Income tax and social contribution	13,764							13,764		13,764
Deemed cost of jointly-controlled investment										
Realization by depreciation or write-off assets	(1,458)							(1,458)		(1,458)
Income tax and social contribution	496							496		496
Fair value adjustments										
Accounts receivable								(449)		(449)
Foreign sales hedge										
Exchange rate				(3,133,346)				(3,133,346)	4,170	(3,129,176)
Transfer to result				1,200,209				1,200,209	59,143	1,259,352
Income tax and social contribution				664,864				664,864	(18,994)	645,870
Fair value of Cash flow hedge										
Change in fair value		(449)			(196,790)			(196,790)	7,722	(189,068)
Transfer to result					26,964			26,964	10,386	37,350
Income tax and social contribution					59,914			59,914	(5,433)	54,481
Fair value of cash flow hedge from jointly-controlled					(2,329)			(2,329)		(2,329)
Actuarial loss with post-employment benefits, net of taxes						(1,569)		(1,569)		(1,569)
ILP PLan fair value										
Change in fair value		9,297						9,297	133	9,430
Income tax and social contribution		(2,891)						(2,891)		(2,891)
Foreign currency translation adjustment							946,342	946,342	(145,119)	801,223
(Loss) investment gains			(65)					(65)	65	
On December 31, 2018	151,214	5,957	(9,469)	(7,626,515)	(257,508)	(53,574)	2,166,875	(5,623,020)	(565,902)	(6,188,922)

(i) Transfer to the income statement when divestment or transfer of control of subsidiary.

(ii) Transfer to retained earnings as the asset is depreciated or written-off/sold.

(iii) For receivables classified as fair value through other comprehensive income, transfer to the income statement when attainment of jurisdiction or early liquidation.

For the ILP Plan, Transfer to retained earnings according to the grace period of the plan.

(iv) Transfer to the income statement when maturity, prepayment or loss of efficacy for hedge accounting.

(v) Transfer to retained earnings when the extinction of the plan.

(vi) Transfer to the income statement when write-off of subsidiary abroad.

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26 Earnings per share

Basic and diluted earnings (loss) per share is calculated by means of the division of adjusted profit for the year attributable to the Company's common and preferred shareholders by the weighted average number of these shares held by shareholders, excluding those held in treasury and following the rules for the distribution of dividends provided for in the Company's bylaws, as described in Note 25(d), particularly in relation to the limited rights enjoyed by class "B" preferred shares. In view of these limited rights, this class of share does not participate in losses. In this case, the diluted result takes into account the conversion of two class "B" preferred shares into one class "A" preferred share, as provided for in the bylaws of the Company.

Class "A" preferred shares participate in dividends with common shares after the mandatory dividends has been attributed in accordance with the formula provided for in the Company's bylaws, as described in Note 25(c) and there is no highest limit for their participation.

Diluted and basic earnings (losses) per share are equal when there is profit in the year, since Braskem has not issued convertible financial instruments.

As required by IAS 33, the table below show the reconciliation of profit (loss) for the period adjusted to the amounts used to calculate basic and diluted earnings (loss) per share.

	2018	2017	Basic and diluted 2016
Profit (loss) for the year attributed to Company's shareholders of continued operations	2,827,650	3,856,564	(442,430)
Distribution of priority dividends attributable to:			
Preferred shares class "A"	208,450	208,416	
Preferred shares class "B"	303	351	
	<u>208,753</u>	<u>208,767</u>	
Distribution of 6% of unit value of common shares	273,840	273,827	
Distribution of plus income, by class:			
Common shares	1,331,513	1,915,805	
Preferred shares class "A"	1,013,544	1,458,165	
	<u>2,345,057</u>	<u>3,373,970</u>	
Reconciliation of income available for distribution, by class (numerator):			
Common shares	1,605,353	2,189,632	(251,222)
Preferred shares class "A"	1,221,994	1,666,581	(191,208)
Preferred shares class "B"	303	351	
	<u>2,827,650</u>	<u>3,856,564</u>	<u>(442,430)</u>
Weighted average number of shares, by class (denominator):			
Common shares	451,668,652	451,668,652	451,668,652
Preferred shares class "A"	343,808,699	343,775,864	343,771,165
Preferred shares class "B"	512,660	578,330	
	<u>795,990,011</u>	<u>796,022,846</u>	<u>795,439,817</u>
Profit (loss) per share (in R\$)			
Common shares	3.5543	4.8479	(0.5562)
Preferred shares class "A"	3.5543	4.8479	(0.5562)
Preferred shares class "B"	0.5910	0.6069	

Braskem S.A.

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	2018			
	Class "A"		Preferred shares Class "B"	
	Outstanding shares	Weighted average	Outstanding shares	Weighted average
Amount at beginning of year	343,775,864	343,775,864	578,330	578,330
Conversion of preferred shares class "B" to "A"	39,050	32,835	(78,100)	(65,670)
Amount at the end of the year	<u>343,814,914</u>	<u>343,808,699</u>	<u>500,230</u>	<u>512,660</u>

	2016	
	Preferred shares Class "A"	
	Outstanding shares	Weighted average
Amount at beginning of year	343,768,220	343,768,220
Conversion of preferred shares class "B" to "A"	7,644	2,945
Amount at the end of the year	<u>343,775,864</u>	<u>343,771,165</u>

27 Net revenues

	2018	2017	2016
Sales revenue			
Domestic market			
Revenue	42,189,365	34,983,265	32,293,042
Rebates	(45,290)	(35,538)	(25,400)
	<u>42,144,075</u>	<u>34,947,727</u>	<u>32,267,642</u>
Foreign market			
Revenue	26,577,433	23,297,304	23,084,703
Rebates	(58,188)	(60,990)	(23,820)
	<u>26,519,245</u>	<u>23,236,314</u>	<u>23,060,883</u>
	<u>68,663,320</u>	<u>58,184,041</u>	<u>55,328,525</u>
Sales and services deductions			
Taxes			
Domestic market	(10,219,138)	(8,663,707)	(7,316,325)
Foreign market	(36,562)	(33,798)	(102,831)
Sales returns			
Domestic market	(148,918)	(125,153)	(168,625)
Foreign market	(258,836)	(100,789)	(76,756)
	<u>(10,663,454)</u>	<u>(8,923,447)</u>	<u>(7,664,537)</u>
Net sales and services revenue	<u>57,999,866</u>	<u>49,260,594</u>	<u>47,663,988</u>

Revenues from sales of products are recognized when (i) the amount of sales can be reliably measured and the Company does not have control over the products sold; (ii) it is probable that the Company will receive the economic benefits; and (iii) risks and benefits of product ownership are substantially transferred to the client. The Company does not make sales with continued management involvement. Most of Braskem's sales are made to industrial customers and, in a lower volume, to resellers.

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The moment when the legal right, as well as the risks and benefits, are substantially transferred to the client is determined as follows:

- (i) for contracts under which the Company is responsible for the freight and insurance, the legal right and the risks and benefits are transferred to the client as soon as the risk of the goods are delivered at the destination established in the contract;
- (ii) for agreements under which the freight and insurance are a responsibility of the client, risks and benefits are transferred as soon as the products are delivered to the client's carrier; and
- (iii) for contracts under which product delivery involves the use of pipelines, especially basic petrochemicals, the risks and benefits are transferred immediately after the Company's official markers, which is the point of delivery of the products and transfer of their ownership.

The cost of freight services related to sales, transfers to storage facilities and finished product transfers between Braskem establishments are included in cost of sales.

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(a) Net revenue by country

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Brazil	31,801,222	26,147,559	24,640,077
United States	9,887,701	8,539,972	7,965,209
Argentina	1,166,191	1,336,440	1,244,267
United Kingdom	366,328	202,830	589,725
Germany	1,385,482	1,192,287	1,198,760
Mexico	4,168,140	3,408,385	2,075,695
Italy	650,605	604,546	667,265
Netherlands	293,315	333,134	262,289
Singapore	756,069	542,866	1,101,156
Switzerland	315,254	415,729	227,504
Colombia	363,497	340,396	369,359
Spain	329,458	282,854	342,154
Chile	686,646	554,237	522,796
Peru	540,495	493,654	397,186
Uruguay	155,571	122,251	122,783
Japan	245,208	126,956	1,631,564
Poland	260,449	231,716	252,508
Paraguay	214,959	174,783	185,432
France	135,094	166,314	236,727
Bolivia	250,048	163,862	211,382
Canada	290,453	235,612	242,492
South Korea	314,517	339,430	254,512
Other	3,423,164	3,304,781	2,923,146
	<u>57,999,866</u>	<u>49,260,594</u>	<u>47,663,988</u>

(b) Net revenue by product

	<u>2018</u>	<u>2017</u>	<u>2016</u>
PE/PP	37,979,148	33,105,714	30,790,364
Ethylene, Propylene	4,283,709	3,351,805	2,906,796
Naphtha, condensate and crude oil	248,313	135,165	2,582,257
Benzene, toluene and xylene	2,785,400	2,683,406	2,411,031
PVC/Caustic Soda/EDC	3,167,390	3,066,879	3,016,390
ETBE/Gasoline	2,928,993	2,433,360	2,058,952
Butadiene	2,023,465	1,819,387	1,315,892
Cumene	909,409	578,482	501,958
Solvents	476,311	401,455	379,745
Other	3,197,729	1,684,941	1,700,603
	<u>57,999,866</u>	<u>49,260,594</u>	<u>47,663,988</u>

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(c) Main clients

The Company does not have any revenue arising from transactions with only one client that is equal to or higher than 10% of its total net revenue. In 2018, the most significant revenue from a single client amounts to approximately 2.4% of total net revenues of the Company and refers to the Chemical segment.

28 Tax incentives**(a) Income Tax**

Since 2015, the Company obtained grant in lawsuits claiming the reduction of 75% of IR on income from the following industrial units: (i) PVC and Chlor-Alkali (*Cloro Soda*), established in the state of Alagoas; and (ii) Chemicals, PE, PVC and Chlor-Alkali units, established in the city of Camaçari (BA). The realization period is 10 years. In 2018, the operations in Brazil recorded tax loss, therefore it is not possible to make any deductions as a tax incentive.

(b) PRODESIN - ICMS

The Company has ICMS tax incentives granted by the state of Alagoas, through the state of Alagoas Integrated Development Program – PRODESIN, which are aimed at implementing and expanding a plant in that state. This incentive is considered an offsetting entry to sales taxes. In fiscal year 2018, the amount was R\$81,863 (R\$95,704 in 2017). Since 2018, through Complementary Law 160/2017, the amount recorded is now allocated to reserve the tax incentives in stockholders' equity, in accordance with Article 195-A of Federal Law 6,404/76.

29 Other income (expenses), net

	<u>Note</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Bonus to employees		(375,360)	(399,828)	(361,796)
Expenses from fixed assets		(40,061)	(205,929)	(53,774)
Allowance for judicial and labor claims		(83,280)	(119,919)	(169,973)
Fine on supply contract of raw material, net	(i)	336,533		
PIS and COFINS credits - exclusion of ICMS from the calculation basis	10(c)	235,919		
Capital gain - sale of Quantiq			276,816	
Recovery of environmental damages		(89,395)	(102,466)	(182,600)
Leniency agreement	23.3(a)		(375,476)	(2,860,402)
Other		106,496	71,922	(277,409)
		<u>90,852</u>	<u>(854,880)</u>	<u>(3,905,954)</u>

(i) The contractual penalty for failing to supply feedstock to the subsidiary Braskem Idesa is R\$338,125.

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30 Financial results

	2018	2017	2016
Financial income			
Interest income	530,007	512,051	646,727
Other	59,045	91,579	43,395
	589,052	603,630	690,122
Financial expenses			
Monetary variations on fiscal debts	(2,084,780)	(2,219,503)	(2,447,481)
Customer discounts granted	(33,429)	(191,101)	(249,578)
Loans transaction costs	(141,223)	(137,389)	(108,606)
Adjustment to present value	(89,982)	(64,771)	(56,020)
	(296,065)	(284,992)	(507,744)
	(362,072)	(849,461)	(201,533)
	(3,007,551)	(3,747,217)	(3,570,962)
Exchange rate variations, net			
On financial assets	1,268,741	216,381	(1,139,676)
On financial liabilities	(3,525,724)	(1,015,143)	(2,070,741)
	(2,256,983)	(798,762)	(3,210,417)
	(4,675,482)	(3,942,349)	(6,091,257)

31 Expenses by nature and function

	2018	2017	2016
Classification by nature:			
Raw materials other inputs	(38,889,949)	(29,364,996)	(28,197,875)
Personnel expenses	(2,412,118)	(2,173,640)	(2,576,107)
Outsourced services	(2,306,048)	(2,120,001)	(2,135,412)
Depreciation, amortization and depletion	(2,990,577)	(2,928,855)	(2,677,672)
Freights	(2,275,375)	(2,058,574)	(1,918,973)
Costs of idle industrial plants	(138,242)	(67,593)	(60,944)
Other income (expenses), net	(706,451)	(1,379,965)	(4,175,836)
Total	(49,718,760)	(40,093,624)	(41,742,819)
Classification by function:			
Cost of products sold	(46,431,220)	(36,177,408)	(34,985,569)
Selling and distribution	(1,545,568)	(1,459,608)	(1,403,673)
General and administrative	(1,633,003)	(1,434,272)	(1,285,613)
Research and development	(199,821)	(167,456)	(162,010)
Other income (expenses), net	90,852	(854,880)	(3,905,954)
Total	(49,718,760)	(40,093,624)	(41,742,819)

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32 Segment information

Braskem's organizational structure was formed by the following segments:

- **Chemicals:** comprises the activities related to the production of ethylene, propylene butadiene, toluene, xylene, cumene and benzene, as well as gasoline, diesel and LPG (Liquefied Petroleum Gas), and other petroleum derivatives and the supply of electric energy, steam, compressed air and other inputs to second-generation producers located in the Camaçari, Triunfo, São Paulo and Rio de Janeiro petrochemical complexes.
- **Polyolefins:** comprises the activities related to the production of PE and PP in Brazil.
- **Vinyls:** comprises the activities related to the production of PVC, caustic soda and chloride in Brazil.
- **United States and Europe:** operations related to PP production in the United States and Europe, through the subsidiaries Braskem America and Braskem Alemanha, respectively.
- **Mexico:** comprises the activities relation to the production of PE in Mexico, through the subsidiary Braskem Idesa.

(a) Presentation, measurement and reconciliation of segment results

Information by segment is generated in accounting records, which are reflected in the consolidated financial statements.

The eliminations stated in the operating segment information, when compared with the consolidated balances, are represented by transfers of inputs between segments that are measured as arm's length sales.

The operating segments are stated based on the results of operations, which does not include financial results, and current and deferred income tax and social contribution expenses.

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(b) Results by segment

	2018						
	Operating expenses						
	Net sales revenue	Cost of products sold	Gross profit	Selling, general and distribution expenses	Results from equity investments	Other operating income (expenses), net	Operating profit (loss)
Reporting segments							
Chemicals	31,111,650	(27,464,046)	3,647,604	(756,719)		(139,393)	2,751,492
Vinyls	3,167,390	(2,889,519)	277,871	(169,377)		(18,416)	90,078
Polyolefins	22,483,866	(19,255,377)	3,228,489	(1,310,080)		(93,465)	1,824,944
USA and Europe	11,724,776	(9,126,392)	2,598,384	(610,384)		10,656	1,998,656
Mexico	3,770,506	(2,333,849)	1,436,657	(296,391)		305,457	1,445,723
Total	72,258,188	(61,069,183)	11,189,005	(3,142,951)		64,839	8,110,893
Other segments	292,435	(173,608)	118,827	(34,819)		(103)	83,905
Corporate unit	265,438 (i)		265,438	(200,622)	(888)	26,116 (i)	90,044
Braskem consolidated before eliminations and reclassifications	72,816,061	(61,242,791)	11,573,270	(3,378,392)	(888)	90,852	8,284,842
Eliminations and reclassifications	(14,816,195)	14,811,571	(4,624)				(4,624)
Total	57,999,866	(46,431,220)	11,568,646	(3,378,392)	(888)	90,852	8,280,218
	2017						
	Operating expenses						
	Net sales revenue	Cost of products sold	Gross profit	Selling, general and distribution expenses	Results from equity investments	Other operating income (expenses), net	Operating profit (loss)
Reporting segments							
Chemicals	25,179,288	(20,478,914)	4,700,374	(773,396)		(197,275)	3,729,703
Vinyls	3,066,879	(2,572,774)	494,105	(162,989)		(163,374)	167,742
Polyolefins	19,650,398	(15,432,179)	4,218,219	(1,321,575)		(177,518)	2,719,126
USA and Europe	9,854,496	(7,419,261)	2,435,235	(582,672)		(21,279)	1,831,284
Mexico	3,600,820	(2,097,471)	1,503,349	(283,318)		27,914	1,247,945
Total	61,351,881	(48,000,599)	13,351,282	(3,123,950)		(531,532)	9,695,800
Other segments	83,720	(65,743)	17,977	(13,391)		(2,430)	2,156
Corporate unit				(61,384)	39,956	(320,918) (ii)	(342,346)
Braskem consolidated before eliminations and reclassifications	61,435,601	(48,066,342)	13,369,259	(3,198,725)	39,956	(854,880)	9,355,610
Eliminations and reclassifications	(12,175,007)	11,888,934	(286,073)	137,389			(148,684)
Total	49,260,594	(36,177,408)	13,083,186	(3,061,336)	39,956	(854,880)	9,206,926
	2016						
	Operating expenses						
	Net sales revenue	Cost of products sold	Gross profit	Selling, general and distribution expenses	Results from equity investments	Other operating income (expenses), net	Operating profit (loss)
Reporting segments							
Chemicals	25,062,602	(20,248,175)	4,814,427	(680,083)		(409,920)	3,724,424
Vinyls	3,016,390	(2,815,184)	201,206	(236,771)		(71,880)	(107,445)
Polyolefins	20,307,367	(15,980,935)	4,326,432	(1,284,665)		(199,098)	2,842,669
USA and Europe	8,896,071	(6,080,722)	2,815,349	(497,810)		(71,000)	2,246,539
Mexico	1,586,927	(1,152,047)	434,880	(231,795)		(4,805)	198,280
Total	58,869,357	(46,277,063)	12,592,294	(2,931,124)		(756,703)	8,904,467
Other segments	12,202	(14,760)	(2,558)	(1,876)		(20,864)	(25,298)
Corporate unit				(33,582)	30,078	(3,128,387) (iii)	(3,131,891)
Braskem consolidated before eliminations and reclassifications	58,881,559	(46,291,823)	12,589,736	(2,966,582)	30,078	(3,905,954)	5,747,278
Eliminations and reclassifications	(11,217,571)	11,306,254	88,683	115,286			203,969
Total	47,663,988	(34,985,569)	12,678,419	(2,851,296)	30,078	(3,905,954)	5,951,247

(i) Includes the amount of R\$501.357 (R\$265,438 in "Net revenue" and R\$235,919 in "Other operating income (expenses), net") related to PIS and COFINS tax credits – exclusion of ICMS from the calculation basis (note 10(c)).

(ii) Includes gain from sale of "Chemicals distribution" segment in the amount of R\$276,816.

(iii) Inclusion of the provision for the Leniency Agreement in the amount of R\$2,860,402.

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(c) Property, plant and equipment and intangible assets by segment

	<u>2018</u>	<u>2017</u>
Reporting segments		
Chemicals	10,916,874	11,136,125
Polyolefins	4,985,337	5,072,162
Vinyls	2,334,270	2,433,882
USA and Europe	3,875,566	2,587,302
Mexico	11,835,170	10,733,277
Total	33,947,217	31,962,748
Unallocated amounts	553,655	526,359
Total	34,500,872	32,489,107

33 Insurance coverage

Braskem contracts insurance policies to the domestic and international operations of its plants, as detailed below. In addition, also contracts other insurance policies, including general civil liability, the civil liability of directors and offices (D&O), domestic and international charter operations, charter's liability, etc.

The Insurance Program maintained by the Company is consistent with the standards adopted by petrochemical companies operating globally.

The All Risks Program provides coverage for material damages and consequent loss of profit of all Braskem plants through an "All Risks" program.

The program is divided into three different policies that ensure coverage of the operations in Brazil, United States/Germany and Mexico, which are valid through April 2020.

The following table presents additional information on the policies in force. Each has maximum indemnity limits ("MIL") per event to cover possible claims in view of the nature of the Company's activities and benchmarks, as well estimated maximum loss studies prepared by external advisors.

	<u>Maturity</u>	<u>Maximum indemnity limit</u>		<u>Amount insured</u>	
		<u>US\$ million</u>	<u>R\$ million</u>	<u>US\$ million</u>	<u>R\$ million</u>
Units in Brazil	April 10, 2020	3,375	13,077	26,406	102,318
Units in United States and Germany	April 10, 2020	500	1,937	2,037	7,893
Units in Mexico	April 10, 2020	2,936	11,376	6,068	23,512
Total				34,511	133,723

The risk assumptions adopted are not part of the audit scope and, therefore, were not subject to review by our independent accountants.

These policies provide coverage for material losses arising from accidents related to fire, explosion and machinery breakdown, etc., and consequential loss of profit, with maximum indemnity periods ranging from 12 and 33 months, depending on the plant and/or coverage.

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Braskem also carries an insurance policy against general civil liability that guarantees any damages caused to third parties from its operations and products, including any losses caused by sudden pollution.

The Company's new projects are covered by specific Engineering Risk policies and/or construction and assembly clauses included in the Operational Risks policies.

34 Information related to guaranteed securities issued by subsidiaries

Braskem S.A. has fully and unconditionally guaranteed the debt securities issued by Braskem Finance, Braskem America Finance and Braskem Holanda Finance 100-percent-owned subsidiaries of Braskem. There are no significant restrictions on the ability of Braskem to obtain funds from these subsidiaries.

35 Subsequent events

- (a) On January 30, 2019, Braskem received the first installment of R\$266 million related to the onlending transaction with the BNDES in the aggregate amount of R\$476 million at an interest rate of 11.57% p.a. and with maturity on January 15, 2031, which was taken out on December 26, 2018. The Company will receive the remaining amounts by the end of fiscal year 2019.
- (b) In 2019 the courts issued a final and unappealable decisions on the lawsuit brought by Braskem S.A. and of merged companies, which determines the exclusion of ICMS tax from the calculation base of PIS/COFINS taxes and earliest period of the tax credit of these lawsuits is retroactive to the year 1991. The effects of these decisions were assessed by the Company which recognized in the first half of 2019 the amount of R\$2,038,938 related to PIS and COFINS taxes of which R\$1,850,965 was recorded under "Other income (expenses)" and R\$187,973 under "Financial income".
- (c) On March 13, 2019, the Board of Directors approved the Long-Term Share Incentive Plan, in accordance with the terms and conditions of the ILP Plan approved by the Extraordinary Shareholders Meeting held at March 21, 2018, which includes the list of eligible persons, the deadline for acquiring own shares by participants and the number of restricted shares to be delivered to participants as matching contribution for each own share acquired.

The maximum number of shares the Company expects to deliver to the participants of the ILP Program 2019, after the vesting period and subject to compliance with all necessary requirements, is 573,345 shares. The shares to be delivered by the Company to participants of the ILP Program 2019 are those currently held in treasury or acquired through repurchase programs, and in the event said shares cannot be delivered, the Company will pay participants in cash the amount corresponding to the shares, based on the quote on the stock exchange on the second business day immediately prior to the respective payment date.

This plan will be accounted for in accordance with CPC 10 – Share-Based Payment and its corresponding standard IFRS 2, which requires the Company to calculate the value of equity instruments granted based on the fair value thereof on the grant date. The corresponding expense will be recognized by the accrual method over the vesting period for exercising the instruments.

- (d) In April 2019, the public-interest civil action was filed by the Alagoas State Prosecution Office and the Alagoas State Public Defender's Office seeking the freezing of Braskem's assets to ensure the payment of any environmental and collective damages the Company may be ordered to pay due to its past mining activities in the city of Maceió.

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The plaintiffs requested a provisional remedy to freeze Braskem's assets in the amount of R\$6.7 billion. The court's A preliminary decision ordered the freezing of R\$100 million in the Braskem's bank accounts, which already has been carried out.

After both parties filed Interlocutory Appeals, the Alagoas State Court of Appeals granted the appeal filed by the State Prosecution Office, ordering the suspension of the distribution of dividends to shareholders, under penalty of freezing R\$2.7 billion. The decision was revised by a Suspension of Injunction and Order, through a decision of the presiding judge of the Superior Court of Justice (STJ), which authorized the decision involving the distribution of dividends conditioned to Braskem effectively issuing an insurance guarantee.

On June 26, 2019, the Alagoas State Prosecution Office and the Alagoas State Public Defender's Office amended the action to change the boundaries of the claim, which involved excluding the alleged environmental damages and reducing the request for immediate freeze of assets to R\$3.7 billion, which would correspond to the sum of the pecuniary damages caused to the residents of the districts affected by the geological event. Immediately thereafter, the presiding judge of the Alagoas State Court of Appeals issued, during a courthouse vacation, a decision ordering the freezing of R\$3.7 billion.

On August 9, 2019, the decision of the presiding judge of the STJ lifted the freezing of cash, conditioned upon the effective presentation of a new insurance guarantee in the same amount by Braskem to the court.

The Company continues to collaborate with the authorities to identify the environmental causes of damages, with the support of independent experts, and is committed to implementing solutions.

- (e) As per the notice dated July 25, 2019, Braskem was informed of the Public-Interest Civil Action filed against it by the Labor Public Prosecutor of the State of Alagoas ("MPT-AL"), with an injunction to freeze the amount of R\$2.5 billion to guarantee payment of any pecuniary damages to workers affected by the geological phenomenon observed in Maceió. In said action, MPT-AL further claims the compensation of workers for pain and suffering.

On October 10, 2019, the Judge of the 7th Labor Court of Maceió deny the preliminary injunctions filed by the MPT-AL.

The Company informs will keep the market informed of any material developments in the matter.

- (f) As per the notice dated August 19, 2019, Braskem was informed that, in connection with the geological events in the State of Alagoas, the Company is aware of the filing of a Public-Interest Civil Action by the Federal Prosecution Office ("MPF") against the Company and other plaintiffs, with the following main claims for interlocutory relief: (i) the accrual of an own private fund in the initial amount of R\$3.075 billion for the execution of social and environmental programs and of emergency measures, and the maintenance in said fund of working capital in the amount of R\$2 billion or, after the financial schedule is approved, an amount equivalent to 100% of the expenses projected for the subsequent 12-month period; (ii) the presentation of guarantees in the amount of R\$20.5 billion; (iii) a prohibition on the encumbrance or divestment of any of the Company's fixed assets and on the distribution of profits, whether in dividends, interest on equity or any other form; (iv) a court-ordered freeze of any profits not distributed; and (v) a suspension on financing from BNDES (state-owned bank) and government incentives, as well as acceleration of existing debts with BNDES.

So far, there is no decision about the injunction requested.

The Company informs that it has taken all applicable measures within the legal periods and will keep the market informed of any relevant development in this matter.

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- (g) Since the Company was not able to file Form 20-F, for the year ended December 31, 2017, until the date granted by SEC and no further extensions have been granted pursuant to Section 802.01E of the NYSE Listed Company Manual, on May 13, 2019, the New York Stock Exchange suspended trading of the Registrant's American Depositary Shares and had initiated delisting procedures.
- The Company appealed the decision, which is scheduled by the NYSE for October 17, 2019.
- On October 7, 2019 the Company filed Form 20-F for the year ended December 31, 2017.
- (h) As per the Material Fact notice dated June 4, 2019, Braskem was informed by Odebrecht of its decision taken jointly with LyondellBasell to terminate negotiations for a potential transaction involving the transfer to LyondellBasell of the entire interest held by Odebrecht in the capital of Braskem. Those negotiations were started on June 15, 2018.
- (i) As per the Material Fact notice dated June 18, 2019, Braskem was informed that in view of the court-supervised reorganization filed by Odebrecht S.A. and other companies of the Odebrecht Group, including the controlling shareholder of the Company, OSP Investimentos S.A., the Company was informed that there has been no change whatsoever in the controlling interest held in Braskem, with the totality of the common and preferred shares in the Company held by OSP Investimentos S.A. in fiduciary assignment agreement to the creditors of Odebrecht.
- The Company further informs that it has no relevant amounts receivable from Odebrecht and that the court-supervised reorganization does not trigger the early termination of any of its liabilities.
- (j) In 2019, the Company reversed the provision for a controversial portion of the 2015 and 2016 CDE (energy development account) quota based on two consumer-friendly injunctions issued in 2018 and 2019 in the amount of R\$223,340.
- (k) On October 3, 2019, the Extraordinary General Meeting approved: (i) the payment of the mandatory dividend, in the amount of R\$667 million, to be paid until December 31, 2019; (ii) the capital budget for the fiscal year of 2019; and (iii) withheld by the Company, the remaining amount of the net profit, of R\$2,002 million, pursuant to article 196 of the Brazilian Corporation Law.
- (l) As of October 9, 2019, a Waivers & Consent package was approved by the Intercreditor Agent on behalf of the Lenders, thus extending the dates for achieving the Guaranteed Physical Completion Date of Braskem Idesa from November 30, 2016 to December 31, 2020 and the Guaranteed Financial Completion Date from December 31, 2016 to December 31, 2020.
- The approval of the Waivers & Consent package allows Braskem Idesa to reclassify the Senior Debt from current to non-current liabilities.