

**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, 2019  
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  
(Translation of Registrant's Name into English)

The Federative Republic of Brazil  
(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.  
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Butantã – São Paulo, SP – CEP 05501-050 – Brazil  
Telephone: + 55 11 3576-9000  
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(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	Trading Symbol	Name of Each Exchange on which Registered
Preferred Shares, Class A, without par value per share, each represented by American Depositary Shares	BAK	New York Stock Exchange

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:

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, 2019 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, a non-accelerated filer, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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<sup>†</sup> provided pursuant to Section 13(a) of the Exchange Act.

<sup>†</sup> 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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## EXPLANATORY NOTE

Braskem S.A., or the Company, is filing this annual report on Form 20-F for the year ended December 31, 2019 pursuant to the U.S. Securities and Exchange Commission, or the SEC, Order under Section 36 of the Securities Exchange Act of 1934 Modifying Exemptions from the Reporting and Proxy Delivery Requirements for Public Companies of March 25, 2020 (Release No. 34-88465).

As set forth in the Company's Form 6-K furnished to the SEC on April 30, 2020, the Company was unable to file its annual report on Form 20-F for the year ended December 31, 2019, which was originally due on April 30, 2020, due to the circumstances related to the novel coronavirus (COVID-19) pandemic. In particular, the novel coronavirus (COVID-19) pandemic has caused displacement of staff and certain other resources of the Company in order to comply with government-imposed restrictions and "stay-at-home" orders. Because of this, the Company was unable to complete certain procedures and analyses on its internal processes and controls in connection with its financial statements for the year ended December 31, 2019 prepared under PCAOB standards. This, in turn, delayed the Company's ability to prepare and complete its annual report on a timely basis.

## PRESENTATION OF FINANCIAL AND OTHER INFORMATION

All references herein to “*real*,” “*reais*” or “R\$” 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 to (1) “we,” “us,” “the Company” or “our Company” are references to Braskem S.A., its consolidated subsidiaries and jointly controlled entities, and (2) “Braskem” are references solely to Braskem S.A. All references herein to “Braskem Europe” are to 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, 2019 and 2018 and for the three years ended December 31, 2019 have been audited, as stated in the report appearing therein, 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 petrochemical 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 the information described above 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, the 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

<b>Term</b>	<b>Meaning</b>	<b>Main uses</b>	<b>In the context of our business</b>
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 BTX by-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.

<b>Term</b>	<b>Meaning</b>	<b>Main uses</b>	<b>In the context of our business</b>
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.

<b>Term</b>	<b>Meaning</b>	<b>Main uses</b>	<b>In the context of our business</b>
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.
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.

<b>Term</b>	<b>Meaning</b>	<b>Main uses</b>	<b>In the context of our business</b>
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.
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.
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.

<b>Term</b>	<b>Meaning</b>	<b>Main uses</b>	<b>In the context of our business</b>
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.
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.

<b>Term</b>	<b>Meaning</b>	<b>Main uses</b>	<b>In the context of our business</b>
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.	Used as a plasticizer, surfactant, lubricating oil additive and polymerization agent.	We produce propylene tetramer in our Chemicals Unit.
Thermoplastic resins	Raw, unshaped polymers, such as PE, PP and PVC.	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.

**Currency Conversion**

Solely for the convenience of the reader, we have translated certain amounts included in “Item 3. Key Information— Selected Financial and Other Information” and elsewhere in this annual report from *reals* into U.S. dollars using the selling rate as reported by the Brazilian Central Bank as of May 29, 2020 of R\$5.4263 to US\$1.00. These translations should not be considered representations that any such amounts have been, could have been or could be converted into U.S. dollars at that or at any other exchange rate.

## 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:

- the adverse effect of global health crises, such as the novel coronavirus (COVID-19) pandemic and others, on our Brazilian and international sales and operations, demand for our petrochemical products, our manufacturing facilities, price of raw materials, logistics for our products and raw materials, and supply chains;
- 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 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 a guarantee 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, 2019 and 2018 and for the three years ended December 31, 2019 have been derived from our audited consolidated financial statements, prepared in accordance with IFRS, and included in this annual report.

In 2019, 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, except for IFRS 16 described in “Section 4. Information on the Company—Changes in key accounting policies.”

In the year ended December 31, 2019, the Company changed the classification of the profit sharing expenses in order to report the effects of these expenses by function. The Company also reclassified the profit sharing expenses in the year ended December 31, 2018 from “Other expenses” (R\$375.4 million in 2018) to “cost of goods sold” (R\$145.4 million in 2018), “selling and distribution expenses” (R\$50.3 million in 2018), “general and administrative expenses” (R\$160.2 million in 2018) and “research and development” (R\$19.4 million in 2018).

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, 2017 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,

	2019	2019	2018	2017	2016	2015
	Restated					
	(in millions of US\$, except per share data and as indicated)			(in millions of reais, except per share data and as indicated)		
<b>Statement of Profit or Loss Data:</b>						
Net revenue	9,642.6	52,323.5	57,999.9	49,260.6	47,664.0	46,880.0
Cost of products sold	(8,455.0)	(45,879.1)	(46,576.6)	(36,177.4)	(34,985.6)	(36,697.8)
<b>Gross profit</b>	<b>1,187.6</b>	<b>6,444.4</b>	<b>11,423.3</b>	<b>13,083.2</b>	<b>12,678.4</b>	<b>10,182.2</b>
<b>Income (expenses):</b>						
Selling and distribution	(328.7)	(1,783.5)	(1,689.2)	(1,459.6)	(1,403.7)	(1,077.3)
(Loss) reversals for impairment of trade accounts receivable	(1.3)	(7.1)	87.0			
General and administrative	(409.9)	(2,224.2)	(1,793.2)	(1,434.3)	(1,285.6)	(1,095.4)
Research and development	(45.7)	(247.7)	(219.2)	(167.5)	(162.0)	(169.6)
Results from equity investments	1.8	10.2	(0.9)	40.0	30.1	2.2
Other operating income (expenses), net <sup>(1)</sup>	(375.7)	(2,038.5)	472.5	(854.9)	(3,906.0)	(952.3)
<b>Operating profit</b>	<b>28.3</b>	<b>153.6</b>	<b>8,280.2</b>	<b>9,206.9</b>	<b>5,951.2</b>	<b>6,889.8</b>
<b>Financial results:</b>						
Financial expenses	(715.5)	(3,882.8)	(3,007.6)	(3,747.2)	(3,571.0)	(3,163.4)
Financial income	156.7	850.6	589.1	603.6	690.1	584.9
Exchange rate variations, net	(317.8)	(1,724.5)	(2,257.0)	(798.7)	(3,210.4)	102.9
Financial expenses, net	(876.6)	(4,756.7)	(4,675.5)	(3,942.3)	(6,091.3)	(2,475.6)
<b>(Loss) Profit before income tax and social contribution</b>	<b>(848.3)</b>	<b>(4,603.1)</b>	<b>3,604.8</b>	<b>5,264.6</b>	<b>(140.1)</b>	<b>4,414.2</b>
Current and deferred income tax and social contribution	361.7	1,962.7	(736.6)	(1,357.7)	(616.0)	(1,660.4)
<b>(Loss) Profit for the year of continued operations</b>	<b>(486.6)</b>	<b>(2,640.4)</b>	<b>2,868.2</b>	<b>3,906.9</b>	<b>(756.1)</b>	<b>2,753.8</b>
Results from discontinued operations	0.0	0.0	0.0	8.9	26.9	6.4
<b>(Loss) Profit for the year</b>	<b>(486.6)</b>	<b>(2,640.4)</b>	<b>2,868.2</b>	<b>3,915.8</b>	<b>(729.2)</b>	<b>2,760.2</b>
Net income attributable to shareholders of the company	(468.3)	(2,541.0)	2,827.7	3,865.4	(411.5)	3,001.7
Net income attributable to non-controlling interest in subsidiaries	(18.3)	(99.4)	40.5	50.3	(317.7)	(241.5)
	<b>(468.6)</b>	<b>(2,640.4)</b>	<b>2,868.2</b>	<b>3,915.8</b>	<b>(729.2)</b>	<b>2,760.2</b>
<b>(Loss) Profit per share:</b>						
<b>Basic:</b>						
Common shares	(0.5883)	(3.1922)	3.5543	4.8479	(0.5511)	3.7651
Preferred class "A" shares	(0.5883)	(3.1922)	3.5543	4.8479	(0.5511)	3.7651
Preferred class "B" shares	(0.5883)	(3.1922)	0.5910	0.6069	0.0000	0.6065
<b>Diluted:</b>						
Common shares	(0.5883)	(3.1922)	3.5543	4.8590	(0.5511)	3.7651
Preferred class "A" shares	(0.5883)	(3.1922)	3.5543	4.8590	(0.5511)	3.7651
Preferred class "B" shares	(0.5883)	(3.1922)	0.5910	0.6069	0.0000	0.6065
ADS <sup>(2)</sup>	(1.1766)	(6.3845)	7.1086	9.7180	(1.1021)	7.5302

(1) In the year ended December 31, 2019, the Company changed the classification of the profit sharing expenses in order to report the effects of these expenses by function. The Company also reclassified the profit sharing expenses in the year ended December 31, 2018 from "Other expenses" (R\$375.4 million in 2018) to "cost of goods sold" (R\$145.4 million in 2018), "selling and distribution expenses" (R\$50.3 million in 2018), "general and administrative expenses" (R\$160.2 million in 2018) and "research and development" (R\$19.4 million in 2018).

(2) For each of the years presented, each ADS represented two of our class A preferred shares.

**For the Year Ended December 31,**

	<b>2019</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>
	<i>(in millions of US\$, except per share data and as indicated)</i>		<i>(in millions of reais, except per share data and as indicated)</i>			
<b>Statement of Financial Position Data:</b>						
Cash, cash equivalents and financial investments <sup>(1)</sup>	1,564.9	8,491.4	7,905.3	6,077.8	7,892.3	7,458.2
Short-term trade accounts receivable	421.2	2,285.8	3,075.2	3,281.2	1,634.1	2,755.7
Inventories <sup>(2)</sup>	1,405.2	7,625.1	8,486.6	6,640.0	5,299.5	6,243.7
Property, plant and equipment, net	5,955.3	32,315.2	31,759.9	29,761.6	29,336.7	34,100.3
Total assets	12,555.3	68,129.0	58,807.5	52,731.8	51,821.9	60,626.9
Short-term borrowings	142.8	774.9	737.4	1,184.8	2,594.5	1,970.0
Long-term borrowings	5,204.7	28,242.1	24,160.7	22,176.6	20,736.6	25,380.5
Share capital	1,482.3	8,043.2	8,043.2	8,043.2	8,043.2	8,043.2
Shareholders' equity (including non- controlling interest)	727.0	3,944.7	5,654.7	5,472.8	1,720.7	945.5

**Other Financial and Operating Information:**

Statement of Cash Flow Data:

Net cash provided by (used in):						
Operating activities	417.5	2,265.3	9,250.4	2,461.6	4,457.9	7,091.7
Investing activities	(491.4)	(2,666.4)	(2,488.3)	(2,406.4)	(2,552.5)	(3,334.2)
Financing activities	301.4	1,636.8	(4,603.4)	(2,988.5)	(2,757.3)	(97.5)

Other Information:

Capital expenditures:						
Property, plant and equipment	(494.4)	(2,682.5)	(2,706.3)	(2,273.2)	(2,586.5)	(3,337.9)

- (1) Includes current financial investments.  
(2) Includes non-current advances to suppliers.

**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*

***Global or regional health pandemics or epidemics, including that related to the novel coronavirus (COVID-19), may adversely affect our business, financial condition and results of operations.***

Our business, financial condition and results of operations may be adversely affected by the novel coronavirus (COVID-19) pandemic, which was reported to have surfaced in China in December 2019 and spread to the rest of the world, or by other pandemics or epidemics of similar nature. In 2020, the novel coronavirus (COVID-19) pandemic has significantly impacted economic activity and markets around the world, and its severity, magnitude and duration are highly uncertain, rapidly changing and difficult to predict. At this time, our management cannot fully predict with certainty the effects that the novel coronavirus (COVID-19) pandemic will have on our business, financial condition and results of operations and whether these effects will be material to us. The spread of the novel coronavirus (COVID-19) has caused us to modify certain of our business practices, and we may take further actions as required by government authorities or that we determine are in the best interests of our employees, customers, partners and suppliers. Based on our preliminary operating data for May 2020 and the publicly reported expected impact on certain industries that are customers to our products (such as automotive and construction), we believe the novel coronavirus (COVID-19) has affected our business in numerous ways, including, but not limited to, reduction of our production, sales volume and net revenue, increase of some of our costs, and decrease of our gross margin.

We are closely monitoring the impact of the novel coronavirus (COVID-19) pandemic on all aspects of our business and geographies, including how it may impact our customers, team members, suppliers, business partners and distribution channels. We are at this time unable to fully predict the impact that the novel coronavirus (COVID-19) pandemic will have on our financial position and results of operations due to numerous uncertainties that we are unable to predict or control, such as the severity of the virus, the duration of the outbreak, governmental, business or other actions, which could include limitations on our operations or mandates to provide products or services, impacts on our supply chains, the effect on customer demand, plant closures or changes to our operations. We cannot predict the impact that the novel coronavirus (COVID-19) pandemic will have on our customers, suppliers and other business partners, and any material effect on these parties could also adversely impact us. The effects on the health of our workforce, and our ability to meet staffing needs in our plants, distribution facilities, sale operations and other critical functions cannot be predicted. Further, the impacts of the expected worsening of global economic conditions and the continued disruptions to, and volatility in, the credit and financial markets, consumer and corporate spending as well as other unanticipated consequences remain unknown. The pandemic has resulted in, and may continue to result in, significant disruption of global financial markets, which may reduce our ability to access capital or our customers' ability to pay us for past or future purchases, which could negatively affect our liquidity.

While we are actively managing our response to potential impacts that are identified, we may not be able to respond to all impacts on a timely basis to prevent adverse effects on our business, financial condition and results of operations.

***The cyclical nature of the petrochemical industry may reduce our net 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 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 revenue, feedstock costs 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.

***Adverse conditions in the petrochemical industry may adversely affect demand for our products.***

Sales of our petrochemical products are tied to global production levels and demand, which can be affected by macro-economic factors such as interest rates, oil prices, shifts to alternative products, consumer confidence, employment trends, regulatory and legislative oversight requirements, trade agreements, as well as regional disruptions, natural disasters, epidemics, pandemics, or other global events. For example, the persistence of the recent novel coronavirus (COVID-19) pandemic could negatively impact supply chains worldwide and demand for our products. The extent to which the novel coronavirus (COVID-19) pandemic impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including the severity of the novel coronavirus (COVID-19) pandemic, actions to contain it or treat its impact, among others.

***Our revenue from certain of our customers is significant, and the credit risks associated with 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 certain of our 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 certain of our customers is significant, and the credit risks associated with 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. In addition, delays in payment cycles by significant customers may adversely affect our liquidity and working capital.

***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 viability of the business of certain of our customers deteriorates or our credit policies are ineffective in reducing our exposure to credit risk relating to such customers, 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. In addition, delays in payment cycles by significant customers may adversely affect our liquidity and working capital.

As of December 31, 2019, our total trade accounts receivable, net of expected credit losses (R\$229.3 million) was R\$2,306.7 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 world's GDP grew by 2.9% in 2019, a decrease of 0.7 percentage points as compared to the world's GDP growth during 2018. In 2019, Brazil's GDP grew by 1.1%, compared to growth of 1.3% in 2018, growth of 1.0% in 2017, and a contraction of 3.5% in 2016.

According to the IMF, the U.S. GDP grew by 2.3% in 2019 as compared to growth of 2.9%, 2.3% and 1.5% in 2018, 2017 and 2016, respectively. In addition, according to the IMF, European GDP grew by 1.2% in 2019 and the Mexican GDP stagnated in 2019.

According to the IMF, because of the adverse effects of the novel coronavirus (COVID-19) pandemic on the economy of several countries, the world's GDP and the GDP of Brazil, the United States, Europe and Mexico is expected to shrink significantly in 2020, leading to an economic contraction and a recession in these countries or regions.

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 may 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, 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, Middle East and Chinese 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. Also, the appreciation of the Euro against the U.S. dollar may increase the competitiveness of prices of imported products denominated in Euro and, as a consequence, increase competition from imports.

***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, which may, as a consequence, adversely affect our results of operations and financial position.

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); (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 recycling and improving recycling chains and recovery of materials; (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) engaging in partnerships to understand, prevent and solve issues associated with mismanagement of plastic residues, especially debris in oceans; and (viii) supporting public policies to improve solid waste management and recycling chains, especially of plastic waste.

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.

In 2018, the European Union adopted a strategy for disposal of plastic products in a circular economy that aims to significantly increase recycling and targets the plastic products most often found on beaches and in seas. In addition, state and local governments, for example, in China and Brazil, have increasingly proposed or implemented bans on plastic products such as disposable plastic bags and straws, as well as other plastic food packaging. Additionally, the use of single-use plastic products has recently faced increased public scrutiny. Increased regulation or prohibition of the use of plastic products could increase the costs incurred by our customers to use such products or otherwise limit the use of these products, and could lead to a decrease in demand for PE, PP and other products we make. Such a decrease in demand could adversely affect our business, 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. For example, failure to comply with applicable policies, which could lead to lower demand for our products, banning of plastic products without allowing the search for alternatives by means of efficient solutions, including resins produced by Braskem, could have a material adverse effect on our business, results of operations and financial condition. Also, 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 40.7% of our consolidated cost of products sold in 2019 and 41.8% in 2018, 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 such Complex. Ethane and propane accounted, directly and indirectly, for 0.5% and 1.0%, respectively, of our consolidated cost of products sold in 2019 and for 0.6% and 1.2%, respectively, of our consolidated cost of products sold in 2018.

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 certain of our Brazilian polypropylene plants. Propylene accounted, directly and indirectly, for 20.1% and 21.7% of our consolidated costs of products sold in 2019 and 2018, 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 1.3% and 1.0% of our consolidated costs of products sold in 2019 and 2018, 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. In 2019, the ARA price of naphtha decreased 16.0%, from US\$601.30 per ton in 2018 to US\$505.30 per ton in 2019, which was the result of lower oil prices and the use of more competitive feedstocks to produce ethylene at flexible petrochemical crackers, mainly in the United States.

In 2019, the Mont Belvieu prices of ethane averaged 21.6 cents per gallon, or US\$160.5 per ton, decreasing 34.0% from 2018, driven by higher supply associated with the: (i) startup of new gas fractionators and pipelines for transportation; and (ii) delays in the startup of new petrochemical crackers.

In 2019, the USG price for propylene averaged US\$820.30 per ton, 31.0% lower than 2018, due to increased availability of the monomer, which was the result of the higher utilization rates of PDH plants and the higher use of natural gas liquids in petrochemical crackers.

The European price reference for propylene averaged US\$1,024.70 per ton in 2019, or 12.4% lower than in 2018, which was the result of the normalization of logistics constraints on propylene in Europe, which affected the region in the previous year due to low river levels.

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, ethane, propane and propylene costs in *reals*. 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 naphtha, which is the main feedstock used by a marginal producer, 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 ethane and propane 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 2019, Petrobras supplied 36.5% 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, and others 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. In June 2020, we entered into new agreements with Petrobras for the supply of petrochemical naphtha to our industrial units in Bahia and Rio Grande do Sul. The agreements will become effective for five years following the expiration of the current agreement with Petrobras in December 2020. See “Item 5—Operating and Financial Review and Prospects—Recent Developments—Naphtha Agreements with Petrobras.”

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 revenue would likely decrease, while our costs would likely increase, and adversely affect our overall financial performance in the event of the occurrence of one or more 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;
- 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”;
- 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; or
- failure to renew or extend our existing agreements for the supply of raw materials or pipeline infrastructure use considering that Petrobras is conducting a divestment plan of its assets that also includes certain refineries that supply naphtha to us and some logistic infrastructure assets.

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, 2019, we had fifteen 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 84% 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 2023. We have entered into a third contract that will expire at the end of 2020, increasing the supply of our plants to 87% 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.***

We currently source most of our supply of ethane, which is the primary feedstock used in our polyethylene production process, from Pemex Transformación Industrial, or Pemex TRI, a state-owned Mexican entity, which is a subsidiary of Petróleos Mexicanos, or Pemex, the state-owned Mexican oil and gas company, pursuant to an ethane supply agreement, or the ethane supply agreement, entered into by Braskem Idesa S.A.P.I., or Braskem Idesa, which is our joint venture with Grupo Idesa, S.A. de C.V., or Idesa, with Pemex TRI under competitive commercial conditions at prices that reference: (i) the Mont Belvieu purity ethane price; and (ii) the Henry Hub price, which are both U.S. dollar-based international reference prices. As a result, our production volumes, net revenue and profit margins would likely decrease and materially adversely affect our overall financial performance in case one or more of the following events occur:

- significant damage to Pemex TRI's gas processing centers or to any of the pipelines connecting our complex to Pemex TRI's facilities, whether as a consequence of an accident, natural disaster, fire or otherwise;
- any further decrease in the amount of ethane currently being delivered by Pemex TRI to our petrochemical complex;
- any dispute with Pemex TRI related to the ethane supply agreement, including the non-recognition or non-payment of liquidated damages;
- any material default by us or by Pemex TRI to supply ethane in the contractually agreed volumes or qualities under the ethane supply agreement;
- any repudiation or termination by Pemex TRI or by us of the ethane supply agreement; or
- delays in the availability of ethane of acceptable quality, or our inability to obtain acceptable ethane in the quantities and quality that we need, or at all, or at reasonable prices.

Regarding liquidated damages due under the ethane supply agreement, during the fourth quarter of 2019 and the first quarter of 2020, Pemex should have delivered to us credit notes relative to: (i) the first quarter of 2019, in an amount of around US\$26 million, after the second quarter of 2019 and third quarter of 2019 contractual cure period for providing catch-up volumes has lapsed; and (ii) the second quarter of 2019, in an amount of around US\$13 million, after the third quarter of 2019 and fourth quarter of 2019 contractual cure period for providing catch-up volumes has lapsed. As of the date of this annual report, Pemex has yet to provide such credit notes and has therefore not fulfilled its contractual obligation on a timely basis.

We are currently engaged in ongoing discussions with Pemex TRI to try and address the issues related to the fact that Pemex's supply of ethane is below the contracted volumes and that Pemex has not paid certain liquidated damages due under the ethane supply agreement. We can give no assurances as to the outcome of such discussions and, at any time, we could initiate legal actions against Pemex for its defaults under the ethane supply agreement, such as arbitration proceedings against Pemex following the default and notifications triggered as a result thereof.

Furthermore, the ethane supply agreement could be modified through regulatory means, terminated or jeopardized by Pemex TRI as a result of political pressure to not comply with the agreement, change the terms of the agreement, initiate expropriation measures or a change in laws or regulations by the Mexican government.

A termination by Pemex TRI of the ethane supply agreement or a modification to the ethane supply agreement as a result of political pressure could have a material adverse effect on our business, results of operations and financial condition. The provisions for early termination by Pemex TRI include: (i) our failure to pay that continues for more than six months after notice; or (ii) an emergency stoppage in operations or force majeure event due to which our insurers consider the complex to be a total loss, or after which we cannot or do not resume operations for 48 months.

If Pemex TRI (i) delivers less than an average of 70% of the 66,000 barrels of ethane per day over a six-month period, (ii) reaches the annual limit in respect of liquidated damages owed by Pemex TRI to us and such limit is not waived by Pemex TRI, or (iii) materially breaches any of its obligations related to the supply of ethane thereunder, and such breach continues for more than six months after notice, Braskem Idesa has the right to terminate the ethane supply agreement and require Pemex TRI to repay certain outstanding debt and compensate Braskem and Idesa according to an agreed valuation formula including the repayment of certain of our debt.

Any termination, cancelation or modification of the ethane supply agreement or reduction in the amount of liquidated damages owed to us by Pemex TRI for any other reason, could have an adverse effect on our results of operations and financial position. 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 have no control over the corporate actions or decisions of Pemex TRI, which is our main supplier of ethane and a Mexican state-owned enterprise.***

The Mexican government has exercised, and continues to exercise, significant influence over the Mexican economy. Accordingly, Mexican governmental actions concerning the Mexican economy and state-owned enterprises could have a significant impact on Mexican private sector entities in general and on our operations in particular. We cannot predict the impact that political conditions will have on the Mexican economy. We can give no assurances that changes in Mexican federal government policies will not adversely affect our business, financial condition, results of operations and prospects. We currently do not have and do not intend to obtain political risk insurance.

Our main supplier of ethane, Pemex TRI, is a subsidiary of Pemex, a state-owned entity of the Mexican government, and, therefore, the Mexican government controls Pemex, as well as its annual budget, which is approved by the Mexican Congress. The Mexican government may cut spending in the future. These cuts could adversely affect Pemex’s annual budget and its ability to provide us with our contracted supply of ethane.

We are subject to the U.S. Foreign Corrupt Practices Act, or FCPA, U.S. domestic bribery laws, and other anti-corruption and anti-money laundering laws in the countries in which we conduct activities, including Mexico. We may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities in Mexico, such as Pemex TRI. We could be held liable for the corrupt or other illegal activities of our employees, representatives, contractors, partners and agents, even if we do not explicitly authorize such activities. Detecting, investigating, and resolving actual or alleged violations of anti-corruption laws can require a significant diversion of time, resources, and attention from senior management. In addition, noncompliance with anti-corruption, anti-bribery, or anti-money laundering laws could subject us to whistleblower complaints, investigations, prosecution, enforcement actions, sanctions, settlements, fines, damages, other civil or criminal penalties or injunctions, suspension or prohibition from contracting with certain persons, reputational harm, adverse media coverage, and other collateral consequences. If any subpoenas or investigations are launched, or governmental or other sanctions are imposed, or if we do not prevail in any civil or criminal proceeding that may be filed against us, our business, financial condition and results of operations could be harmed.

In addition, there have been allegations released in the media in Brazil and Mexico regarding corruption at Pemex involving their procurement processes as a general matter. We can make no assurances that those allegations will not extend to the procurement process with regard to the ethane supply agreement.

Pemex’s production, over which we have no control, nor over any other corporate action or decision, have decreased over the last years according to public disclosure by Pemex. As a result, it has led to a significant decrease in oil production and associated production of natural gas, which, in turn, is the feedstock used by Pemex in the production of ethane. Any further decrease in the amount of ethane currently being delivered by Pemex TRI to our petrochemical facility pursuant to the terms of the ethane supply agreement or any reduction in, or outright failure by, Pemex TRI to pay us the liquidated damages due under the ethane supply agreement, could have an adverse effect on our financial condition and results of operation.

***We rely on limited or sole-source suppliers for our raw materials, inputs and energy.***

We rely on Petrobras for most or all of our supply of 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 Unit, and Pemex TRI for most of our supply of ethane in Mexico. For naphtha supply to Brazil we rely in several international suppliers for most of the purchases to the crackers in the states of Bahia and Rio Grande do Sul, and we rely on Petrobras for the major part of the supply only to the cracker located in the state of São Paulo. Also, we are subject to substantial risks because of our reliance on these and other limited or sole-source suppliers of raw materials, inputs and energy, including the following risks:

- if a supplier does not provide naphtha, ethane, propane, refinery off gas, propylene, input or energy, 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, propylene, other inputs or energy, 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 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.

Also, our production volumes of, and net revenue from, our Chemicals Unit products could decrease, and our overall financial performance would be negatively affected in the event of any significant damage to the facilities of our Vinyls and Polyolefins Units through which ethylene is consumed.

Our plants located at the Camaçari Complex in the Brazilian state of Bahia depend on our subsidiaries Cetrel S.A. (“Cetrel”), Água de Camaçari (“DAC”) and Distribuidora de Água Triunfo (“DAT”) 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, DAC or DAT may result in the shutdown of all of our plants at the Camaçari Complex and the Rio Grande do Sul 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 revenue from sales from our plants at the Camaçari Complex and the Rio Grande do Sul 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.

In addition, the International Maritime Organization (IMO) has set a limit for sulphur in fuel oil used onboard ships of 0.50% m/m (mass by mass), which is applicable from January 2020, aimed at significantly reducing the amount of sulphur oxide emissions by ships, down from the previous 3.50% m/m (mass by mass), which could increase our shipping costs and, as a consequence, decrease our gross margin.

***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.

***Capital projects can take many years to complete, and market conditions could deteriorate significantly between the project approval date and the project startup date, negatively impacting project returns. If we are unable to complete capital projects at their expected cost and in a timely manner, or if the market conditions assumed as a basis for our project economics deteriorate, our business, financial condition, results of operations and cash flows could be materially and adversely affected.***

Delays or cost increases related to capital spending programs involving engineering, procurement and construction of facilities could materially adversely affect our ability to achieve forecasted internal rates of return and results of operations. Delays in making required changes or upgrades to our facilities could subject us to fines or penalties as well as affect our ability to contract with our customers and supply certain products we produce.

Such delays or cost increases may arise as a result of unpredictable factors, many of which are beyond our control, including, but not limited to:

- denial of or delay in receiving requisite regulatory approvals or permits;
- unplanned increases in the cost of construction materials or labor;
- disruptions in transportation of components or construction materials;
- change in the market conditions assumed as a basis for our project economics;
- adverse weather conditions, natural disasters, epidemics, pandemics or other events (such as equipment malfunctions, explosions, fires or spills) affecting our facilities, or those of vendors or suppliers;
- shortages of sufficiently skilled labor, or labor disagreements resulting in unplanned work stoppages; and
- nonperformance by, or disputes with, vendors, suppliers, contractors or subcontractors. Any one or more of these factors could have a significant impact on our ongoing capital projects.

If we are unable to make up the delays associated with such factors or to recover the related costs, or if market conditions change, it could materially and adversely affect our business, financial condition, results of operations and cash flows.

***Our level of indebtedness could adversely affect our ability to raise additional capital to fund our operations, limit the ability to react to changes in the economy or our industry and prevent us from meeting our obligations under our financing agreements.***

Our level of indebtedness and our leverage, together with changes to our ratings and those of our debt securities by the main credit rating agencies, could have certain material consequences to us, including the following:

- limit our ability to obtain additional financing for working capital, additions to fixed assets, product development, debt service requirements, acquisitions and general corporate or other purposes;
- limit our ability to pay dividends;
- a portion of our cash flows from operations must be set aside for the payment of interest on existing indebtedness and is therefore not available for other purposes, including operations, additions to fixed assets and future business opportunities;
- limit our ability to adjust to changing market conditions and place us at a competitive disadvantage compared to our competitors that have less debt;
- we may become vulnerable in a downturn in general economic conditions; and
- we may be required to adjust the level of funds available for additions to fixed assets.

As a result of the factors listed above, our financial condition and results of operations may be adversely affected.

***Any downgrade in the ratings of Brazil, our Company 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 negative outlook and (ii) Fitch Ratings of BBB with a negative 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 negative outlook and (ii) Fitch Ratings of AAA with a negative 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 in January 2018 and has not been investment grade by all the main rating agencies for several years. Any decision by these agencies to downgrade the ratings of the Brazilian federal government, our ratings or those 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.

In 2020, the novel coronavirus (COVID-19) pandemic has significantly impacted economic activity and markets around the world, and its severity, magnitude and duration are highly uncertain, rapidly changing and difficult to predict. Actual and potential impacts of the novel coronavirus (COVID-19) on the global economy, the economies of certain countries and certain companies has led ratings agencies to review and downgrade the credit ratings of sovereigns and issuers of securities around the world. Recently, Fitch Ratings has revised the outlook of the Brazilian sovereign credit rating to negative from stable. A potential further downgrade of the ratings of Brazil, our ratings, or those of our debt securities could result in increased interest and other financial expenses related to our borrowings and debt securities and could reduce our liquidity and ability to obtain additional financing under desired terms and conditions.

***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.

In addition, 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 (as defined below), including risks related to the change of our corporate control resulting from decisions taken or agreed under such proceedings and the consequences derived therefrom. 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.

***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 shareholders 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. 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 and incurred significant debt. 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;
- any material default by Pemex TRI under the ethane supply agreement;
- the ability of Braskem Idesa to service the debt under its project finance facility;
- the ability of Braskem Idesa’s shareholders to comply with the obligation to make certain contingent equity contributions to cover additional amounts necessary to complete the project, as agreed in the equity support agreement in connection with the project finance facility. For additional information, see “Item 5. Operating and Financial Review and Prospects—Capital Expenditures—Joint Venture—Mexico Complex—Equity Support Agreement Relating to the Mexico Complex.”
- an unstable and non-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 three 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. Further, any material adverse effect on the financial condition or results of operations of the Mexican complex may adversely impact our own financial condition and results of operations. 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 and our second and third generation clients 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 and impact the demand for our products, which would likely result in lower net 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 (mainly by pipeline, road, train, fluvial and maritime), 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 or close to our logistic routes and pipelines, environmental damage, delays in production, and, in certain circumstances, liability in civil, labor, criminal and administrative lawsuits.

Changes to applicable laws may impose changes on standards we have already implemented, which can take time to review and update. For example, we are carrying out studies related to dams at certain of our industrial sites as a result of a change in Brazilian law that now requires that all water and waste dams have a safety plan for these structures. We have already classified all of our dams in terms of associated risks and potential damage. At this time, we are preparing dam safety plans, with completion scheduled for the first half of 2020, which were communicated to public authorities. All of our dams are small in volume, and our preliminary assessments did not point to significant risks in their structures. Some environmental studies that we have commissioned have indicated instances of environmental contamination at certain of our plants. If the laws and regulations applicable to risks and safety plans change, we may be required to revise the studies that we have carried out, or take further action to rectify potential issues that would not need to be addressed under current laws and regulations. In addition, we and certain of our executive officers have received certain notices 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.

Also, under Brazilian federal and state environmental laws and regulations, we are required to obtain operating licenses and permits for our manufacturing facilities. If any of our environmental licenses or permits lapse or are not renewed or if we fail to obtain any required environmental licenses or 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 other civil and criminal sanctions on us.

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, storage facilities, logistic equipment or pipelines could force us to suspend our operations temporarily and result in significant remediation costs and lost net 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, was subject to similar risks and hazards. For instance, in certain neighborhoods of the city of Maceió that are located near the geological area of our salt mines, there have been allegations that the ground gave way as a result of the activities carried out by us at these mines, which allegedly may have affected certain nearby private and public properties. Certain lawsuits have been filed in the state of Alagoas in connection with this incident.

Mining operations at our salt mine in Alagoas were halted in May 2019. Even though the risk of a sinkhole formation is unlikely, it cannot be fully disregarded. A safety area covering 15 of the 35 wells at the site of our salt mine was designated, and the entirety of the mining area has been monitored. In October 2019, a conceptual project was launched to start backfilling some wells that have lost their salt, which is a condition for sinkhole formation. We expect that these wells will be stabilized as soon as possible, starting in 2020. However, these actions are part of a large operation that, following reasonable engineering efforts, may take a few years to be completed. Other caverns that are comparatively more stable will be closely monitored. Based on the results of monitoring routines and additional studies relating to numerical simulations, which provide data to monitor the stability of the caverns, there could arise the need for further stabilization and backfilling.

On January 3, 2020, we entered into an agreement with the Alagoas State Public Defender's Office (*Defensoria Pública do Estado de Alagoas*), the Federal Prosecutor's Office (*Ministério Público Federal*), the State of Alagoas Prosecutor's Office (*Ministério Público do Estado de Alagoas*) and the Federal Public Defender's Office (*Defensoria Pública da União*) to support the relocation of, and indemnification to, residents in the areas at risk located in the districts of Mutange, Bom Parto, Pinheiro and Bebedouro in the city of Maceió, in the state of Alagoas, as set forth in the agreement, which was ratified by the Federal Judge of the 3<sup>rd</sup> District Court in the state of Alagoas. We estimate that the support for relocation set forth in the agreement and in surrounding areas will involve approximately 4,500 buildings and 17,000 people during the next two years.

On December 31, 2019, based on its assessment and on that of its external legal advisors, and considering the existing information that was available, discussions held with authorities and estimates of expenses with the various safety measures to benefit residents, the Company recorded a provision of R\$3,383.1 million, of which R\$1,450.5 million is under current liabilities and R\$1,932.6 million is under non-current liabilities. Due to the inherent change in the assumptions related to the provisions arising from new facts and circumstances, execution time and extent of the action plans, the findings of future studies conducted by experts and the outcome of pending lawsuits, the provision may be adjusted over time to reflect new developments.

On February 17, 2020, we entered into a settlement agreement with the Labor Prosecutor's Office (*Ministério Público do Trabalho*) in the amount of R\$40.0 million pursuant to which we agreed to implement a program for business recovery and promotion of educational activities, or the Business Recovery and Promotion of Educational Activities Program, for the benefit of residents and workers in the districts of Mutange, Bom Parto, Pinheiro and Bebedouro in the city of Maceió, in the state of Alagoas, Brazil. The program consists of constructing day care centers and schools, implementing vocational training programs and providing support to civil defense authorities with regard to hiring qualified personnel for continuing the process of monitoring the areas at risk in these districts. Pursuant to the settlement agreement, the Labor Prosecutor's Office agreed to withdraw the lawsuit it had filed against us, including the request to freeze our funds made in connection with such lawsuit, as per the notices to the market disclosed by us on July 25, 2019 and October 10, 2019. For additional information, see "Item 8. Financial Information—Legal Proceedings—Alagoas – Mining Activities."

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, waste water treatment 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 caused 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 that was launched by certain entities of the chemical industry sector worldwide.

Such existing stringent environmental and other regulations require significant capital expenditures. Our consolidated annual expenditures on environmental control were R\$369.8 million in 2019, R\$329.3 million in 2018 and R\$330.1 million in 2017, 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 Controlship (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\$2.3 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\$1.5 billion related to the Global Settelement 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\$900 million to the MPF in four remaining annual installments due on January 30 of each year as from 2021. 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 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 were required to cooperate with these governmental authorities and improve our governance and anti-corruption compliance practices. We were also subject to external monitorship for a period of three years from 2017, which ended in March 2020, during which time the monitor assessed compliance with the Global Settlement, including the effectiveness of our internal controls, policies and procedures to reduce the risk of any anti-corruption violations.

On May 13, 2020, the MPF, the DoJ and the SEC confirmed the conclusion of the independent compliance monitorship at Braskem, which had been established in the settlement agreements entered into by Braskem, the DoJ and the SEC on December 21, 2016. The decision of the DoJ and the SEC was based on a final report from the independent monitors, who certified that the Company implemented all of the recommendations regarding the structure and execution of its compliance program and concluded that the Company meets the standards set out in the settlement agreements entered into with the DoJ and the SEC. Following the end of the independent monitorship period and the certification by the MPF, the DoJ and the SEC, the Company has complied with its obligations established in the settlement agreements entered into with these authorities and has successfully concluded the three-year monitorship.

We believe 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 Braskem S.A.'s stock in violation of U.S. securities laws.

After the decision on the motion to dismiss filed by us, partially granting its arguments, we 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\$10.0 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 Depositary 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).

On January 3, 2020, the plaintiffs agreed to: (i) release the amount of R\$3.7 billion that had been frozen, of which R\$1.7 billion was to be transferred to a bank account of Braskem specifically for funding the Financial Compensation and Support for Relocation Program, which must maintain at minimum balance of R\$100 million, subject to audit by an external auditor; and (ii) substitute the surety bonds that had been presented by Braskem in the approximate aggregate amount of R\$6.4 billion for two new surety bonds in the approximate aggregate amount of R\$3.0 billion to guarantee the public interest civil lawsuit filed by 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*) and the public interest civil lawsuit filed by the Federal Prosecutor's Office (*Ministério Público Federal*).

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, or health epidemics 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. Additionally, other unanticipated problems such as health epidemics or pandemics, including the novel coronavirus (COVID-19) outbreak that began in China and spread to the rest of the world, could also cause operational disruptions of varied duration. 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. In addition, if the amount of water available to industrial facilities becomes scarce, there may be a need to reduce production at the affected sites. 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, 2019 (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, 2018, certain of which still existed as of December 31, 2019. 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 were granted pursuant to Section 802.01E of the NYSE Listed Company Manual, on May 13, 2019, we were notified by the NYSE that it had suspended the trading of our ADSs and had initiated delisting procedures. Trading of our ADSs resumed after we filed our annual reports on Form 20-F for the years ended December 31, 2017 and December 31, 2018 on October 8, 2019 and October 17, 2019, respectively.

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 or noteholders 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 or noteholders 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.

In addition, certain of our contractual arrangements, including debt obligations, 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 financing 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 5.375% Notes due 2022, 3.50% Notes due 2023, 6.45% Notes due 2024, 4.50% Notes due 2028, 4.500% Notes due 2030, 7.125% Notes due 2041, 5.875% Notes due 2050 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 was initially expected to come into effect in August 2020, but its effective date has been postponed to at least 2021. 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 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 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:

- expansion or contraction of the Brazilian economy, as measured by rates of growth in GDP, which is expected to significantly contract in 2020;
- fluctuations in exchange rates;
- exchange control policies;
- interest rates;
- inflation;
- tax policies;
- 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.

Also, imports of suspension PVC from the United States 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 also been subject to a duty 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 on imports from the United States and Mexico are scheduled to expire in 2021, and, although the duties imposed on imports from China and South Korea expired in 2019, they are currently under review and therefore will remain in effect until the end of the review process, which is expected to occur in August 2020.

Additionally, in December 2010, CAMEX imposed an anti-dumping duty of 10.6% on polypropylene imports from the United States, which was extended 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 although the duties imposed on imports from South Africa, India and South Korea expired in 2019, they are currently under review and therefore will remain in effect until the end of the review process, which is expected to occur in August 2020.

In 2019, 31% of Brazilian polyethylene, polypropylene and PVC resins were imported products, which reflected an 8.5% annual increase in the volume of resins imported.

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 higher availability of products from plants that recently started to operate.

***Changes in industrial policy and related actions undertaken by the Brazilian government may negatively affect demand for our products as well as our net 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 tax 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 *real* 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 47.0% against the U.S. dollar during 2015, appreciated by 16.5% during 2016 and appreciated by 8.5% during 2017, depreciated by 14.5% during 2018 and depreciated by 7.9% during 2019.

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\$37,633.2 million (US\$9,336.6 million) as of December 31, 2019 (inclusive of an aggregate amount of R\$9,981.7 million (US\$2,476.4 million) outstanding as of December 31, 2019 in connection with our secured debt related to our Mexico Complex), representing 96.0% of our consolidated indebtedness, net of transaction costs. As of December 31, 2019, we had R\$6,803.9 million (US\$1,688.0 million) in foreign currency-denominated cash and cash equivalents, including the aggregate amount of R\$1,017.2 million (US\$252.4 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 40.7% of our consolidated cost of products sold in 2019. 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.

Therefore, with the goal of partially mitigating the long-term exchange risk, in September 2016, the Company started to contract financial derivatives to establish a long-term foreign exchange hedge program. The program aims to mitigate dollar call and put option contracts by hedging expected cash flows over a 24-month period.

***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 years, inflationary pressures persist. Inflation rates, as measured by the IGP-DI, were 10.7% in 2015, 7.2% in 2016, negative 0.4% in 2017, 7.1% in 2018 and 7.3% in 2019. 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 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 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, 2019, we had, among other debt obligations:

- R\$0.3 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, 2019);
- R\$1,031.5 million of loans and financing that were subject to the Interbank Deposit Certificate (*Certificado de Depósito Interbancário*), or CDI, rate;
- R\$479.1 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\$7,794.9 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, and it is unclear if LIBOR will cease to exist or if new methods of calculating LIBOR will evolve. If LIBOR ceases to exist or if the methods of calculating LIBOR change from their current form, interest rates on future indebtedness may be adversely affected or we may need to renegotiate the terms of our existing facilities to replace LIBOR with the new standard that is established, if any, or to otherwise agree with lenders, trustees or agents, as applicable, on a new means of calculating interest. 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 96.0% of our indebtedness on a consolidated basis as of December 31, 2019, including transaction costs and 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, in particular in view of the novel coronavirus (COVID-19) pandemic. 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***

### ***Mexico has experienced adverse economic conditions, which may adversely affect our business.***

Mexico has historically experienced uneven periods of economic growth. In 2017, Mexico's GDP only increased by 2.1%, while inflation increased to 6.8%. At the end of 2017, Mexico's inflation rate reached a 17-year high, primarily due to a weaker *Peso* compared to the U.S. dollar and the termination of government controls on gasoline and other fuels. In 2018, Mexico's economy rebounded slightly from the prior high inflation rate, decreasing to 4.8%. Inflation remained above the consumer price index target of 3%, and Mexico's GDP growth for 2018 decreased slightly to 2.0%, from 2.1% in 2017. In 2019, Mexico's GDP stagnated in relation to 2018. According to the IMF, because of the adverse effects of the novel coronavirus (COVID-19) pandemic, the GDP of Mexico is expected to shrink significantly in 2020, leading to an economic contraction and a recession in the country.

Decreases in the growth rate of the Mexican economy, periods of negative growth or reductions in disposable income may result in lower demand for our products. The Mexican government recently cut spending in response to an austerity policy and a downward trend in international crude oil prices, and it may further cut spending in the future. These cuts could adversely affect the Mexican economy and, consequently, our business, financial condition, operating results and prospects. In addition, there can be no assurance that the recent Mexican sovereign debt rating downgrades will not adversely affect our business, financial condition or results of operations.

Our revenues are subject to the risk of loss from unfavorable political and diplomatic developments, social instability, and changes in governmental policies, including expropriation, nationalization, international ownership legislation, interest-rate caps and tax policies. As a result, the actions of the Mexican government concerning the economy and regulating certain industries could have a significant effect on Mexican private sector entities, including us, and on market conditions, prices and returns on Mexican securities, including our securities.

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

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, and increased economic activity between the two countries. Adverse economic conditions in the United States or other related events could have a significant adverse effect on the Mexican economy, which could adversely affect our business. As a result of talks to renegotiate NAFTA, on November 30, 2018, the United States, Canada, and Mexico signed the United States-Mexico-Canada Agreement, or USMCA. Although the USMCA is intended to replace NAFTA, the USMCA is not yet in effect and may fail to be approved and implemented. If such events occurred, they could adversely impact our business and operations. Since 2003, exports of petrochemical products from Mexico to the United States have enjoyed a zero-tariff rate under NAFTA. Any action taken by the current U.S. or Mexico administrations, including changes to NAFTA or the USMCA that would increase the tariff rate between the countries, could have a negative impact on the Mexican economy, such as reductions in the levels of remittances, reduced commercial activity or bilateral trade, or declining foreign direct investment in Mexico. In addition, increased or perceptions of increased economic protectionism in the United States and other countries could potentially lead to lower levels of trade and investment and economic growth, which could have a similarly negative impact on the Mexican economy. These economic and political consequences could adversely affect our business, results of operations and financial condition.

The 2016 U.S. presidential election and the change in the U.S. administration have had an impact on the worldwide economy and in Mexico. The current U.S. governmental policies towards Mexico have created instability, uncertainty and may adversely affect the Mexican economy. For example, President Donald Trump has instituted import tariffs on a limited amount of products imported from Mexico and enforced measures intended to control illegal immigration from Mexico, which have created friction between the U.S. and Mexican governments and may reduce economic activity between these countries. In addition, in June 2019, the Trump administration announced plans to impose an escalating series of tariffs on Mexico unless the Mexican government enacted certain policy changes. While the Mexican and U.S. governments were able to reach an understanding, we cannot assure you that the U.S. government will not impose escalating or other tariffs on Mexico and that we will not be materially adversely affected by tariffs in the future.

Our profitability is affected by numerous factors including demand for the products we provide. The demand for our products in Mexico, Central and South America, the Caribbean, Europe the U.S. and in the other countries in which we operate may be adversely affected by the tightening of credit markets and economic downturns. As a global company, we depend on the demand from customers in Mexico, the U.S. and the other countries in which we operate, and reduced consumer spending that falls short of our projections could adversely affect our business, results of operations and financial condition.

***Political events in Mexico could affect Mexican economic policy and our business, financial condition and results of operations.***

The last Mexican presidential and congressional elections took place in July 2018. Andrés Manuel López Obrador, presidential candidate for the National Regeneration Movement Party (*Movimiento de Regeneración Nacional*), or Morena, was elected President of Mexico and took office on December 1, 2018. Additionally, Mexican congressional elections took place in July 2018, resulting in Morena effectively controlling the Mexican House of Representatives (*Cámara de Diputados*) and having a significant influence in the Mexican Senate (*Senado de la República*), obtaining a historical absolute majority and reducing the rest of the political forces to a level of marginal influence. Mexico’s next federal legislative election will be in July 2021.

During the presidential campaign, the candidates for the presidency and the federal legislatures presented diverse proposals to, among other things, modify or terminate certain structural reforms introduced in the previous administration, with the purpose of reducing the participation of private investment in sectors such as energy. Accordingly, as has happened historically in any change of administration or congress, the Mexican government could implement significant changes in laws, policies and regulations, and could reduce or eliminate the independence of organizations or of semi-autonomous or decentralized dependencies, which could affect the economic and political situation in Mexico. We cannot predict if the current administration will implement substantial changes in law, policy and regulations in Mexico, which could affect our business, results of operations or financial condition.

Morena’s control over the Mexican Congress, as described above, could result in further reforms and secondary legislation of key sectors of the Mexican economy. The ruling political coalition led by Morena has been strengthened by fragmented support from the Green Ecologist Party of Mexico (*Partido Verde Ecologista*), the Institutional Revolutionary Party (PRI) and a deficient organization of dissident political groups. As a result, in the state elections of 2019, Morena expanded its influence in the entities acquiring control of 21 of 32 local congresses. We cannot ascertain whether, and to what extent, such policies may affect our business, results of operations and financial condition or the legal framework in which we operate.

In addition, the new administration canceled the New Mexico City Airport (*Nuevo Aeropuerto Internacional de la Ciudad de México*) project, and has announced the kickoff of the main infrastructure projects that were promised during campaign (including a new refinery at Dos Bocas, the “Mayan train,” and the construction of a new airport in Santa Lucía). Several investors and credit rating agencies are still cautious about the new administration’s policies, which could contribute to a decrease in the Mexican economy’s resilience in the event of a global economic downturn. Morena’s led coalition control in the Congress and in various local Congresses are enough to implement significant reforms without the approval of the rest of the other Mexican political parties, including amendments to the Mexican Constitution. Such concentration of power and any instability in Mexican politics or the Mexican economy as a result of the above can have a negative impact on our business, financial position or operating results. The extent of such impact cannot be accurately predicted.

***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 entity, could be modified through regulatory means, 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 increased criminal activity, including violence associated with drug trafficking and organized crime, and such activities could adversely affect our financing costs and exposure to our customers and counterparties.***

During recent years, Mexico has experienced a period of increased criminal activity and violence, primarily due to organized crime. This violence has taken place throughout Mexico, including the State of Veracruz, where our Mexico Complex is located. Despite the efforts of the Mexican government to increase security measures by strengthening its military and police forces, drug-related violence and crime continues to threaten the Mexican economy and the peace and security of certain regions, resulting in economic and political instability and uncertainty in Mexico. Systematic criminal activity and isolated criminal events could interrupt our operations, affect our ability to generate revenue and increase the cost of our operations. Continued violence could result in the Mexican government adopting additional security measures, such as transport restrictions, prohibiting the transit of goods and people at certain times, and cross-border trade. We cannot assure you that these activities, their escalation and the violence associated with them, over which we have no control, could have a negative impact on the business environment in which we operate, and therefore on our results of operations and financial condition.

***We may interpret certain provisions of our ethane supply agreement differently than our counterparty Pemex TRI.***

As of the date of this annual report, we source substantially all of the ethane for the production of polyethylene at our Mexico Complex from Pemex TRI pursuant to the take-or-pay long-term ethane supply agreement with Pemex TRI. The ethane supply agreement is a complex agreement, and we may interpret certain of its provisions differently than Pemex TRI does. For instance, if Pemex TRI fails to supply a determined percentage of the ethane contractually specified under the ethane supply agreement for six consecutive months, we will have the right to terminate the ethane supply agreement and require Pemex TRI to pay to the other parties involved in the project an amount equal to the termination value of this project (the value of which is determined pursuant to the contract and takes into consideration, among other factors, the outstanding debt of the project and the amount invested in the project at such time). A difference of interpretation between us and Pemex TRI of certain provisions of the ethane supply agreement, including the provisions relating to calculation of the termination value, could have an adverse effect on our results of operations and financial position. See “—We have no control over the corporate actions or decisions of Pemex TRI, which is our main supplier of ethane and a Mexican state-owned enterprise.”

***If we fail to develop an alternative source of ethane, it may have a negative impact on our business because we cannot operate our Mexico Complex at full capacity.***

In order to increase the operating rate of our Mexico Complex, we need to obtain additional quantities of ethane to offset the shortfall in the amount of ethane supplied by Pemex TRI under the ethane supply agreement. As of the date of this annual report, our Mexico Complex is importing additional supplies of ethane through a private terminal in Coatzacoalcos and transporting it to our complex via a logistical solution, or the Fast-Track Solution. In the future, we may consider the development and construction of a new terminal, or the Ethane Import Terminal. However, we cannot guarantee that the potential construction of the Ethane Import Terminal will be completed or that the Fast-Track Solution will be able to increase our production to our expected level of output. In addition, we cannot guarantee that we will be able to import ethane at current market prices, which could also adversely affect our business, results of operations and financial condition.

The development and construction of the Ethane Import Terminal and the establishment of the Fast-Track Solution for the importation of ethane may involve significant risks and uncertainties, such as:

- failure to obtain or maintain requisite approvals from the applicable regulators and governmental entities;
- negotiation of satisfactory engineering, procurement and construction agreements;
- negotiation of satisfactory operations and maintenance agreements;
- failure to achieve expected results;
- failure to obtain rights of way required for the construction of the Ethane Import Terminal;

- negotiation with local communities and minority groups;
- delays in the construction and start of operations of the Ethane Import Terminal;
- unanticipated liabilities;
- obtaining the required financing for the construction of the Ethane Import Terminal; or
- contractor's or subcontractor's failure to comply with construction contracts.

The spread of the novel coronavirus (COVID-19) has caused us to modify certain of our business practices, and we may take further actions as required by government authorities, including closure of ports, or that we determine are in the best interests of our employees, customers, partners and suppliers. These actions could impact the development and construction of the Ethane Import Terminal and the establishment of the Fast-Track Solution for the importation of ethane. We currently expect Pemex TRI's undersupply of ethane to continue.

#### ***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. – Petrobras 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 Corporations 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 class A and class B preferred shareholders are entitled to an 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 we do not record a profit.

***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 underlying these shares 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 requirements 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, voting by proxy or by remote voting, if applicable. By contrast, holders of the ADSs will receive notice of a shareholders' meeting by mail from the depository following our notice to the ADS depository requesting the ADS 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 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 our outstanding 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 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 or the applicable 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 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 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 than under the laws of other jurisdictions, including in a jurisdiction in the United States.***

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 when compared to holders of shares of companies incorporated in other jurisdictions. 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 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, notes or our other indebtedness full compensation of the amount sought in any such litigation.

***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 and cannot fully predict the effects of the United Kingdom's leaving the European Union (Brexit). 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 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 notes and other indebtedness, and using the proceeds therefrom as permitted by the agreements governing these issuances, including lending the net proceeds of the 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 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 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 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 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 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, 2019, Braskem had (1) consolidated corporate debt, net of transaction costs, of R\$29,291.5 million (US\$7,267.1 million), and (2) consolidated Braskem Idesa debt related to our Mexico Complex of R\$9,981.7 million (US\$2,476.4 million). Of the consolidated corporate debt, R\$1,992.4 million (US\$494.3 million) was unsecured debt of Braskem S.A., R\$36.0 million (US\$8.9 million) was secured debt of Braskem S.A., R\$27,262.7 million (US\$6,763.8 million) was unsecured debt of Braskem's subsidiaries and special purpose entities (other than Braskem Idesa S.A.P.I.), and R\$0.6 million (US\$0.1 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 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 are unable to make dividend payments to Braskem due to insufficient cash flows, Braskem may be required to utilize its own cash flows to service payments. Further, if these subsidiaries and jointly controlled entities are unable to pay their debt, they may become subject to bankruptcy or insolvency proceedings. Any bankruptcy or insolvency proceedings of these subsidiaries and jointly controlled entities may have an adverse effect on our financial condition and results of operations.

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

Under Brazilian law, Braskem's obligations under the guarantees under the outstanding 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 notes may be unable to collect amounts that they are due under the outstanding notes.

***Brazilian bankruptcy laws may be less favorable to holders of our shares, ADSs and outstanding 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 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, 2019. 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, 2019, our business operations were organized into five business units, which corresponded to our principal production processes, products and services. Our segments 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 revenue of R\$27,172.3 million, or 42.3% of our consolidated net revenue of all reportable segments, including net 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 revenue of R\$21,191.9 million, or 33.0% of our consolidated net revenue of all reportable segments, including net 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 revenue of R\$10,044.3 million, or 15.7% of our consolidated net revenue of all reportable segments, including net 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 revenue of R\$3,051.4 million, or 4.8% of our consolidated net revenue of all reportable segments, including net 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 revenue of R\$2,692.8 million, or 4.2% of our consolidated net revenue of all reportable segments, including net revenue to our other business units.

In 2017, 2018 and 2019, 53.1%, 54.8% and 54.5% of our net revenue, respectively, related to sales performed in Brazil, and 46.9%, 45.2% and 45.5% of our net revenue in 2017, 2018 and 2019 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. In 2019, 1.5% of the ethylene production of our Northeastern Complex was ethane-based. 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. In 2017, we commenced operations of a new Ultra High Molecular Weight Polyethylene – UHMWPE (UTE<sup>®</sup>) 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 2019, important construction milestones, keeping us on track for commencing operations in 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 green<sup>TM</sup>, 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.

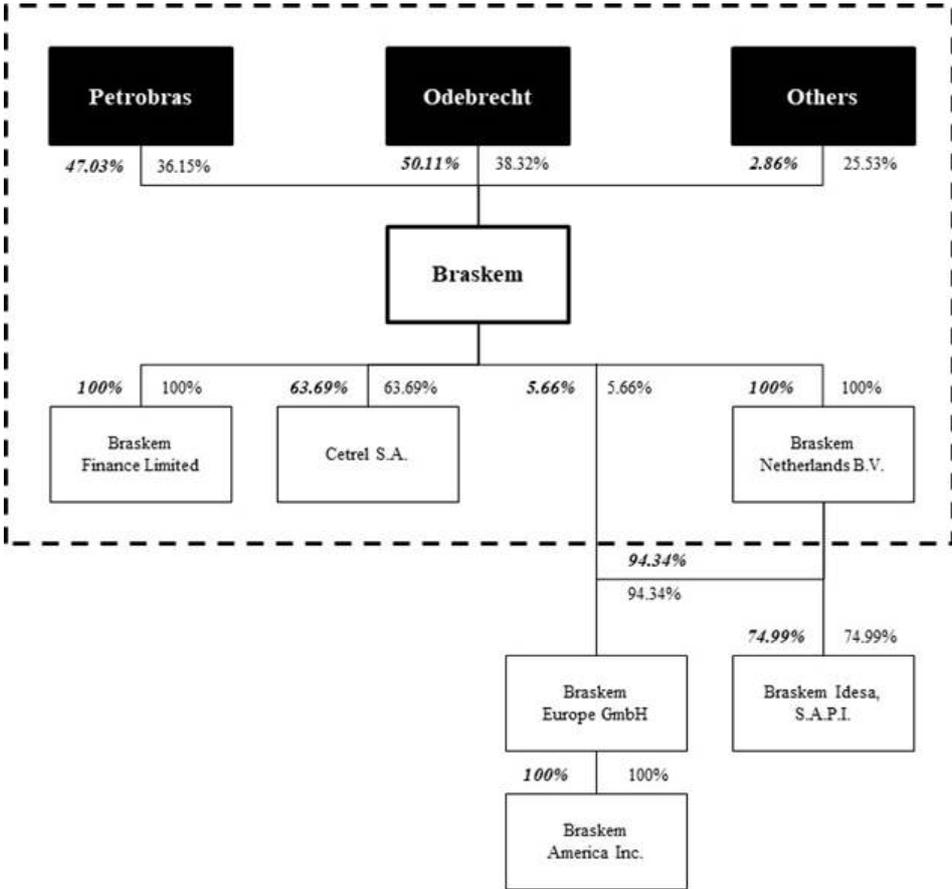
***Beginning of Operations of Our Mexico Unit***

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](http://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](http://www.braskem.com.br), and the internet website of our investors relations’ department is [www.braskem-ri.com.br](http://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 – 24º 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, 2019, 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 revenue to our other business units, our Chemicals Unit generated net revenue of R\$27,172.3 million in 2019, or 42.3% of the net revenue of all of 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 2019, 45.3% of our Chemicals Unit’s net revenue was derived from intra-company sales of basic petrochemicals, and 56.5% from the sale of basic petrochemicals to third parties.

### *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 petrochemical products by our Chemicals Unit (excluding our intra-company sales) for the periods indicated.

	Year Ended December 31,		
	2019	2018	2017
	<i>(in thousands of tons)</i>		
<b>Domestic sales:</b>			
Ethylene	464.1	509.1	523.6
Propylene	341.9	345.8	360.4
Cumene	219.0	234.1	199.8
Butadiene	161.0	192.0	183.8
BTX products <sup>(1)</sup>	618.7	648.0	644.6
Gasoline	1,007.3	942.9	925.9
Others	443.8	492.0	477.3
Total domestic sales of Chemicals	3,255.8	3,364.5	3,315.5
Total export sales of Chemicals	1,060.9	1,028.9	1,320.1
<b>Total sales of Chemicals</b>	<b>4,316.7</b>	<b>4,393.4</b>	<b>4,635.6</b>

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

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

	Year Ended December 31,		
	2019	2018	2017
	<i>(in thousands of tons)</i>		
Ethylene	2,584.9	2,779.6	2,888.8
Propylene	944.0	969.5	1,041.1

#### **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, 2019 and annual production for the years presented.

Primary Products	Annual Production Capacity	Production For the Year Ended December 31,		
		2019	2018	2017
		<i>(in tons)</i>		
<b>Olefins:</b>				
Ethylene	3,952,000	3,185,203	3,399,610	3,518,658
Propylene	1,585,000	1,310,028	1,324,358	1,445,887
Butadiene	480,000	397,762	394,998	430,040
<b>Aromatics:</b>				
BTX products <sup>(1)</sup>	1,367,000	825,253	841,485	977,184

(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.

	2019	2018 <i>(in US\$)</i>	2017
Average <sup>(1)</sup>	US\$505.33	US\$601.26	US\$483.84
<b>Month ended:</b>			
January	459.16	592.23	499.37
February	499.83	555.15	498.26
March	533.15	571.44	459.41
April	563.16	607.20	467.94
May	544.57	666.82	434.62
June	472.94	632.55	400.68
July	503.46	642.73	424.81
August	446.86	640.60	459.16
September	479.46	676.13	503.96
October	491.00	661.82	519.13
November	529.99	505.59	571.73
December	540.33	462.87	566.98

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

Source: HIS and Braskem Global Market Intelligence.

### 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,		
	2019	2018	2017
Brazil	37%	43%	53%
Algeria	11%	19%	18%
Europe	16%	14%	6%
South America	10%	10%	10%
North America	16%	5%	4%
West Africa	4%	4%	6%
Others	6%	5%	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;
- 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.

#### *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;

- in 2019, 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 ethane and propane with Petrobras, which would become effective following the expiration of the current agreement in 2021. Currently, we cannot assure you that the impact of the new terms and conditions of a future agreement and any failure to successfully negotiate with Petrobras would not impair our ability to satisfy our ethane and propane needs;
- 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 2019 was 35.3 ktons, and in 2018 it was 44.2 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, 1.5% was from ethane feedstock in 2019 and 11% in 2018.

#### *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 is required to sell a minimum daily volume to us;
- 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 represented 79% of our global electric consumption in 2019, we self-generated 24% of our electrical energy consumption. 26% of our demand in 2019 was 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 34% of the energy consumption, and about 55% 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, 57% 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 33% 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 11% 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 2019 represented 65% of our consolidated consumption.

- In the Bahia Complex, natural gas is supplied by Companhia de Gás da Bahia, or Bahiagás, which represents 49% of our consumption in Brazil.
- In the Alagoas Complex, natural gas is supplied by Gás de Alagoas S.A., or Algás, which represents 14% 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 15% 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 20% of our consumption in Brazil.

- In the Rio de Janeiro Complex, natural gas is supplied by Naturgy Brasil, 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 most 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 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,		
	2019	2018	2017
	<i>(in millions of reais)</i>		
<b>Net revenue<sup>(1)</sup>:</b>			
Domestic sales	11,002.5	12,309.9	9,367.7
Export sales	3,820.4	4,077.0	4,182.5
<b>Total net revenue</b>	<b>14,822.9</b>	<b>16,386.9</b>	<b>13,550.2</b>

(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. Net revenue of our Chemicals Unit to third parties in Brazil represented 70.2% of our Chemicals Unit’s net revenue during 2019.

#### 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 to third parties represented 29.7% of our Chemicals Unit’s net revenue during 2019.

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 2019, we recorded resale operations of R\$790.3 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 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, 2019, 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 revenue of R\$21,191.9 million during 2019, or 33.0% of the net revenue of all of our reportable segments.

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.

	<b>Year Ended December 31,</b>		
	<b>2019</b>	<b>2018</b>	<b>2017</b>
	<i>(in thousands of tons)</i>		
<b>Domestic sales:</b>			
Polyethylene <sup>(1)</sup>	1,789.7	1,788.3	1,795.4
Polypropylene	1,142.8	1,143.3	1,165.0
Other	—	—	—
Total domestic sales	<u>2,932.5</u>	<u>2,931.7</u>	<u>2,960.4</u>
Total export sales	1,391.8	1,257.3	1,438.3
<b>Total Polyolefins Unit sales</b>	<b><u>4,324.3</u></b>	<b><u>4,189.0</u></b>	<b><u>4,398.7</u></b>

(1) Includes EVA 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, 2019, 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, 2019 and annual production for the years presented.

Primary Products	Annual Production Capacity	Production For the Year Ended December 31,		
		2019	2018	2017
		<i>(in tons)</i>		
Polyethylene:				
LDPE/EVA <sup>(1)</sup>	795,000	675,075	663,285	682,030
HDPE/LLDPE/UHMWPE <sup>(2)</sup>	2,260,000	1,935,752	2,009,389	2,066,004
Polypropylene <sup>(3)</sup>	1,850,000	1,638,974	1,592,480	1,711,741

(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.

### ***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 85.2% of our Polyolefins Unit's total variable cost of production during 2019. 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 December 2029, 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 until July 2021. 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 Poliolefine Italia S.R.L. and Equistar Chemicals, L.P. or, collectively, 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 1,400 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 revenue derived from domestic and export sales by our Polyolefins Unit for the years indicated:

	<b>For the Year Ended December 31,</b>		
	<b>2019</b>	<b>2018</b>	<b>2017</b>
	<i>(in millions of reais)</i>		
<b>Net revenue:</b>			
Domestic sales	R\$14,799.7	R\$16,116.8	R\$13,856.4
<b>Export sales:</b>			
South America (excluding Brazil)	3,073.1	3,261.7	3,289.8
Europe	1,419.2	1,154.4	607.7
North America	723.9	467.7	683.8
Asia	987.0	940.2	269.1
Other	189.1	543.1	943.6
<b>Total export sales</b>	<b>6,392.2</b>	<b>6,367.0</b>	<b>5,794.0</b>
	<b>R\$21,191.9</b>	<b>R\$22,483.9</b>	<b>R\$19,650.4</b>

#### *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 cyclicity 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 2019, Brazilian polyethylene and polypropylene imports increased by 8.0% and represented 31.4% 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<sup>®</sup> plant; and
- the operations of two polypropylene plants in Germany.

As of December 31, 2019, 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 revenue of R\$10,044.3 million during 2019, or 15.7% of the net revenue of all of our reportable segments, including inter-segment sales.

In June 2014, we announced the construction of an UHMWPE production line in our La Porte, Texas site, which began producing UTEC<sup>®</sup> 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 1,925,036 tons in 2019, 1,923,227 tons in 2018 and 2,116,529 tons in 2017. 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, 2019 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,		
		2019	2018	2017
		<i>(in tons)</i>		
United States	1,570,400	1,435,298	1,388,600	1,521,894
Germany	625,000	494,241	523,797	591,417

### 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, 2019, we had fifteen 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 completed construction of a PDH plant in Texas in 2017 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 84% 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 2023. We have entered into a third contract that will expire at the end of 2020, increasing the supply of our plants to 87% 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 revenue derived from sales of our USA and Europe Unit for the years indicated:

	<b>For the Year Ended December 31,</b>		
	<b>2019</b>	<b>2018</b>	<b>2017</b>
	<i>(in millions of reais)</i>		
<b>Net revenue:</b>			
USA and Europe	10,044.3	11,724.8	9,854.5

28% 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.

As of December 31, 2019, our Mexico Unit had the largest annual polyethylene production capacity in Mexico. Our Mexico Unit generated net revenue of R\$3,051.4 million during 2019, or 4.8% of the net revenue of all of our reportable segments, including inter-segment sales.

**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 813,105 tons in 2019. 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 state 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,		
		2019	2018	2017
		<i>(in tons)</i>		
Mexico (Polyethylene)	1,050,000	800,783	808,388	923,540

**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. We currently source most of our supply of ethane, which is the primary feedstock used in our polyethylene production process, from Pemex TRI, a state-owned Mexican entity, which is a subsidiary of Pemex, the state-owned Mexican oil and gas company, pursuant to an ethane supply agreement.

*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 Natural Gas reference U.S. dollar-based international reference price of these feedstocks. Under this agreement, any daily amount rejected by Braskem Idesa could 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 2020, Pemex TRI volume deliveries under the Long-Term Performance Test remained close but above 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 electricity company) 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) pursuant to an agreement that expires in 2022 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 mainly supplied by Pemex through Cenagas, but also by other natural gas suppliers in Mexico.

### ***Sales and Marketing of Our Mexico Unit***

Our Mexico Unit sells polyethylene products to approximately 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 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 60 days, on average, following delivery for most customers.

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 market price references. 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 Canada. 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 2019. As of December 31, 2019, our PVC production facilities had the second largest annual production capacity in Latin America. Our Vinyls Unit generated net revenue of R\$2,692.8 million in 2019, or 4.2% of our net revenue of all reportable segments, including inter-segment sales.

Our PVC production is integrated through our production of chlorine, ethylene and other raw materials. The main use of PVC is for pipes and fittings and other products related to the civil construction market. Our Vinyls Unit also manufactures caustic soda, which is mainly used by producers of alumina, pulp and paper, and in the soap industry.

In 2019, we had an approximate 48% share of the Brazilian PVC market and a 16% 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,		
	2019	2018	2017
		<i>(in thousands of tons)</i>	
PVC	491.3	490.1	525.7
Caustic soda	243.2	344.2	407.5
Other <sup>(1)</sup>	72.1	85.9	103.7
Total domestic sales	806.7	920.5	1,036.9
Total export sales	22.2	49.4	89.6
Total Vinyls Unit sales	828.8	969.9	1,126.5

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

### 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, 2019 and annual production for the years presented.

Primary Products	Annual Production Capacity	Production For the Year Ended December 31,		
		2019	2018	2017
		<i>(in tons)</i>		
PVC	710.0	461.1	533.2	611.2
Caustic Soda	539.0	123.2	317.8	409.0

### 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 21% of our Vinyls Unit's total cost of products sold in 2019. 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 10% of our Vinyls Unit's total cost of products sold in 2019. 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 212,000 tons of salt during 2019. Salt accounted for 1% of our Vinyls Unit's total cost of products sold in 2019.

However, salt mining operations at our mine were halted in May 2019, as described in "Item 3. Key Information—Risk Factors—Risks Relating to Us and the Petrochemical Industry—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" and "Item 8. Financial Information—Legal Proceedings—Alagoas – Mining Activities." Production of caustic soda and ethylene dichloride at our chlor-alkali facility located in the state of Alagoas was also interrupted due to the lack of salt. Ethylene dichloride, or EDC, is consumed in PVC production. Because of the interruption, we needed to import 139,000 tons of caustic soda to supply our customers and 295,000 tons of EDC to supply our PVC facilities located in the state of Alagoas and in the Northeastern Complex.

Seeking to resume our chlor-alkali operations, we launched a project to modify the feedstock base of our chlor-alkali plants by acquiring sea salt from third parties in Brazil or abroad. The product will be stocked, dissolved in water to make brine and then treated and sent for processing. The estimated cost of the project is R\$59.3 million, of which R\$21.2 million was already disbursed in 2019. See "Item 5. Operating and financial review and prospects—Other Investments—Technology change at our chlor-alkali facility in Alagoas."

### *Sales and Marketing of Our Vinyls Unit*

There is a structural link between the PVC and caustic soda markets because caustic soda is a co-product of the production of chlorine required to produce PVC. Most of the time, 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, but we use third-party distributors to serve smaller caustic soda customers. 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 five 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 contract with Mexichem. Our primary customers operate in the laminated, shoe and automobile sectors. These products represented 1.7% of our consolidated sales volume in 2019.

### *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.

## **Competition**

### *PVC*

Unipar Indupa (formerly Carbocloro and 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 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 from all regions accounted for 34% of Brazilian PVC consumption in 2019. 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 Alcalis, Cloro e Derivados*), the three largest Brazilian producers of caustic soda, including Braskem, accounted for 89% of capacity in Brazil in 2019. Most domestic producers operate on a local or regional basis, with the exception of Braskem and another producer located in the Northeast region of Brazil that operate in the whole country through terminal tanks located on the Brazilian coast. Imports accounted for 42% of Brazil's total caustic soda consumption in 2019, excluding Braskem imports.

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, 2019, collectively had 297 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.

In 2019, to accelerate our efforts toward circular economy solutions, we created an innovation platform for recycling to strengthen our reputation as a sustainability leader. The platform coordinates all efforts relating to chemical and mechanical recycling of plastic waste and aims to convert post-consumer plastic into recycled resins. Our focus is to expand certified recycled resins in our portfolio.

## **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., Rip Serviços Industriais S.A., Sulzer 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 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;
- the Northeastern Complex's olefins 2 and aromatics 2 units is scheduled to take place in 2023; and
- the Rio de Janeiro Complex's olefins unit is scheduled to take place in 2024.

### ***Plants of Our Polyolefins, Vinyls and USA and Europe Unit***

We have a regular maintenance program for each of our polyolefins plants. Production at each of our polyolefins plants generally is shut down for 7 to 20 days every 2 to 3 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, water and soil. 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\$369.8 million in 2019, R\$329.3 million in 2018 and R\$330.1 million in 2017, 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.

We make all reasonable efforts to ensure that our operations are in compliance in all material respects with applicable Brazilian environmental laws and regulations currently in effect. Our internal audit processes and our management system in place aim to ensure that the permits that will expire be renewed in a timely manner. However, changes to applicable laws and regulations may require us to revise our standards, which may take time to implement. 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 make all reasonable efforts to ensure that our operations in Brazil are in compliance in all material respects with applicable Brazilian federal, state and local environmental laws and regulations currently in effect, and we have an internal audit process and a management system in place assuring that the permits that will expire be renewed 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 at Cetrel. Hazardous liquid and solid waste are incinerated at high temperatures and non-hazardous solid waste is coprocessed and sent to cement customers to be used as energy in cement kilns.

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 42.9 % of the solid waste generated by our facilities and 25.3 % of the water used in our production processes.

*Mercury*

As of December 31, 2019, Braskem had a chlor-alkali plant in Bahia based on mercury cell technology. On April 20, 2020, our chlor-alkali plant in Bahia shut down following the end of the facility's useful life, and it will be decommissioned. The preferred decommissioning strategy involves structure decontamination and demolition, and we are currently planning the most appropriate strategies for waste destination and remediation of contaminated areas, which are expected to be implemented soon after the plant shutdown.

***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 make all reasonable efforts to ensure 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 PM2.5), 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 PM2.5 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 PM2.5 NAAQS. These requirements could in turn translate into additional state-specific requirements to further reduce allowable emission rates for PM2.5 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. We make all reasonable efforts to ensure that our operations in Mexico are in compliance in all material respects with applicable Mexican federal, state and local environmental laws and regulations currently in effect.

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 materially 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, 2019 by location of facilities, products produced and size of plant.

Type of Product or Service	Location of Facilities	Size of Plant <i>(in hectares)<sup>(1)</sup></i>
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, 2019, the consolidated net book value of our property, plant and equipment was R\$32,315.2 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\$34.5 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.

<b>Policy / Region US\$ bn</b>	<b>Value at risk — Property Damage</b>	<b>Combined Property Damage and Business Interruption Limit</b>	<b>Comments</b>
Brazil	26.4	3.4	—
Mexico <sup>(1)</sup>	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. Braskem has coverage for environmental liabilities and remediation activities such as clean-up costs. These policies are capped at US\$50 million for Mexico, US\$50 million for Brazil 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, 2019, we identified a material weakness in our control environment as we had insufficient resources with an appropriate level of knowledge, training, expertise and skills commensurate with our financial reporting requirements. This resulted in a material weakness in our risk assessment as we did not effectively design and perform 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 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 certain ancillary 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, in particular the completeness and accuracy of information from such systems, also being considered ineffective because they could have been adversely impacted. In addition, there were ineffective controls over reports from our ERP system and lack of controls over spreadsheets used in the operation of certain controls; (ii) ineffective design and operation of controls within the financial reporting process including consolidation, analysis of complex and unusual transactions, review of manual journal entries, and the preparation and review of the financial statements, including the technical application of generally accepted accounting principles and applicability of required disclosures; (iii) Ineffective operation of controls over legal contingencies related primarily to completeness of the legal contingences assessment; (iv) ineffective operation of controls over the purchase of and payment for certain legal services; (v) ineffective controls over the quantity of product shipped for sales transactions. 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 a material weaknesses described in our 2018 annual report on Form 20-F: in 2019, the Feedstock department implemented new controls related to oversight of purchases and payment of raw materials. This controls were able to ensure the raw material received from suppliers were adequate, in terms of quantity and quality. These efforts were able to ensure the remediation of the material weakness related to Ineffective design of controls over the purchase of raw materials. We have implemented these remedial steps and successfully tested the related controls. Therefore, as of December 31, 2019, we have concluded this material weaknesses described in our annual report on Form 20-F for the year ended December 31, 2018 has 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, 2019 and 2018 and for the three years ended December 31, 2019, 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, in particular with respect to the recent novel coronavirus (COVID-19) pandemic and related impacts on our historical and future results of operations and financial condition. 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, 2019, 2018 and 2017 have been influenced, and our results of operations will continue to be influenced, by a variety of factors, including:

- GDP growth in the regions where we operate, including as follows:
  - Brazil’s GDP, which expanded 1.1% in 2019, as compared to 1.1% in 2018 and 1.0% in 2017, which affected the demand for our products and, consequently, our sales volume;
  - the U.S. GDP, which expanded 2.3% in 2019, as compared to 2.9% in 2018 and 2.5% in 2017, which affected the demand for our products and, consequently, our sales volume;
  - Europe’s GDP, which expanded 1.2% in 2019, as compared to 2.2% in 2018 and 2.5% in 2017, which affected the demand for our products and, consequently, our sales volume;
  - Mexico’s GDP, which contracted 0.1% in 2019, as compared to a 2.1% expansion in 2018 and a 2.0% expansion in 2017, which affected the demand for our products and, consequently, our sales volume; and
  - according to the IMF, because of the adverse effects of the novel coronavirus (COVID-19) pandemic on the economy of several countries, the world’s GDP and the GDP of Brazil, the United States, Europe and Mexico is expected to shrink significantly in 2020, leading to an economic contraction and a recession in these countries or regions;
- 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, 2019, fluctuating in a range between US\$447 and US\$563 per ton during 2019, US\$463 and US\$676 per ton during 2018, and US\$400 and US\$571 per ton during 2017;

- 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 2019 as a result of the: (i) lower utilization rate of the cracker in Bahia resulting from the shutdown of the chlor-alkali and dichloroethane plants in Alagoas; (ii) scheduled turnaround of one of our production lines at the Bahia cracker in the fourth quarter of 2019; (iii) lower utilization rate at the crackers in Rio Grande do Sul, due to logistics problems; and (iv) drop in the marginal profitability of our export of resins;
- government industrial policy;
- changes in the *real*/U.S. dollar exchange rate, including the depreciation of the *real* against the U.S. dollar by 4.0% in 2019 and 14.5% in 2018, as compared to an appreciation of 8.3% in 2017;
- 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 7.7% in 2019, 7.1% in 2018, and negative 0.4% in 2017, 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, including the adverse effect of the novel coronavirus (COVID-19) on the world economy and our business, financial condition and results of operations;
- 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.

## Recent Developments

### ***Impact of the Novel Coronavirus (COVID-19)***

The rapid, worldwide spread of the novel coronavirus (COVID-19) has created global economic disruption and uncertainty, including in our business.

In March 2020, in view of the progression of the novel coronavirus (COVID-19) outbreak, we formed a crisis committee with the aim of establishing global procedures focusing on the health of our team members and the continuity of our operations. We have taken the following measures: (i) recommended that all team members and contractors work remotely; (ii) established a minimum team in industrial areas to ensure safety and operational continuity matters; (iii) prohibited all national and international business travel, apart from exceptional cases; (iv) determined the self-quarantine of any team member or contractor returning from international travel or high risk areas, whether for business travel or personal reasons; (v) recommended that internal and face-to-face meetings with over 20 people be avoided, and prohibited participation in corporate events with 50 people or more; (vi) recommended that non-routine contractors and suppliers do not visit our facilities, and also prohibited access by visitors or third parties coming from high risk areas to our facilities; (vii) created joint schedules with customers and local communities to optimize the distribution of our products in a way that helps fight the pandemic.

Also, in line with our core safety value, we started to operate our industrial plants with reduced teams. The reduction of approximately 50% in the number of industrial team members and contractors has allowed us to keep teams safe while maintaining the reliability of our operations.

Utilization rates at our plants will be adjusted considering the market demand and the potential opportunities for exports to other regions that may arise, especially with the resumption of activities in Asia. We have made the following main adjustments so far:

- Brazil: reduction in ethylene production to approximately 65% of our total capacity, which is 3.6 million tons per year; and
- United States: reduction in polypropylene production to approximately 85% of our total capacity, which is 1.6 million tons per year.

We have also been taking a series of measures to preserve liquidity in order to maintain our financial strength and business resilience, such as:

- drawdown of our revolving credit facility in the amount of US\$1 billion;
- reduction of administrative expenses by approximately 10%;
- reduction of planned investments for 2020 from US\$721 million to US\$600 million;
- postponement of payment of social contributions in Brazil; and
- working capital optimizations.

We have taken critical actions on four important fronts: (i) actions taken jointly with our customers and business partners to transform plastic resins and chemicals into essential items to combat the novel coronavirus (COVID-19), especially surgical masks, packaging for liquid and gel alcohol, bleach, and 3D printing of rods for protection masks; (ii) donation of LPG to hospitals; (iii) actions to support clients and supply chains, especially small and mid-sized companies; and (iv) donation of hygiene kits and basic food baskets to affected communities around our plants.

As of March 31, 2020, we had positive net working capital of R\$5.8 billion, most of our liabilities come due in the long term and 96.9% of our total debt was denominated in U.S. dollars, pursuant to our financial policy. We are comfortable with such exposure to the U.S. dollar, since a significant part of our revenue to be generated in the coming years that could be used to service our debt is directly or indirectly denominated in U.S. dollars.

During periods in which the Brazilian *real* depreciates significantly against the U.S. dollar, we are subject to an adverse effect from exchange variation on our debt, a part of which is recognized in our results for the period and a part of which is incorporated into our equity through the hedge accounting mechanism.

In the first quarter of 2020, the Brazilian *real* depreciated 29% against the U.S. dollar. The quarter's negative exchange variation will produce a cash effect upon maturity of our liabilities, is concentrated in the long term given our debt maturity profile, and does not put at risk our liquidity position in the context of our efforts to contain the effect of the novel coronavirus (COVID-19) pandemic on our business.

Due to the uncertainties arising from the novel coronavirus (COVID-19) pandemic with regard to the global economy, it is impossible to accurately predict the adverse impacts on our equity and financial position and that of our subsidiaries. We are continuously evaluating the effects arising from the pandemic, which could lead us to constitute provisions for asset impairment in the coming quarters.

Based on our preliminary operating data for May 2020 and the publicly reported expected impact on certain industries in which our customers operate (such as automotive and construction), we believe that the novel coronavirus (COVID-19) pandemic could negatively affect our business in numerous ways, including, but not limited to, reduction of our production volume, sales volume and net revenue, increase of certain of our costs, and decrease of our gross margin.

See “Item 3. Key Information—Risk Factors—Risks Relating to Us and the Petrochemical Industry—Global or regional health pandemics or epidemics, including the novel coronavirus (COVID-19), could negatively impact our business, financial condition and results of operations.”

***Revolving Credit Facility Agreement***

In May 2018, we and certain of our subsidiaries entered into a revolving credit facility agreement with several international financial institutions for a principal amount of R\$5,426.3 million (US\$1,000.0 million), which matures in May 2023. In April 2020, we borrowed the amount of R\$5,426.3 million (US\$1,000.0 million) on this credit facility. As of the date of this annual report, the amount outstanding under this credit facility was R\$5,426.3 million (US\$1,000.0 million).

***Naphtha Agreements with Petrobras***

In June 2020, we entered into new agreements with Petrobras for the supply of petrochemical naphtha to our industrial units in Bahia and Rio Grande do Sul. The agreements, with a term of five years following the expiration of the current agreement with Petrobras, establish the supply of a minimum annual volume of 650 kton and, at the option of Petrobras, an additional volume of up to 2.8 million tons per year, at the price of 100% of the international reference ARA.

In addition, to guarantee access to the naphtha logistics system in Rio Grande do Sul, Braskem also renewed the storage agreement with Petrobras and the transport and storage agreement with Petrobras Transporte S.A.

***Other Developments***

In January 2020, the amount of R\$3.7 billion, which had previously been frozen on June 26, 2019 by a decision of the presiding judge of the Alagoas state court of appeals (*Tribunal de Justiça do Estado de Alagoas*), was fully reimbursed to the Company. As disclosed in a material fact on January 6, 2020, of the amount of R\$3.7 billion, R\$1.7 billion was transferred to a bank account controlled by Braskem specifically for funding the financial compensation and relocation program, as set forth in the agreement described below. For additional information, see “Item 8. Financial Information—Legal Proceedings—Alagoas – Mining Activities.”

On February 14, 2020, the Company entered into an agreement with the Labor Prosecutors’ Office in the state of Alagoas (*Ministério Público do Trabalho do Estado do Alagoas*) in the amount of R\$40.0 million for the implementation of the Program for Recovery of Business and Promotion of Educational Activities for residents and workers in the districts affected by the geological incident near our salt mine in the state of Alagoas. The program consists of support for the construction of daycare centers and schools and for administering professional training programs, as well as support for civil defense initiatives to hire skilled professionals to continue monitoring the risk areas in the districts affected by the incident. For additional information, see “Item 8. Financial Information—Legal Proceedings—Alagoas – Mining Activities.”

**Financial Presentation and Accounting Policies**

***Presentation of Financial Statements***

We have prepared our audited consolidated financial statements as of December 31, 2019 and 2018 and for each of the years ended December 31, 2019, 2018 and 2017 in accordance with IFRS, as issued by the IASB.

The consolidated financial statements presented in this annual report on Form 20-F are not equivalent to our statutory financial statements as issued under the requirements of Brazilian laws, regulations and accounting practices. The date of authorization for the issuance 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, 2019 were authorized for issuance on April 3, 2020, 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*, or “CVM”) on April 3, 2020.

**Operating Segments and Presentation of Segment Financial Data**

We believe that our organizational structure as of December 31, 2019 reflected our business activities and corresponded to our principal products and production processes. As of December 31, 2019, 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.
- *Vinyls*—This segment includes our production and sale of PVC and caustic soda.
- *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.

**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, 2019 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 the (1) Southern Petrochemical Complex, (2) Northeastern Petrochemical Complex and (3) Vinyls Unit.

As of December 31, 2019, assets were grouped according to the following CGUs:

*Brazil:*

- CGU Northeastern petrochemical complex (NE): comprises assets of the ethylene and PE plants located in the Northeast region;

- CGU Vynils: represented by assets of PVC and chloride soda plants located in Brazil;
- CGU Southern petrochemical complex (South): comprises assets of the ethylene, propylene, PE and PP plants, located in the South region;
- CGU Rio de Janeiro petrochemical complex (RJ): comprises assets of the ethylene, propylene, PE and PP plants, located in the state of Rio de Janeiro;
- CGU São Paulo petrochemical complex (SP): comprises assets of the ethylene and PE plants, located in the cities of Santo André and Cubatão, in the state of São Paulo;
- CGU Paulínia: comprises assets of the PP plant located in Paulínia, in the state of São Paulo;
- CGU ABC greater São Paulo region: comprises assets of the PP plant located in the state of São Paulo;

United States and Europe:

- CGU Polypropylene USA: there are five PP plants located in the United States, the assets of each plant represent a CGU;
- CGU Polypropylene Europe: there are two PP plants located in Germany, the assets of each plant represent a CGU;

Mexico:

- CGU Mexico: comprised of assets of the ethylene and PE plants located in Mexico.

On December 31, 2019, the Company tested the balances of goodwill shown in the table below for impairment:

	<b>Goodwill</b>
	<i>(in thousands of reais)</i>
<b>CGU</b>	
Southern petrochemical complex	1,390,741
Northeastern petrochemical complex	475,780
Vynils unit	192,353

The determination of value in use involves judgments and assumptions to determine the discounted cash flow as described in note 3.2.3(b) to our audited consolidated financial statements. The WACC used was 10.69% p.a. and the inflation rate considered for perpetuity was 3.5%.

The recoverable amount based on the fair value less cost of disposal is based on the discounted cash flow consistent with a market participant perspective, less incremental costs directly attributable to the disposal. The main assumptions consider a post-tax discount rate of 12.87% p.a. and an average growth rate of 2% p.a.

Given the potential impact on cash flows of the “discount rate” and “perpetuity”, the Company conducted a sensitivity analysis based on changes in these variables, considering +0.5% on discount rate and –0.5% on perpetuity. Based on the analyses conducted by our management, there was no need to record impairment losses for the balances of these assets in the year ended December 31, 2019.

	<b>+0.5% on discount rate</b>	<b>–0.5% on perpetuity</b>
	<i>(in thousands of reais)</i>	
<b>CGU</b>		
Southern petrochemical complex	18,472,786	19,091,510
Northeastern petrochemical complex	5,634,385	5,795,452
Vynils unit	3,179,141	3,302,724

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 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.

We did not record any impairment charges in the years ended December 31, 2019, 2018 and 2017. As of December 31, 2019, 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 24 and 25 to our audited consolidated financial statements.

Provisions are recorded when there is a present obligation (legal or constructive) as a result of a past event, and it is more likely than not that an outflow of resources will be required to settle the obligation. Contingent liabilities are mainly related to discussions in judicial and administrative proceedings arising primarily from labor, corporate, civil and tax claims.

Our management, based on its assessment and the opinion of external legal advisors, classifies these proceedings based on the probability of loss, as follows:

- probable loss: proceedings for which there is a higher probability of loss than of a favorable outcome;
- possible loss: proceedings for which the possibility of loss is greater than remote and lower than probable. For these claims, we do not recognize a provision and disclose the most significant matters in note 24.2 to our audited consolidated financial statements.

The provisions for labor, corporate, civil and tax lawsuits correspond to the value of the claims plus charges in the amount of the estimated value of probable losses. Pursuant to IFRS 3, on the acquisition date in business combination operations, a contingent liability is recorded when it represents a present obligation.

Our management believes 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 a similar case involving another company, adopting a final interpretation of the matter and, consequently, advancing the termination of the proceeding involving us, without any disbursement or without the need for any financial settlement of the proceeding; and (ii) programs encouraging the payment of the debts 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.

- *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**

***IFRS 16 – Leases***

This pronouncement replaced the previous standards on leases, including IAS 17 – Leases and the corresponding interpretations, such as IFRIC 4, SIC 15 and SIC 27.

For its transition, the Company adopted the modified retrospective approach, i.e., it applied the requirements of the lease standard to all existing agreements on the initial adoption date, i.e. January 1, 2019. Therefore, information and balances were not restated for comparison purposes.

After the date of the first-time application, on January 1, 2019, leases were recognized as a right-of-use asset and a corresponding liability on the date on which the leased asset becomes available to the Company. For each right-of-use asset measured, an equivalent liability was recorded. The payment is recorded as a reduction of the lease liability. The financial cost of the lease liability is recorded in the profit and loss during the enforceable term of the lease, applying a constant interest rate on the remaining balance of the liability. The right-of-use asset is depreciated using the straight-line method considering the shortest period between the useful life of the asset and the enforceable term of the lease.

*Definition of a Lease*

Previously, the Company determined at contract inception whether an arrangement was or contained a lease under IFRIC 4 – Determining whether an Arrangement contains a Lease. The Company now assesses whether a contract is or contains a lease based on the definition of a lease, according to IFRS 16 – Leases.

*As a lessee*

To determine the enforceable term of the lease, our management considers all facts and circumstances that create an economic incentive for exercising the option of extension or create economic disincentives for not exercising the option of early termination.

When adopting IFRS 16, the Company recognized its lease liabilities in relation to the lease agreements previously classified as “operating leases” under IAS 17. Up to the financial statements for the year ended December 31, 2018, the payments of these leases, net of any incentives received from the lessor, were recognized as profit or loss during the lease period.

For leases previously classified as “financial leases” the Company recognized the lease asset and liability considering the amount immediately prior to the date of first-time adoption.

On the date of adoption, the assets and liabilities from lease agreements were measured at their present value, considering the outstanding payments of each agreement, discounting by the Company’s incremental borrowing rate on January 1, 2019. The weighted average incremental rate applied upon first-time adoption was 5.58% p.a. The lease liability considers the net present value of the following lease payments:

- fixed payments discounting any incentive received;
- variable payments based on rates or indexes;
- expected payables to the lessor referring to the guaranteed residual amount;
- exercise price of a purchase option, if it is reasonably certain that lessee will exercise such option; and
- payment of fines for termination of the lease if the contractual terms provide for lessee’s exercise option.

<b>Commitments of operating leases as of December 31, 2018</b>	<b>3,257,982</b>
<b>Lease liability recognized on January 1, 2019</b>	
Lease commitments discounted at the incremental rate on the date of initial application	2,177,138
(+) Financial leases as of December 31, 2018	100,557
(-) Short-term leases recognized immediately in profit or loss	(103,929)
(-) Low-value contracts recognized immediately in profit or loss	(1,071)
(+): Extension options reasonably certain to be exercised	119,770
<b>Total</b>	<b>2,292,465</b>

The right-of-use assets were measured by the amount of the lease liabilities, adjusted by any amount of advance payments and provisions for lease payments related to the lease recognized on January 1, 2019. There were no onerous leases that required adjustment to the right-of-use assets on the date of first-time adoption.

Upon first-time adoption, the Company used the following practical expedients permitted under IFRS 16:

- not to reevaluate whether the contract is or contains any lease on the initial adoption date. Instead, applied the standard to agreements that were previously identified as leases;
- ppt not to separate non-lease components from lease components, considering them, therefore, as a single lease component;
- not to record contracts, that on the date of the initial adoption date, will end within 12 months; as long as the Company is not reasonably certain to exercise the purchase option at the end of the contract;
- not to record low-value agreements (R\$30 for companies in Brazil and US\$10 for foreign subsidiaries), in accordance with the policy defined by management;
- excluded the direct initial costs from measuring the right of use asset on the initial adoption date;
- used hindsight, such as determining the term of the lease, if the contract contains options to postpone or terminate the lease, among others; and

- applied 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”).

#### *Leases classified as finance leases under IAS 17*

The Company leases some equipments classified as finance leases under IAS 17. For these finance leases, the carrying amount of the right-of-use asset and the lease liability at 1 January 2019 were determined at the carrying amount of the lease asset and lease liability under IAS 17 immediately before that date.

#### **IFRIC 23 – Uncertainty on Income Tax Treatment**

The new interpretation establishes requirements for recognition and measurement in situations where the Company has defined, 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 tax authorities.

The Company concluded the analyses of the application of this standard and did not identify any impacts on the consolidated financial statements.

#### **New or revised pronouncements that are not yet in effect**

New standards and amendments to current standards will come into effect in annual periods starting after January 1, 2020. Although certain of such standards and amendments may be adopted early, we chose not to early adopt the following new standards and interpretations for preparing our financial statements:

- changes to references to the conceptual structure of IFRS;
- definition of business (changes to IFRS 13);
- definition of materiality (amendments to IAS 1 and IAS 8); and
- IFRS 17 – Insurance agreements.

The amended standards and interpretations are not expected to produce a significant impact on our consolidated financial statements.

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;
- presentation of the variable considerations (bonuses) deducted directly from sales revenue;
- change in the classification and measurement of financial assets; and
- change in the accounting of operations involving dollar put and call options designated for hedge accounting.

#### ***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 our 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 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; and
- (ii) 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 as of January 1, 2018	
	IAS 39	IFRS 9	IAS 39	IFRS 9
<b>Cash and cash equivalents</b>				
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
			<b>3,775,093</b>	<b>3,775,093</b>
<b>Financial investments</b>				
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
			<b>2,313,008</b>	<b>2,313,008</b>
<b>Trade accounts receivable</b>	Loans and receivables	Amortized cost	<b>3,244,851</b>	<b>3,235,463</b>
<b>Trade accounts receivable</b>	Loans and receivables	Fair value through other comprehensive income	<b>73,841</b>	<b>73,240</b>
<b>Derivatives</b>	Financial assets measured at fair value	Fair value through profit and loss	<b>74,378</b>	<b>74,378</b>

#### 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 R\$9.4 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 the GDP of the Countries in which we Operate and Domestic Demand for Our Products in Brazil***

Our sales in Brazil represented 54.5% of our net revenue, including inter-segment sales, in the year ended December 31, 2019. We are significantly affected by economic conditions in Brazil and in the other countries in which we operate, and our results of operations and financial condition have been, and will continue to be, affected by the growth rate of the GDP of Brazil, the United States, Europe and Mexico.

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

	<b>December 31,</b>				
	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>
Brazilian GDP	1.1%	1.1%	1.0%	(3.6)%	(3.8)%
Brazilian apparent consumption of polyethylene	2.5%	3.2%	4.8%	(1.3)%	(3.2)%
Brazilian apparent consumption of polypropylene	2.2%	1.9%	5.9%	1.1%	(8.3)%
Brazilian apparent consumption of PVC	1.4%	1.4%	(1.9)%	(2.3)%	(16.0)%

*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 the impact on growth in Brazil will affect our future net revenue and results of operations, and a continued recession or low growth in Brazil would likely reduce our future net revenue and have a negative effect on our results of operations.

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.

In 2019, Brazil's economy continued to recover and, as a result, Brazilian consumption volumes of thermoplastic resins increased by 2.2% for polypropylene and by 2.5% for polyethylene. The PVC market remained stable in relation to 2018.

According to the IMF, because of the adverse effects of the novel coronavirus (COVID-19) pandemic on the economy of several countries, the world's GDP and the GDP of Brazil, the United States, Europe and Mexico is expected to shrink significantly in 2020, leading to an economic contraction and a recession in these countries or regions.

### ***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.

	<b>December 31,</b>				
	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>
GDP growth / Reduction <sup>(1)</sup>	1.1%	1.1%	1.0%	(3.6)%	(3.8)%
Inflation (IGP-M) <sup>(2)</sup>	7.3%	7.5%	(0.42)%	7.2%	10.5%
Inflation (IPCA) <sup>(3)</sup>	4.3%	3.7%	2.9%	6.2%	10.7%
CDI rate <sup>(4)</sup>	4.6%	6.40%	6.99%	13.6%	14.1%
Appreciation (depreciation) of the <i>real</i> vs. U.S. dollar	4.0%	17.1%	1.5%	4.3%	41.8%
Period-end exchange rate—US\$1.00	R\$4.0307	R\$3.8748	R\$3.3080	R\$3.2591	R\$3.9048

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 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 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 96% of our outstanding indebtedness as of December 31, 2019, including the secured debt related to our Mexico Complex. Without the latter, our U.S. dollar-denominated indebtedness represented 94% of our outstanding indebtedness.

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, October 10, 2017, February 28, 2019, May 2, 2019, November 1, 2019 and December 31, 2019, 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.

The *real* depreciated against the U.S. dollar from mid-2011 to early 2016, and again from early 2018 to 2020. In particular, during 2015, due to the poor economic conditions in Brazil, including as a result of political instability, the *real* depreciated at a rate that was much higher than in previous years, and a similar trend occurred during 2018 and 2019. On March 31, 2020, the *real* fell to the lowest level since the introduction of the currency, at R\$5.1987 per US\$1.00. Overall, in 2015, the *real* depreciated 47.0%, reaching R\$3.9048 per US\$1.00 on December 31, 2015. In 2016, the *real* fluctuated significantly, primarily as a result of Brazil's political instability, appreciating 16.5%, to R\$3.2591 per US\$1.00 on December 31, 2016. In 2017, the *real* depreciated 1.5% against the U.S. dollar, ending the year at an exchange rate of R\$3.3080 per US\$1.00. In 2018, the *real* depreciated 14.6 % against the U.S. dollar, ending the year at an exchange rate of R\$3.8748 per US\$1.00, primarily as a result of lower interest rates in Brazil, which reduced the volume of foreign currency deposited in Brazil in the "carry trade," as well as uncertainty regarding the Brazilian presidential elections held in October 2018. As of December 31, 2019, the *real*/U.S. dollar exchange rate reported by the Central Bank was R\$4.0307 per US\$1.00 and, as of May 29, 2020, it was R\$5.4263 per US\$1.00. There can be no assurance that the *real* will not depreciate or appreciate further against the U.S. dollar.

#### **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, 2019, 45.5% of our net revenue was derived from sales of our products outside Brazil as compared to 45.2% during 2018 and 46.9% during 2017. Net revenue derived from sales outside Brazil decreased by 9.1% during 2019, compared to 13.4% during 2018, and 0.4% during 2017.

During the year ended December 31, 2019, sales to customers in countries in the Americas (other than Brazil) accounted for 63.4% of our sales outside Brazil. During the year ended December 31, 2019, sales to customers in Europe accounted for 18.9% of our sales outside Brazil, and sales to customers in East Asia and Other accounted for 17.8% of our sales outside Brazil.

Sales outside Brazil are important to us for diversification purposes in relation to regional supply and demand balance, macroeconomic factors and the political environment. In line with our strategy, sales outside Brazil affect our financial performance by hedging our operations against risks linked to Brazil.

According to the IMF, because of the adverse effects of the novel coronavirus (COVID-19) pandemic on the economy of several countries, the world's GDP and the GDP of the United States, Europe and Mexico is expected to shrink significantly in 2020, leading to an economic contraction and a recession in these countries or regions. As a result, our sales outside Brazil are expected to be adversely affected.

### ***Cyclicity 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.

Several petrochemical companies have announced plans to build significant additional ethylene production capacity in the coming years, of which 56.1% is expected to be concentrated in Northeast Asia. According to IHS, 46.3 million tons of annual global ethylene capacity is scheduled to be commissioned between 2020 and 2025, including 21.2 million tons of annual capacity in China. 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, gas oil and residues. 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.

In 2020, the novel coronavirus (COVID-19) pandemic has significantly impacted economic activity and markets around the world, and its severity, magnitude and duration are highly uncertain, rapidly changing and difficult to predict. According to the IMF, because of the adverse effects of the novel coronavirus (COVID-19) pandemic on the economy of several countries, the world's GDP and the GDP of Brazil, the United States, Europe and Mexico is expected to shrink significantly in 2020, leading to an economic contraction and a recession in these countries or regions.

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.

In 2019, the world economy slowed to its slowest pace since the financial crisis of 2008. During the year, the impact from the trade war between the United States and China; the slowdown in the Chinese economy; the contraction in Europe's automotive industry, especially in Germany; the uncertainties associated with Brexit; and the political instability in key emerging markets, such as Brazil and Mexico, adversely affected investment and demand for consumer goods, leading to slower growth in the industrial sector and in international trade. In this scenario, the growth in global demand for chemicals and thermoplastic resins in 2019 was below the initial expectations of petrochemical industry players and external consulting firms, such as IHS. Combined with this weaker demand, new shale gas-based integrated polyethylene capacities in the United States and new refineries in Asia expanded the global supply of polyolefins and chemicals, pressuring the international spreads of these products. The exception was the PP market in the United States, which still presented healthy spreads supported by U.S. economic growth and the high supply of the material.

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 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 United States due to extreme weather conditions, have allowed spreads to maintain a healthy level throughout the year, thus extending the upcycle of the industry.

***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 and condensate accounted for 40.7% of our direct and indirect consolidated cost of products sold during 2019.

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 price of petroleum 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, as a consequence of higher oil prices, increases the competitiveness of products derived from ethane and may result in an effect on our results of operations to the extent that we are able to maintain our operating margins and increased prices do not reduce 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 revenue and our results of operations due to increased 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 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.

	<b>Year Ended December 31,</b>		
	<b>2019</b>	<b>2018</b>	<b>2017</b>
Ethylene	85%	91%	94%
Polyethylene	85%	88%	90%
Polypropylene	89%	87%	93%
PVC	65%	76%	86%
Polypropylene USA and Europe	89%	87%	97%
PE Mexico	76%	77%	88%

In 2019, average capacity utilization was affected by the: (i) lower ethylene utilization rate of the cracker in Bahia resulting from the shutdown of the chlor-alkali and dichloroethane plants in Alagoas; (ii) scheduled turnaround of one of our ethylene production lines at the Bahia cracker in the fourth quarter of 2019; (iii) lower ethylene utilization rate at the crackers in Rio Grande do Sul, due to logistics problems; and (iv) drop in the marginal profitability of our export of resins.

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.

#### **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, for an undefined term.

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.

Also, imports of suspension PVC from the United States 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 also been subject to a duty 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 on imports from the United States and Mexico are scheduled to expire in 2021, and, although the duties imposed on imports from China and South Korea expired in 2019, they are currently under review and therefore will remain in effect until the end of the review process, which is expected to occur in August 2020.

Additionally, in December 2010, CAMEX imposed an anti-dumping duty of 10.6% on polypropylene imports from the United States, which was extended 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 although the duties imposed on imports from South Africa, India and South Korea expired in 2019, they are currently under review and therefore will remain in effect until the end of the review process, which is expected to occur in August 2020.

In 2019, 31% of Brazilian polyethylene, polypropylene and PVC resins were imported products, which reflected an 8.5% annual increase in the volume of resins imported.

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 higher availability of products from plants that recently started to operate.

### ***Effect of Level of Indebtedness and Interest Rates***

As of December 31, 2019, our total outstanding consolidated indebtedness, net of transaction costs, was R\$39,273.3 million (US\$9,743.5 million), including R\$9,981.7 million (US\$2,476.4 million) in connection with the secured debt related to our Mexico Complex. The level of our indebtedness results in significant financial expenses that are reflected in our statement of profit or loss. 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 34 to our audited consolidated financial statements. In the year ended December 31, 2019, we recorded total financial expenses of R\$4,746.4 million, of which R\$2,191.8 million consisted of interest expenses. In addition, we recorded a loss of R\$1,725.8 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 represent a 75% reduction of our tax burden, and, as a result, 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. There is no outstanding balance to be used in 2020.

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.

## 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, 2019						
Net revenue	Cost of products sold	Gross profit	Selling, general and distribution expenses	Results from equity investments	Other operating income (expense), net <sup>(1)</sup>	Operating (loss) profit
<i>(in millions of reais)</i>						
Chemicals	27,172.3	(25,349.9)	1,822.4	(1,069.9)	—	483.1
Polyolefins	21,191.9	(18,494.5)	2,697.3	(1,439.2)	—	1,106.8
Vinyls	2,692.8	(3,069.3)	(376.5)	(437.2)	—	(4,486.8)
USA and Europe	10,044.3	(8,233.1)	1,811.2	(786.1)	—	1,034.3
Mexico	3,051.4	(2,504.0)	547.4	(351.2)	—	520.9
<b>Total segments</b>	<b>64,152.7</b>	<b>(57,650.8)</b>	<b>6,501.8</b>	<b>(4,083.5)</b>	<b>—</b>	<b>(1,341.7)</b>
Other segment <sup>(2)</sup>	296.3	(188.3)	108.0	(44.5)	—	66.8
Corporate unit	—	—	—	(218.0)	10.2	1,567.5
Reclassifications and eliminations <sup>(3)</sup>	(12,125.4)	11,960.1	(165.4)	83.6	—	(138.9)
<b>Consolidated</b>	<b>52,323.5</b>	<b>(45,879.1)</b>	<b>6,444.4</b>	<b>(4,262.4)</b>	<b>10.2</b>	<b>153.7</b>

(1) Includes research and development.

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

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

Year Ended December 31, 2018						
Net revenue	Cost of products sold	Gross profit	Selling, general and distribution expenses	Results from equity investments	Other operating income (expense), net <sup>(1)</sup>	Operating (loss) profit
<i>(in millions of reais)</i>						
Chemicals	31,111.7	(27,523.7)	3,587.9	(784.5)	—	2,751.5
Polyolefins	22,483.9	(19,295.9)	3,188.0	(1,328.0)	—	1,824.9
Vinyls	3,167.4	(2,908.4)	259.0	(177.3)	—	90.1
USA and Europe	11,724.8	(9,152.8)	2,571.9	(642.0)	—	1,998.7
Mexico	3,770.5	(2,333.8)	1,436.7	(313.5)	—	1,445.7
<b>Total segments</b>	<b>72,258.2</b>	<b>(61,214.6)</b>	<b>11,043.6</b>	<b>(3,245.4)</b>	<b>—</b>	<b>8,110.9</b>
Other segment <sup>(2)</sup>	292.4	(173.6)	118.8	(34.8)	—	83.9
Corporate unit <sup>(3)</sup>	265.4	—	265.4	(334.4)	(0.9)	90.0
Reclassifications and eliminations <sup>(4)</sup>	(14,816.2)	14,811.6	(4.6)	—	—	(4.6)
<b>Consolidated</b>	<b>57,999.9</b>	<b>(46,576.7)</b>	<b>11,423.2</b>	<b>(3,614.6)</b>	<b>(0.9)</b>	<b>8,280.2</b>

(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 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 inter-segment sales, which are made in similar terms as arm's length transactions.

Year Ended December 31, 2017

	Net revenue	Cost of products sold	Gross profit	Selling, general and distribution expenses	Results from equity investments	Other operating income (expense), net <sup>(1)</sup>	Operating (loss) profit
				<i>(in millions of reais)</i>			
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)	1,831.3
Mexico	3,600.8	(2,097.5)	1,503.3	(283.3)	—	27.9	1,247.9
<b>Total segments</b>	<b>61,351.9</b>	<b>(48,097.5)</b>	<b>13,351.3</b>	<b>(3,124.0)</b>	—	<b>(531.5)</b>	<b>9,695.8</b>
Other segment <sup>(2)</sup>	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 <sup>(3)</sup>	(12,175.0)	11,888.9	(286.1)	137.4	—	—	(148.6)
<b>Consolidated</b>	<b>49,260.6</b>	<b>(36,177.4)</b>	<b>13,083.2</b>	<b>(3,061.3)</b>	<b>40.0</b>	<b>(854.9)</b>	<b>9,206.9</b>

(1) Includes research and development.

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

(3) Eliminations consist primarily of inter-segment 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, 2019 Compared with Year Ended December 31, 2018**

The following table sets forth our audited consolidated financial information for the years ended December 31, 2019 and 2018.

	Year Ended December 31,		
	2019	2018	% Change
	<i>(in millions of reais)</i>		
Net revenue	52,323.5	57,999.9	(9.8)%
Cost of products sold	(45,879.1)	(46,576.7)	(1.5)%
<b>Gross profit</b>	<b>6,444.4</b>	<b>11,423.2</b>	<b>(43.6)%</b>
Income (expenses):			
Selling and distribution	(1,783.5)	(1,689.2)	5.6%
(Loss) reversals for impairment of accounts receivable	(7.1)	87.0	n.m.
General and administrative	(2,224.2)	(1,793.2)	24.0%
Research and development	(247.7)	(219.3)	13.0%
Results from equity investments	10.2	(0.9)	n.m.
Other income	2,408.4	1,027.2	134.5%
Other expenses	(4,446.9)	(554.7)	701.7%
<b>Operating profit</b>	<b>153.7</b>	<b>8,280.2</b>	<b>(98.1)%</b>
Financial results:			
Financial expenses	(3,882.8)	(3,007.6)	29.1%
Financial income	850.6	589.1	44.4%
Exchange rate variations, net	(1,724.5)	(2,257.0)	(23.6)%
<b>Financial expenses, net</b>	<b>(4,756.8)</b>	<b>(4,675.5)</b>	<b>1.7%</b>
<b>(Loss) profit before income tax and social contribution</b>	<b>(4,603.1)</b>	<b>3,604.7</b>	<b>n.m.</b>
Current and deferred income tax and social contribution	1,962.7	(736.6)	n.m.
<b>(Loss) profit for the year from continuing operations</b>	<b>(2,640.4)</b>	<b>2,868.2</b>	<b>n.m.</b>

n.m.: Not meaningful

**Net revenue**

Net revenue decreased by 9.8%, or R\$5,676.3 million, to R\$52,323.5 million in 2019, from R\$57,999.9 million in 2018, primarily as a result of (1) a R\$3,939.4 million, or 12.7%, decrease in net revenue of our Chemicals Unit, to R\$27,172.3 million in 2019, from R\$31,111.7 million in 2018, (2) a R\$1,292.0 million, or 5.7%, decrease in net revenue of our Polyolefins Unit, to R\$21,191.9 million in 2019, from R\$22,483.9 million in 2018, (3) a R\$474.6 million, or 15.0%, decrease in net revenue of our Vinyls Unit, to R\$2,692.8 million in 2019, from R\$3,167.4 million in 2018, (4) a R\$1,680.5 million, or 14.3%, decrease in net revenue of our USA and Europe Unit, to R\$10,044.3 million in 2019, from R\$11,724.8 million in 2018, and (5) a R\$719.1 million, or 19.1%, decrease in net revenue of our Mexico Unit, to R\$3,051.4 million in 2019, from R\$3,770.5 million in 2018. Reclassifications and eliminations of net revenue of our segments in consolidation, primarily reflecting intercompany sales of chemicals by our Chemicals Unit to our other segments, decreased by 18.2%, or R\$2,690.8 million, to R\$12,125.4 million in 2019, from R\$14,816.2 million in 2018.

In 2019 and 2018, we did not have any revenue arising from transactions with any single client that was equal to or greater than 10% of our total net revenue. In 2019, the most significant revenue from a single client accounted for 6.5% of our total net revenue.

### ***Net Revenue of Chemicals Unit***

Net revenue of the Chemicals Unit decreased by R\$3,939.4 million, or 12.7%, to R\$27,172.3 million in 2019, from R\$31,111.7 million in 2018.

The table below sets forth information regarding the weighted average international prices of main chemicals that are generally used as a reference for our Chemicals Unit for the periods indicated:

International References <sup>1</sup>	Year Ended December 31,		% Change
	2019	2018	
	(in US\$/ton)		
Main Chemicals <sup>2</sup>	827.9	1,014.9	(18.4)%

(1) Source: External consulting firm (spot price).

(2) Average prices weighted based on Braskem's capacity production: ethylene (20%), butadiene (10%), propylene (10%), cumene (5%), benzene (20%), paraxylene (5%), gasoline (25%) and toluene (5%).

### ***Net Revenue Generated by Sales in Brazil***

In 2019, net revenue of the Chemicals Unit from domestic sales in Brazil decreased by 15.5%, or R\$4,137.9 million, to R\$22,562.9 million (including R\$11,826.9 million from sales to the Polyolefins and Vinyls Units) in 2019, compared to R\$26,700.8 million (including R\$14,468.7 million from sales to the Polyolefins and Vinyls Units) in 2018, primarily due to lower sales volume of chemicals to third parties and lower main chemicals average prices in the petrochemical sector, which were explained by: (1) the startup of new shale-gas-based ethylene capacity and the good operational performance of propane dehydrogenation, or PDH, plants in the United States, (2) the startup of new refineries in Asia, and (3) weaker demand, mainly from the automobile sector.

### ***Sales Volume in Brazil***

Our Chemicals Unit's internal transfers decreased by 5.9%, to 3,528.9 ktons in 2019, from 3,749.1 ktons in 2018, and our sales volume in the Brazilian market to third parties decreased by 2.1%, to 2,812.0 ktons in 2019, from 2,871.8 ktons in 2018, primarily due to the lower availability of products since our crackers operated at an average capacity utilization rate of 85%, down 6 p.p. from 2018. The decrease in the capacity utilization rate was mainly explained by: (1) lower utilization rate of our cracker in the state of Bahia, Brazil, resulting from the shutdown of our chlor-alkali and dichloroethane plants in the state of Alagoas, Brazil; (2) scheduled turnaround of one of our production lines at our cracker located in the state of Bahia, Brazil, in the last quarter of 2019; (3) lower utilization rate at our crackers in the state of Rio Grande do Sul, Brazil, due to certain logistics issues; and (4) a drop in the marginal profitability of our resins export business.

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

Chemicals Unit's Internal Transfers Volume	Year Ended December 31,		% Change
	2019	2018	
	(in tons)		
Ethylene	2,584,872	2,779,589	(7.0)%
Propylene	944,019	969,491	(2.6)%
<b>Total</b>	<b>3,528,891</b>	<b>3,749,080</b>	<b>(5.9)%</b>

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,		
	2019	2018	% Change
	(in tons)		
Ethylene	464,087	509,056	(8.8)%
Propylene	341,891	345,795	(1.1)%
Cumene	219,047	234,108	(6.4)%
Butadiene	161,020	192,049	(16.2)%
Gasoline	1,007,311	942,864	6.8%
BTX <sup>(1)</sup>	618,657	647,968	(4.5)%
<b>Total</b>	<b>2,812,012</b>	<b>2,871,839</b>	<b>(2.1)%</b>

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

#### Net Revenue Generated by Exports

Net revenue of the Chemicals Unit from exports increased by 4.5%, or R\$198.4 million, to R\$4,609.3 million in 2019, compared to R\$4,410.9 million in 2018, mainly due to the higher sales volume.

#### Sales Volume from Exports

Our Chemicals Unit's volume of export sales increased by 10.0%, to 627.9 ktons in 2019, from 570.7 ktons in 2018, mostly in ethylene, propylene and BTX, primarily due to lower sales volume in the Brazilian market.

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,		
	2019	2018	% Change
	(in tons)		
Ethylene	138,907	114,549	21.3%
Propylene	25,632	9,600	167.0%
Butadiene	237,911	206,162	15.4%
Gasoline	4,096	60,437	(93.2)%
BTX <sup>(1)</sup>	221,327	179,994	23.0%
<b>Total</b>	<b>627,873</b>	<b>570,741</b>	<b>10.0%</b>

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

#### Net Revenue of Polyolefins Unit

Net revenue of the Polyolefins Unit decreased by 5.7%, or R\$1,292.0 million, to R\$21,191.9 million in 2019, from R\$22,483.9 million in 2018, mainly as a result of the lower average price of polyolefins in the petrochemical sector, which was the result of: (1) a decline in global demand as a result of lower levels of global growth; (2) lower demand of the automobile sector influenced by the end of tax incentives for vehicle purchases in China and to the ongoing adjustment of production lines to meet the new rules for greenhouse gas emissions in Europe and China; and (3) the startup of new shale-gas-based integrated polyethylene capacity in the United States and new polypropylene plants in Asia, mainly in China.

The table below sets forth information regarding the weighted average international prices of the polyolefins of our Polyolefins Unit for the periods indicated:

International References <sup>1</sup>	Year Ended December 31,		
	2019	2018	% Change
	(in US\$/ton)		
Polyethylene U.S	859.5	1,190.7	(27.8)%
Polypropylene Asia	1,033.9	1,206.4	(14.3)%

(1) Source: External consulting (spot price).

#### Net Revenue Generated by Sales in Brazil

Net revenue from domestic sales of the Polyolefins Unit in Brazil decreased by 8.2%, or R\$1,317.2 million, to R\$14,799.7 million in 2019, from R\$16,116.8 million in 2018.

#### Sales Volume in Brazil

In 2019, sales volume in Brazil increased by 0.1%, to 2,933.8 ktons in 2019, from 2,931.7 ktons in 2018.

Polyolefins Unit's Domestic Sales Volume	Year Ended December 31,		
	2019	2018	% Change
	(in tons)		
Polyethylene	1,790,955	1,788,332	0.1%
Polypropylene	1,142,833	1,143,327	0.0%
<b>Total</b>	<b>2,933,788</b>	<b>2,931,658</b>	<b>0.1%</b>

#### Net Revenue Generated by Exports

Our Polyolefins Unit's net revenue from exports increased by 0.4%, or R\$25.2 million, to R\$6,392.2 million in 2019, from R\$6,367.0 million in 2018, reflecting higher export sales.

#### Sales Volume from Exports

Our Polyolefins Unit's volume of export sales increased by 10.7%, to 1,391.8 kton in 2019, from 1,257.3 kton in 2018, in particular of polypropylene reflecting a higher market share in the South America region.

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,		
	2019	2018	% Change
	(in tons)		
Polyethylene	834,926	819,979	1.8%
Polypropylene	556,852	437,367	27.3%
<b>Total</b>	<b>1,391,778</b>	<b>1,257,346</b>	<b>10.7%</b>

#### Net Revenue of Vinyls Unit

Net revenue of our Vinyls Unit decreased by 15.0%, or R\$474.6 million, to R\$2,692.8 million in 2019, from R\$3,167.4 million in 2018, which was the result of lower caustic soda sales volume as a result of the shutdown of our chlor-alkali and dichloroethane plants in the state of Alagoas, Brazil, and lower PVC and caustic soda prices in the petrochemical sector due to the weakening of: (1) PVC demand in Asia, due to the trade war between the United States and China and India's anti-dumping policy; and (2) demand for caustic soda in the aluminum and pulp and paper sectors.

International References <sup>(1)</sup>	Year Ended December 31,		
	2019	2018	% Change
	(in US\$/ton)		
PVC Asia	861.7	912.1	(5.5)%

(1) External consulting (Spot Price).

### Net Revenue Generated by Sales in Brazil

Net revenue of the Vinyls Unit generated by sales in Brazil decreased by 12.4%, or R\$372.1 million, to R\$2,633.1 million in 2019, from R\$3,005.2 million in 2018.

### Sales Volume in Brazil

Our Vinyls Unit's volume of sales in Brazil decreased by 12.5%, to 806.7 ktons in 2019, from 921.6 ktons in 2018, which was the result of lower sales volume of caustic soda following the shutdown of our chlor-alkali and dichloroethane plants in the state of Alagoas, Brazil.

Vinyls Unit's Domestic Sales Volume	Year Ended December 31,		
	2019	2018	% Change
	(in tons)		
PVC	491,329	490,139	0.2%
Caustic Soda	243,243	345,516	(29.6)%
Others	72,128	85,937	(16.1)%
<b>Total</b>	<b>806,700</b>	<b>921,592</b>	<b>(12.51)%</b>

### Net Revenue Generated by Exports

Our Vinyls Unit's net revenue generated by exports decreased by 63.2%, or R\$102.5 million, to R\$59.7 million in 2019, from R\$162.2 million in 2018.

### Sales Volume from Exports

Our Vinyls Unit's volume of export sales decreased by 55.2%, to 22.2 kton in 2019, from 49.4 kton in 2018, due to due to the lower availability of PVC volumes to exports.

Vinyls Unit's Export Sales Volume	Year Ended December 31,		
	2019	2018	% Change
	(in tons)		
PVC	15,934	45,512	(65.0)%
Caustic Soda	6,228	3,924	58.7%
<b>Total</b>	<b>22,162</b>	<b>49,436</b>	<b>(55.2)%</b>

### Net Revenue of USA and Europe Unit

Net revenue of our USA and Europe Unit, which includes our polypropylene assets in the United States and Europe, decreased by 14.3%, or R\$1,680.5 million, to R\$10,044.3 million in 2019, from R\$11,724.8 million in 2018, primarily as a result of lower availability of polypropylene for sale in Europe caused by lower utilization of the plants due to operational problems affecting the propylene supplier and the consequent shortage of feedstock at one of our plants.

International References <sup>1</sup>	Year Ended December 31,		
	2019	2018	% Change
	(in US\$/ton)		
PP US and Europe <sup>2</sup>	1,449.3	1,763.1	(17.8)%

(1) Source: External consulting (spot price).

(2) Average prices weighted based on Braskem's capacity production: PP USA (72%) and PP Europe (28%).

### Net Revenue of Mexico Unit

Net revenue of the Mexico Unit decreased by 19.1%, or R\$719.1 million, to R\$3,051.4 million in 2019, from R\$3,770.5 million in 2018, due to lower polyethylene prices in the petrochemical sector, which was the result of the decline in global demand associated with the startup of new shale-gas-based integrated polyethylene capacity in the United States.

International References <sup>1</sup>	Year Ended December 31,		
	2019	2018	% Change
	(in US\$/ton)		
PE US	868.2	1,220.8	(28.9)%

(1) Source: External consulting (spot price).

### ***Cost of Products Sold and Gross Profit***

Cost of products sold decreased by 1.5%, or R\$697.5 million, to R\$45,879.1 million in 2019, from R\$46,576.7 million in 2018, primarily as a result of a 7.9% decrease in the cost of products sold by our Chemicals Unit, a 4.2% decrease in the cost of products sold by our Polyolefins Unit, and a 10.0% decrease 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 purchased by our Polyolefins and Vinyls Units from our Chemicals Unit, decreased by 19.3% in 2019.

Consolidated gross profit decreased by 43.6%, or R\$4,978.8 million, to R\$6,444.4 million in 2019, from R\$11,423.2 million in 2018. Gross margin (gross profit as a percentage of net revenue) decreased to 12.3% during 2019, from 19.7% during 2018.

### ***Cost of Products Sold of Chemicals Unit***

Cost of products sold of the Chemicals Unit decreased by 7.9%, or R\$2,173.8 million, to R\$25,349.9 million in 2019, from R\$27,523.7 million in 2018, primarily as a result of a decrease in the international prices of the raw materials used by the Chemicals Unit. The lower international prices for naphtha are explained by the lower oil prices as well as by the use of more competitive feedstocks to produce ethylene at flexible petrochemical complexes, mainly in the United States. The lower U.S. ethane and propane prices are explained by the higher supply of these products associated with the startup of new gas fractionators and pipelines for transportation and with the delays in the startup of new petrochemical complexes in the region.

International References <sup>1</sup>	Year Ended December 31,		
	2019	2018	% Change
	(in US\$/ton)		
Naphtha ARA	505.3	601.7	(16.0)%
Ethane U.S.	160.5	243.4	(34.1)%
Propane U.S.	278.9	548.1	(39.1)%

(1) Source: External consulting (spot price).

Gross profit of the Chemicals Unit decreased by 49.2%, or R\$1,765.6 million, to R\$1,822.4 million in 2019, from R\$3,587.9 million during 2018, and gross margin (gross profit as a percentage of net revenue) decreased to 6.7% during 2019, from 11.5% during 2018. *Cost of Products Sold of Polyolefins Unit*

Cost of products sold of the Polyolefins Unit decreased by 4.2%, or R\$801.3 million, to R\$18,494.5 million in 2019, from R\$19,295.9 million in 2018, explained by the lower ethylene and propylene prices applied by our Chemicals Unit to its internal transfers.

Gross profit of the Polyolefins Unit decreased by 15.4%, or R\$490.7 million, to R\$2,697.3 million during 2019, from R\$3,188.0 million during 2018, and gross margin (gross profit as a percentage of net revenue) was 12.7% during 2019, as compared to 14.2% during 2018.

### ***Cost of Products Sold of Vinyls Unit***

Cost of products sold of the Vinyls Unit increased by 5.5%, or R\$160.9 million, to R\$3,069.3 million in 2019, from R\$2,908.4 million in 2018, primarily due to the transition from an integrated business model to a temporary model based on imports of EDC, which has a higher cost than the integrated business model.

International References <sup>1</sup>	Year Ended December 31,		% Change
	2019	2018	
	(in US\$/ton)		
EDC U.S.	285.4	238.4	19.7%

(1) Source: External consulting (spot price).

Our Vinyls Unit presented a gross loss of R\$376.5 million during 2019, compared to a gross profit of R\$259.0 million during 2018, with a gross margin of 8.2%.

#### *Cost of Products Sold of USA and Europe Unit*

Cost of products sold of the USA and Europe Unit decreased by 10.0%, or R\$918.8 million, to R\$8,233.1 million in 2019, from R\$9,152.8 million in 2018, which was the result of: (1) the increased availability of propylene in the United States due to the high utilization rates of PDH plants and the higher use of natural gas liquids in crackers, and (2) the normalization of logistics constraints on propylene in Europe, which affected the region in the previous year due to low river levels.

International References <sup>1</sup>	Year Ended December 31,		% Change
	2019	2018	
	(in US\$/ton)		
PP US and Europe <sup>2</sup>	877.7	1,183.1	(25.8)%

(1) Source: External consulting (spot price).

(2) Average prices weighted based on Braskem's capacity production: PP USA (72%) and PP Europe (28%).

Gross profit of the USA and Europe Unit decreased by 29.6%, to R\$1,811.2 million during 2019, from R\$2,571.9 million during 2018, and gross margin (gross profit as a percentage of net revenue) decreased to 18.0% during 2019, from 21.9% during 2018.

#### *Cost of Products Sold by Mexico Unit*

Cost of products sold by the Mexico Unit increased by 7.3%, or R\$170.2 million, to R\$2,504.0 in 2019, from R\$2,333.8 million in 2018, due to the impact of the Brazilian *real* depreciation, higher sales volume and higher natural gas prices in the Mexican market, which was partially offset by the drop in U.S. ethane prices due to higher supply associated with the startup of new gas fractionators and pipelines for transportation and with the delays in the startup of new petrochemical complexes in the United States.

International References <sup>1</sup>	Year Ended December 31,		% Change
	2019	2018	
	(in US\$/ton)		
Ethane U.S.	160.5	243.4	(34.1)%

(1) Source: External consulting (spot price).

During 2019, the Mexico Unit recorded a gross profit of R\$547.4 million and gross margin (gross profit as a percentage of net revenue) of 17.9%. During 2018, the Mexico Unit recorded a gross profit of R\$1,436.7 million and gross margin of 38.1%.

#### ***Selling and Distribution Expenses***

Selling and distribution expenses increased by 5.6%, or R\$94.3 million, to R\$1,783.5 million in 2019, from R\$1,689.2 million in 2018, primarily as a result of: (1) higher exports sales of resins and main chemicals of our Polyolefin and Chemical Unit, (2) higher sales volumes of our USA and Europe Unit, (3) higher exports sales from our Mexico Unit.

### **(Loss) reversals for impairment of accounts receivable**

(Loss) reversals for impairment of accounts receivable decreased to a loss of R\$7.1 million in 2019, from a reversal of R\$87.0 million in 2018. For more information related to our (loss) reversals for impairment of accounts receivable, see note 7(i) to our audited consolidated financial statements included elsewhere in this annual report.

### **General and Administrative Expenses**

General and administrative expenses increased by 24.0%, or R\$431.0 million, to R\$2,224.2 million in 2019, from R\$1,793.2 million in 2018, primarily as a result of higher expenses with: (1) consulting and legal fees to support the external monitorship related to our Global Settlement with certain authorities; (2) auditing firms; and (3) the cooperation with relevant authorities and the local community in relation to the geological event in certain neighborhoods of the city of Maceió, in the state of Alagoas, Brazil, that are located adjacent to and above the area where our salt mining activities were located.

### **Research and Development Expenses**

Research and development expenses increased by 13.0%, or R\$28.5 million, to R\$247.7 in 2019, from R\$219.3 million in 2018. Research and development expenses as a percentage of net revenue were 0.5% during 2019, as compared to 0.4% during 2018.

### **Results from Equity Investments**

Results from equity investments increased to an income of R\$10.2 million in 2019, from a loss of R\$0.9 million in 2018, as a result of an increase in the results of jointly-controlled investments, primarily Refinaria de Petróleo Rio-Grandense S.A., or RPR, and Borealis Brasil S.A., or Borealis. For more information related to our results of equity investments, see note 11(c) to our audited consolidated financial statements included elsewhere in this annual report.

### **Other Income**

Other income increased by 134.5%, or R\$1,381.2 million, to R\$2,408.4 million in 2019 from R\$1,027.2 million in 2018, which was the result of an increase of R\$1,667.8 million in the provision related to the Federal Supreme Court (STF) decision that ICMS tax should not be included in the calculation base of PIS/COFINS. For more information related to the PIS/COFINS exclusion from the ICMS tax basis calculation, see note 10(c) to our audited consolidated financial statements included elsewhere in this annual report.

### **Other Expenses**

Other expenses increased by R\$3,892.2 million, to R\$4,446.9 million in 2019 from R\$554.7 million in 2018, due to: (1) provisions related to the Financial Compensation and Support for Relocation Program, Business Recovery and Promotion of Educational Activities Program and the actions required to close certain of our salt wells totaling R\$3,383.1 million; (2) the provision related to the leniency agreement with the Office of the Federal Controller General (CGU) and the Office of the Attorney General (AGU) (the "CGU/AGU Agreement") in the amount of R\$409.9 million; (3) the provision to permanently close our chlor-alkali production facility located in Camaçari, in the state of Bahia, Brazil, in the amount of R\$172.9 million; and (4) an increase of R\$52.1 million, or 58.3%, in the provision for remediation of environmental damage.

### **Operating Profit**

As a result of the foregoing:

- operating profit on a consolidated basis decreased by 98.1%, or R\$8,126.5 million, to an operating profit of R\$153.7 million in 2019, from R\$8,280.2 million in 2018, and as a percentage of net revenue, operating profit decreased to 0.3% in 2019, from 14.3% during 2018;
- operating profit of the Chemicals Unit decreased by 82.4% to R\$483.1 million during 2019, from R\$2,751.5 million during 2018, and the operating margin of the Chemicals Unit decreased to 1.8% during 2019, from 8.8% during 2018;

- operating profit of the Polyolefins Unit decreased by 39.4%, to R\$1,106.8 million during 2019, from R\$1,824.9 million during 2018, and the operating margin of the Polyolefins Unit decreased to 5.2% from 8.1% during 2018;
- operating loss of the Vinyls Unit was R\$4,486.8 million during 2019, compared to operating profit of R\$90.1 million and an operating margin of 2.8% during 2018;
- operating profit of the USA and Europe Unit decreased by 48.2%, to R\$1,034.3 million during 2019, from R\$1,998.7 million during 2018, and the operating margin of the USA and Europe Unit decreased to 10.3% during 2019, from 17.0% during 2018; and
- Operating profit of the Mexico Unit decreased by 64.0%, to R\$520.9 million during 2019, from R\$1,445.7 million during 2018, and the operating margin of the Mexico Unit decreased to 17.1% during 2019, from 38.3% during 2018.

### **Financial Results**

Financial expenses, net increased by 1.7%, or R\$81.3 million, to R\$4,756.8 million in 2019, from R\$4,675.5 million in 2018.

#### *Financial Expenses*

Financial expenses increased by 29.1%, or R\$875.2 million, to R\$3,882.8 million in 2019, from R\$3,007.6 million in 2018 due to: (1) the interest linked to the adoption of the new IFRS 16 standard as from January 1, 2019; (2) the adjustment to present value of the leniency agreement as a result of a change in the index of monetary correction applicable to the installments payable to the Federal Public Ministry, from IPCA to Selic, in the amount of R\$117.9 million; and (3) the payment of costs related to the full redemption of notes maturing in 2020 and 2021 and the partial redemption of notes maturing in 2022 and 2023.

#### *Financial Income*

Financial income increased by 44.4%, or R\$261.5 million, to R\$850.6 million in 2019, from R\$589.1 million in 2018, mainly due to the recognition of revenue related to PIS and COFINS claims originated in previous years ruled favorably by tax courts.

#### *Exchange variations, net*

Net exchange variations decreased by 23.6%, or R\$532.5 million, to R\$1,724.5 million in 2019, from R\$2,257.0 million in 2018, explained by the effect of a lower Brazilian *real* depreciation against the U.S. dollars 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 were previously recorded under shareholders' equity, in the amount of R\$1,652.3 million during 2019, compared to R\$1,259.4 million during 2018.

### **Current and deferred**

#### *Income Tax and Social Contribution*

Our income tax and social contribution was a benefit of R\$1,962.7 million during 2019, as compared to an expense of R\$736.6 million during 2018. The effective tax rate applicable to our profit before income tax and social contribution was a negative rate of 42.6% in 2019, as compared to an effective tax rate applicable to our profit before income tax and social contribution of 20.4% in 2018.

### **(Loss) profit for the year**

As a result of the foregoing, we recorded a loss of R\$2,640.4 million during 2019, compared to a profit of R\$2,868.2 million, or 4.9% of net revenue, during 2018.

**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,		% Change
	2018	2017	
	<i>(in millions of reais)</i>		
Net revenue	57,999.9	49,260.6	17.7%
Cost of products sold	(46,576.7)	(36,177.4)	28.7%
<b>Gross profit</b>	<b>11,423.2</b>	<b>13,083.2</b>	(12.7)%
Income (expenses):			
Selling and distribution	(1,689.2)	(1,459.6)	16.8%
(Loss) reversals for impairment of accounts receivable	87.0	(13.5)	n.m.
General and administrative	(1,793.2)	(1,434.3)	25.0%
Research and development	(219.3)	(167.5)	30.9%
Results from equity investments	(0.9)	40.0	n.m.
Other income	1,027.2	314.9	226.2%
Other expenses	(554.7)	(1,169.8)	(52.6)%
<b>Operating profit</b>	<b>8,280.2</b>	<b>9,206.9</b>	(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%
<b>Financial expenses, net</b>	<b>(4,675.5)</b>	<b>(3,942.4)</b>	18.6%
<b>(Loss) profit before income tax and social contribution</b>	<b>3,604.7</b>	<b>5,264.6</b>	(31.5)%
Current and deferred income tax and social contribution	(736.6)	(1,357.7)	(45.7)%
<b>(Loss) profit for the year from continuing operations</b>	<b>2,868.2</b>	<b>3,906.9</b>	(26.6)%
Discontinued operations results	—	8.9	—
<b>(Loss) profit for the year</b>	<b>2,868.2</b>	<b>3,915.8</b>	(26.8)%

n.m.: Not meaningful

**Net Revenue**

Net revenue increased by 17.7%, or R\$8,739.3 million, to R\$57,999.9 million in 2018, from R\$49,260.6 million in 2017, primarily as a result of (1) a R\$1,870.3 million, or 19.0%, increase in net 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 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 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 revenue. In 2018, the most significant revenue from a single client accounted for 2.4% of our total net revenue and refers to the Chemical segment.

**Net Revenue of Chemicals Unit**

Net 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 Revenue Generated by Sales in Brazil:**

In 2018, net 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\$21,007.0 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)%
<b>Total</b>	<b>3,749,080</b>	<b>3,929,794</b>	<b>(4.6)%</b>

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 <sup>(1)</sup>	647,968	644,589	0.5%
<b>Total</b>	<b>2,871,839</b>	<b>2,838,130</b>	<b>1.2%</b>

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

Net Revenue Generated by Exports.

Net 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 <sup>(1)</sup>	179,994	361,476	(50.2)%
<b>Total</b>	<b>570,741</b>	<b>824,579</b>	<b>(30.8)%</b>

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

### *Net Revenue of Polyolefins Unit*

Net 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 Revenue Generated by Sales in Brazil*

Net 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.

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

### *Net revenue Generated by Exports*

Our Polyolefins Unit's net 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:

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

### *Net Revenue of Vinyls Unit*

Net 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 Revenue Generated by Sales in Brazil.

Net 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	
	<i>(in tons)</i>		
PVC	490,139	525,683	(6.8)%
<b>Total</b>	<b>490,139</b>	<b>525,683</b>	<b>(6.8)%</b>

Net Revenue Generated by Exports.

Our Vinyls Unit's net 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)%
<b>Total</b>	<b>45,512</b>	<b>82,008</b>	<b>(44.5)%</b>

Net Revenue of USA and Europe Unit

Net 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 Revenue of Mexico Unit

Net 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 28.7%, or R\$10,399.2 million, to R\$46,576.7 million in 2018 from R\$36,177.4 million in 2017, primarily as a result of a 34.4% increase in the cost of products sold by our Chemicals Unit and a 23.4% 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 12.7%, or R\$1,660.0 million to R\$11,423.2 million in 2018 from R\$13,083.2 million in 2017. Gross margin (gross profit as a percentage of net revenue) decreased to 19.7% during 2018 from 26.6% during 2017.

#### *Cost of Products Sold of Chemicals Unit*

Cost of products sold of the Chemicals Unit increased by 34.4%, or R\$7,044.8 million, to R\$27,523.7 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 23.7%, or R\$1,112.5 million, to R\$3,587.9 million in 2018 from R\$4,700.4 million during 2017, and gross margin decreased to 11.5% during 2018 from 18.5% during 2017.

#### *Cost of Products Sold of Polyolefins Unit*

Cost of products sold of the Polyolefins Unit increased by 25.0%, or R\$3,863.7 million, to R\$19,295.9 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 24.4%, or R\$1,030.2 million, to R\$3,188.0 million during 2018 from R\$4,218.2 million during 2017, and gross margin was 14.2% during 2018 from 21.5% during 2017.

#### *Cost of Products Sold of Vinyls Unit*

Cost of products sold of the Vinyls Unit increased by 13.0%, or R\$335.6 million, to R\$2,908.4 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 47.6%, or R\$235.1 million, to R\$259.0 million during 2018 to R\$494.1 million during 2017, while gross margin was 8.2% 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 23.4%, or R\$1,733.5 million, to R\$9,152.8 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 5.6%, or R\$136.7 million, to R\$2,571.9 million during 2018 from R\$2,435.2 million during 2017, and gross margin decreased to 21.9% 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\$236.3 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 41.7%.

#### *Selling and Distribution Expenses*

Selling and distribution expenses increased by 16.8%, or R\$243.0 million, to R\$1,689.2 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.

#### *(Loss) reversals for impairment of accounts receivable*

(Loss) reversals for impairment of accounts receivable corresponded to a reversal of R\$87.0 million in 2018 due to proceeds received from customers, from a loss of R\$13.5 million in 2017 relating to an allowance for doubtful accounts recorded in that year. For more information related to our (loss) reversals for impairment of accounts receivable, see note 7(i) to our audited consolidated financial statements included elsewhere in this annual report.

### *General and Administrative Expenses*

General and administrative expenses increased by 25.0%, or R\$358.9 million, to R\$1,793.2 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 30.9%, or R\$51.8 million, to R\$219.3 million in 2018 from R\$167.5 million in 2017. Research and development expenses as a percentage of net revenue were 0.4% during 2018 and 0.3% during 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 in this annual report.

### *Other income*

Other income increased by 226.2%, or R\$712.3 million, to R\$1,027.2 million in 2018 from R\$314.9 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.

### *Other expenses*

Other expenses decreased by 52.6%, or R\$615.1 million, to R\$554.7 million in 2018 from R\$1,169.8 million in 2017 as a result of lower: (i) expenses from fixed assets; (ii) provision of legal and labor lawsuits; and (iii) provision for repair environmental damage.

### *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 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.

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 our 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 our revenue is pegged to the variation of the U.S. dollar and 80% of our costs also are pegged to this currency.

In September 2016, Braskem launched a recurring currency hedge program to mitigate the exposure of our 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 our cash flows, 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 the appreciation of 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. In addition, any losses from the collar strategy are always 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 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%.

### *(Loss) profit for the year*

As a result of the foregoing, we recorded a profit of R\$2,868.2 million, or 4.9% of net revenue, during 2018, compared to a profit of R\$3,915.8 million, or 7.9% of net revenue, during 2017.

### **Liquidity and Capital Resources**

Our principal cash requirements for 2019 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 2019, cash flow provided by operating activities was used primarily for investing activities, working capital requirements, to service our outstanding debt obligations and to distribute dividends to shareholders. At the extraordinary shareholders' meeting held on October 3, 2019, our shareholders approved the distribution of the minimum mandatory dividends for the fiscal year ended December 31, 2018, in the amount of R\$667.4 million, which was made on December 30, 2019. 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.

As of December 31, 2019, our consolidated cash and cash equivalents amounted to R\$6,803.9 million, including the aggregate amount of R\$1,017.2 million of Braskem Idesa's cash and cash equivalents.

As of December 31, 2019, we had positive net working capital (defined as (1) current assets minus (2) current liabilities) of R\$7,242.2 million, including total assets in the amount of R\$16,415.7 million and total liabilities in the amount of R\$18,613.8 million of Braskem Idesa.

### **Projected Sources and Uses of Cash**

Considering our short-term contractual obligations and commitments as of December 31, 2019 and budgeted capital expenditures for 2020, we anticipate that we will be required to spend R\$15,440.2 million during 2020 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, subject to conditions precedent and the payment of commitment fees.

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, we have borrowed the amount of R\$5,426.3 million (US\$1,000.0 million) on this credit facility. The two facilities previously held by us in the aggregate amounts of R\$4,069.7 million (US\$750.0 million) with expiration in December 2019 and of R\$500.0 million with expiration in September 2019 were cancelled.

In July 2018, Braskem America entered into a credit facility with Euler Hermes, a German export credit agency, in the aggregate principal amount of up to R\$1,220.9 million (US\$225.0 million) to finance a portion of the investments in our new PP plant in the United States. As of December 31, 2019, R\$973.5 million (US\$179.4 million) had been disbursed in principal amount, and the amount outstanding under the credit facility was R\$1,011.5 million (US\$186.4 million).

In December 2018, we entered into a new credit facility with BNDES, in the aggregate principal amount of R\$476.0 million, maturing in January 2031, with proceeds used to finance our capital expenditures in Brazil. As of December 31, 2019, the outstanding amount under this facility was R\$270.5 million.

**Cash Flows**

The following table sets forth certain consolidated cash flow information for the periods indicated:

	<b>As of December 31,</b>		
	<b>2019</b>	<b>2018</b>	<b>2017</b>
	<i>(in millions of reais)</i>		
Net cash provided by (used in) operating activities	2,265.3	9,250.4	2,461.6
Net cash provided by (used in) investing activities	(2,666.4)	(2,488.3)	(2,406.4)
Net cash provided by (used in) financing activities	1,636.8	(4,603.4)	(2,988.5)
Effect of exchange rate changes on cash and cash equivalents	20.6	(386.1)	6.5
<b>Increase (decrease) in cash and cash equivalents</b>	<b>1,256.2</b>	<b>1,772.5</b>	<b>(2,926.8)</b>

*Cash Flows generated by Operating Activities*

Net cash provided by operating activities was R\$2,265.3 million during 2019, R\$9,250.4 million during 2018 and R\$2,461.6 million during 2017. Net cash provided by operating activities decreased by R\$6,985.1 million during 2019, as compared to 2018, which was the result of the:

- negative impact relating to the transfer of the amount of R\$3,680.5 million from our bank accounts to a judicial deposit account in connection with the public interest civil lawsuit filed by the Alagoas State Prosecutors' Office and the Alagoas State Public Defender's Office;
- reductions in sales volume and in the average international prices references for both chemicals and resins;; and
- the payment under Global Settlement of (i) R\$278.0 million to the MPF, on January 30, 2019 and (ii) CHF16.1 million (R\$58 million) to the OAG, on June 27, 2019.

During 2019, the effects of these factors were partially offset by the:

- lower inventories of raw materials and finished products in the amount of R\$867.8 million; and
- purchase of larger volumes of imported naphtha with extended payment terms.
- monetization of R\$280.8 million of the PIS/COFINS balance (excluded from the ICMS calculation base);
- receipt of advances from customers related to the future sale of chemical products in the Brazilian market and the future export of PE and PP in the amount of R\$36.4 million; and
- lower tax payments in the amount of R\$412.5 million.

During 2019, the effects of these factors were partially offset by the:

Net cash provided by operating activities increased by R\$6,788.8 million during 2018, as 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, which was 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.

#### *Cash Flows Used in Investing Activities*

Net cash used in investing activities was R\$2,666.4 million during 2019, R\$2,488.3 million during 2018 and R\$2,406.4 million during 2017.

During 2019, investing activities for which we used cash on a consolidated basis primarily consisted of: (1) acquisitions to property, plant and equipment of R\$1,749.3 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, (2) acquisitions to property, plant and equipment of R\$1,026.9 million in the USA and Europe Unit, equivalent to US\$259.7 million, allocated both to industrial operations and strategic projects, such as the new polypropylene plant, and (3) acquisitions to property, plant and equipment of R\$104.5 million in Mexico, equivalent to US\$25.8 million.

During 2018, investing activities for which we used cash on a consolidated basis primarily consisted of: (1) acquisitions to property, plant and equipment of R\$1,777.7 million, in Brazilian units, which were allocated primarily to industrial operations, including the investments related to HES, productivity and modernization (such as diversification of the feedstock profile of the cracker in Bahia), (2) acquisitions to property, plant and equipment of R\$992.6 million in the USA and Europe Unit, equivalent to US\$268.7 million, allocated both to industrial operations and strategic projects, such as our new polypropylene plant, and (3) acquisitions to property, plant and equipment of R\$55.2 million in Mexico.

During 2017, investing activities for which we used cash on a consolidated basis primarily consisted of: (1) acquisitions to property, plant and equipment of R\$1,575.7 million, in Brazilian units, which were allocated primarily to industrial operations, including the investments related to HES, productivity and modernization (such as diversification of the feedstock profile of the cracker in Bahia), (2) acquisitions to property, plant and equipment of R\$184.4 million, equivalent to US\$57.4 million, in the USA and Europe Unit, allocated to strategic projects, such as the new polypropylene plant and productivity gains at our polypropylene plants in the United States and Germany, and (3) acquisitions to property, plant and equipment of R\$22.4 million in our Mexico Complex.

#### *Cash Flows Used in Financing Activities*

Net cash provided by financing activities was R\$1,636.8 million during 2019, as compared to a net cash used in financing activities of R\$4,603.4 million during 2018.

During 2019:

- we entered into a contract with international financial institutions under which we borrowed an aggregate principal amount of R\$550.0 million from the Italian export credit agency SACE;
- we drew funds under a revolving credit line in the amount of R\$7,851.2 million;
- we entered into certain agreements for advance on exchange contracts (*adiantamentos sobre contratos de câmbio*), or ACCs, with local financial institutions in Brazil under which we borrowed an aggregate principal amount of R\$1,172.7 million;
- we entered into export prepayment agreements in the aggregate amount of R\$601.8 million;
- we received disbursements under a financing agreement with certain governmental entities in the aggregate amount of R\$266.4 million;

- we issued notes maturing in 2030 and 2050 for an aggregate principal amount of R\$9,966.0 million (US\$2,250.0 million) in the fourth quarter of 2019;
- our subsidiary Braskem Idesa issued notes maturing in 2029 for an aggregate principal amount of R\$3,497.6 million (US\$900.0 million) in the fourth quarter of 2019; and
- we received R\$277.4 million from a leaseback operation for machinery and equipment at some of our plants, with a term of seven years.

During 2019, we used cash to pay:

- R\$128.4 million, representing aggregate interest expenses of our lease agreements;
- R\$1,204.6 million, representing ACCs with local financial institutions in Brazil;
- R\$141.5 million, representing corporate loans (advance exports contracts, credit facilities, promissory notes and others), with local and international institutions;
- R\$7,405.4 million, representing a full redemption of notes maturing in 2020 and 2021 and a partial redemption of our perpetual bonds;
- R\$599.9 million, representing export prepayments which local and international institutions;
- R\$4,414.5 million, related to the partial amortization of the Braskem Idesa project finance facility;
- R\$188.2 million, representing aggregate principal under a financing agreement with BNDES and certain governmental entities; and
- R\$7,829.0 million, representing payments related to a revolving credit line.

In addition, in 2019 we used cash to pay dividends in the aggregate amount of R\$667.4 million.

During 2018:

- Braskem America 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) from Euler Hermes, a German export credit agency, and R\$1,117.3 million (US\$295.1 million) from the Italian export credit agency SACE; and
- we entered into certain agreements for ACCs with local financial institutions in Brazil under which we borrowed an aggregate principal amount of R\$1,931.7 million (US\$536.8 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 ACCs with local financial institutions in Brazil;
- R\$2,487.8 million, representing corporate loans (advance exports contracts, credit facilities, promissory notes and others), with local and international institutions;
- R\$1,958.4 million, representing amortization of principal of notes maturing in 2018, 2020 and 2021 and a partial redemption of our perpetual bonds;
- R\$105.9 million, representing export prepayments with local and international institutions;
- R\$805.0 million, representing amortization of principal of the Braskem Idesa project finance facility; and
- R\$368.6 million, representing aggregate principal under a financing agreement with BNDES and certain governmental entities.

In addition, in 2018 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 amount of R\$420.0 million in September 2017; and
- we received proceeds from the issuance of notes maturing in 2022 and 2027 in the aggregate principal amount of R\$5,470.1 million in the fourth quarter of 2017.

During 2017, we used cash to pay:

- R\$2,149.6 million, representing aggregate interest expenses;
- R\$307.7 million, representing ACCs 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 notes maturing 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 agreement of Braskem Idesa;
- R\$581.9 million, representing amortization of the principal of the Braskem Idesa project finance facility; and
- R\$2,298.4 million, representing aggregate principal under a financing agreement with BNDES and certain governmental entities.

In addition, in 2017 we used cash to pay dividends in the aggregate amount of R\$998.9 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.

### ***Contractual Commitments***

The following table summarizes significant contractual obligations and commitments as of December 31, 2019 that have an impact on our liquidity.

We have adopted a calculation methodology to determine minimum cash needs for a 30-day timeframe (the “monthly vision”) and minimum cash needs for a 12-month timeframe (the “yearly vision”) for the purpose, respectively, of: (i) ensuring the liquidity needed to meet obligations coming due in the following month; and (ii) ensuring that we maintain liquidity during potential crises. Minimum cash needed for our “yearly vision” is calculated mainly based on the projected operating cash generation, less short-term debts and working capital needs. Minimum cash needed for our “monthly vision” considers the projected operating cash disbursements, debt service and contributions to projects, as well as the planned disbursement for derivatives maturing in the following month, among other items. For our financial policy, we adopt the greater of these two references to determine the amount of minimum cash needed.

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 R\$5,426.3 million (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 a precautionary measure, on April 1, 2020, we borrowed the amount of R\$5,426.3 million (US\$1,000.0 million) on this credit facility. The table below shows Braskem’s financial liabilities by maturity, including the amounts due under the Leniency Agreement, according to note 25 to our audited consolidated financial statements. These amounts are calculated based on undiscounted cash flows and include contractual interest payments, therefore they may not be reconciled with our balance sheet.

**Maturity as of December 31, 2019**

	Within one year	Between one and two years	Between two and five years	More than five years	Total
	<i>(in millions of reais)</i>				
Trade payables	9.2	0.0	—	—	9.2
Borrowings	0.9	2.3	7.2	40.1	50.4
Debentures	0.1	0.1	0.1	0.1	0.4
Braskem Idesa borrowings	0.8	1.7	2.4	9.5	14.4
Derivatives	0.1	0.1	0.1	0.0	0.2
Loan to non-controlling shareholder of Braskem Idesa	—	—	—	2.4	2.4
Other financial liabilities	0.5	—	—	—	0.5
Leniency agreement (note 25 to our audited consolidated financial statements)	0.4	0.4	1.0	0.2	2.0
Leases	0.6	0.5	1.1	0.7	3.0
<b>Total</b>	<b>12.5</b>	<b>5.1</b>	<b>11.9</b>	<b>52.9</b>	<b>82.5</b>

**Indebtedness and Financing Strategy**

As of December 31, 2019, our total outstanding consolidated indebtedness, net of transaction costs, was R\$39,273.3 million (US\$9,743.5 million), including R\$9,981.7 million (US\$2,476.4 million) in connection with the secured debt related to our Mexico Complex. As of December 31, 2019, we had R\$2,395.9 million in outstanding indebtedness relating to a loan payable to the non-controlling shareholder of Braskem Idesa, maturing in December 2029 and accruing interest at 7% p.a., whose proceeds were used by Braskem Idesa to fund its construction project.

Our short-term indebtedness outstanding as of December 31, 2019 was R\$1,566.0 million, including the current portion of long-term indebtedness (4.0% of our total indebtedness) and the amount of R\$744.4 million in connection with the secured debt related to our Mexico Complex.

Our long-term indebtedness outstanding as of December 31, 2019 was R\$37,707.3 million (96.0% of our total indebtedness), including the amount of R\$9,237.3 million in connection with the secured debt related to our Mexico Complex.

On a consolidated basis, our *real*-denominated indebtedness as of December 31, 2019, net of transaction costs, was R\$1,640.1 million (4.2% of our total indebtedness), and our foreign currency-denominated indebtedness was R\$37,633.2 million (95.8% of our total indebtedness).

The following table presents information relating to our debt maturity profile as of December 31, 2019:

	2020	2021	2022	2023	2024	2025	Thereafter	Total
	<i>(in millions of reais)</i>							
Indebtedness	424.7	448.1	448.8	644.3	1,044.0	411.9	1,100.7	4,522.6
Capital Markets	396.8	(15.7)	1,153.3	824.5	3,426.6	(22.7)	19,006.2	24,768.9
Debt related to our Mexico Complex (Braskem Idesa Financing)	744.4	800.8	699.1	892.6	978.5	883.3	4,983.1	9,981.7
<b>Total</b>	<b>1,566.0</b>	<b>1,233.2</b>	<b>2,301.2</b>	<b>2,361.4</b>	<b>5,449.0</b>	<b>1,272.5</b>	<b>25,090.0</b>	<b>39,273.3</b>

**Short-Term Indebtedness**

Our consolidated short-term debt, including current portion of long-term debt, was R\$1,566.0 million, including the amount of R\$744.4 million in connection with the secured debt related to our Mexico Complex.

**Long-Term Indebtedness**

Our long-term indebtedness outstanding as of December 31, 2019 was R\$37,707.3 million (96.0% of our total indebtedness), including the amount of R\$9,237.3 million in connection with the secured debt related to our Mexico Complex.

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, certain 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, 2019, R\$36.5 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.

In October 2019, our finance subsidiary Braskem Netherlands Finance B.V. issued R\$8,139.5 million (US\$1,500.0 million) in aggregate principal amount of 4.500% notes due 2030 and R\$4,069.7 million (US\$750.0 million) in aggregate principal amount of 5.875% notes due 2050. The proceeds of the issuance were used primarily to repay certain of our outstanding debt. In November 2019, we issued R\$550.0 million in aggregate principal amount of promissory notes due 2024. The proceeds from the promissory notes issuance were used primarily to repay certain of our outstanding debt, including our notes maturing in 2020 and 2021, and for a partial repayment of our notes maturing in 2022 and 2023.

As of December 31, 2019, 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.

#### *Fixed-Rate Notes Denominated in U.S. Dollars*

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 amount of these securities and their maturity dates.

Security	Outstanding Principal plus Interest Amount as of December 31, 2019		Final Maturity
	(in millions of US\$)	(in millions of reais)	
5.375% Notes due 2022 <sup>(1)</sup>	291.7	1,582.9	May 2022
3.50% Notes due 2023 <sup>(2)</sup>	210.3	1,141.2	January 2023
6.45% Notes due 2024 <sup>(1)</sup>	769.9	4,177.7	February 2024
4.50% Notes due 2028 <sup>(2)</sup>	1,276.6	6,927.2	February 2028
4.500% Notes due 2030 <sup>(2)</sup>	1,511.1	8,199.7	January 2030
7.125% Notes due 2041 <sup>(3)</sup>	773.5	4,197.2	July 2041
5.875% Notes due 2050 <sup>(2)</sup>	757.2	4,108.8	January 2050
7.375% Perpetual Bonds <sup>(1)</sup>	508.8	2,760.9	—

(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.

### Floating-Rate Notes Denominated in Brazilian Reais

We have issued a floating-rate promissory note in the Brazilian market, which pays interest in ten semi-annual installments to maturity in November 2024. The promissory note is non-amortizing, and principal becomes due upon maturity. The table below sets forth the outstanding amount of this security and its maturity date.

Security	Outstanding Principal plus Interest Amount as of December 31, 2019		Final Maturity
	(in millions of US\$)	(in millions of reais)	
CDI + 0.85% Promissory Note due 2024	102.2	554.3	November 2024

### Credit Facilities with Governmental Agencies Denominated in U.S. Dollars

In March 2017, we entered into a credit facility secured by NEXI, a Japanese export credit agency, in an aggregate principal amount of R\$732.6 million (US\$135.0 million). This facility bears interest at a rate equivalent to LIBOR plus 1.61% per year, payable semi-annually to maturity in March 2027. The principal amount is amortized in 20 successive semi-annual installments beginning in September 2017. As of December 31, 2019, the outstanding amount under this facility was R\$616.4 million (US\$113.6 million).

In July 2018, Braskem America entered into a credit facility with Euler Hermes, a German export credit agency, in the aggregate principal amount of up to R\$1,220.6 million (US\$225.0 million) to finance a portion of the investments in our new PP plant in the United States. The facility, which matures on December 30, 2028, bears interest at a rate equivalent to LIBOR plus 0.65% per year, payable semi-annually to maturity. The principal amount is amortized semi-annually as from December 30, 2020. The funds are disbursed in accordance with the progress of the construction project, and the total amount is expected to be disbursed by December 30, 2020. As of December 31, 2019, R\$973.5 million (US\$179.4 million) had been disbursed in principal amount, and the amount outstanding under the credit facility was R\$1,011.5 million (US\$186.4 million).

In November 2018, we entered into a credit facility secured by SACE, an Italian export credit agency, in an aggregate principal amount of US\$295.1 million. This facility bears interest at a rate equivalent to LIBOR plus 0.90% per year, payable semi-annually to maturity in November 2028. The principal amount is payable in 20 successive semi-annual installments beginning in May 2019. As of December 31, 2019, the outstanding amount under this facility was R\$1,445.0 million (US\$266.3 million).

In December 2019, we entered into a credit facility secured by SACE, in an aggregate principal amount of R\$813.9 million (US\$150.0 million). This facility bears interest at a rate equivalent to LIBOR plus 0.90% per year, payable semi-annually to maturity in December 2029. The principal amount is payable in 20 successive semi-annual installments beginning in June 2020. As of December 31, 2019, the outstanding amount under this facility was R\$368.4 million (US\$67.9 million).

Issue Date	Outstanding Principal plus Interest Amount as of December 31, 2019		Interest Rate	Amortization Schedule	Final Maturity
	(in millions of US\$)	(in millions of reais)			
March 2017	113.6	616.4	LIBOR + 1.61% p.a.	Semi-annual <sup>(1)</sup>	March 2027
July 2018	186.4	1,011.5	LIBOR + 0.65% p.a.	Semi-annual <sup>(2)</sup>	December 2028
November 2018	266.3	1,445.0	LIBOR + 0.90% p.a.	Semi-annual <sup>(3)</sup>	November 2028
December 2019	67.9	368.4	LIBOR + 0.90% p.a.	Semi-annual <sup>(4)</sup>	December 2029

(1) Amortization on this facility commenced in September 2017.

(2) Amortization on this facility will commence in November 2020.

(3) Amortization on this facility commenced in May 2019.

(4) Amortization on this facility will commence in June 2020.

### Credit Facilities with Governmental Agencies Denominated in Brazilian Reais

In December 2018, we entered into a new credit facility with BNDES, in the aggregate principal amount of R\$476.0 million, maturing in January 2031, with proceeds used to finance our capital expenditures in Brazil. On January 30, 2019, we drew the first installment under this facility in the aggregate principal amount of R\$266.0 million. This facility bears interest at a rate equivalent to IPCA plus 6.04% per year, payable quarterly after an initial grace period, from the first installment until January 2021, and afterwards monthly to maturity until January 2031. The principal amount is payable in 120 successive monthly installments beginning in February 2021. As of December 31, 2019, the outstanding amount under this facility was R\$1,467.8 million (US\$270.5 million).

The table below sets forth selected information with respect to our BNDES credit facilities as of December 31, 2019.

Facility	Outstanding Principal plus Interest Amount as of December 31, 2019		Weighted Average Interest Rate	Expiration of Commitment
	(in millions of US\$)	(in millions of reais)		
December 2009 <sup>(1)</sup> — Fixed rate	3.69	20.0	4.0% p.a.	January 2021
January 2019 <sup>(2)</sup> — Fixed rate	49.8	270.5	IPCA + 6.04% p.a.	January 2031

(1) Amortization on this facility commenced in February 2016.

(2) Amortization on this facility will commence in February 2021.

The credit facility that matures in January 2021 is secured by mortgages on two of our plants located in our Southern Complex. The credit facility that matures in January 2031 is unsecured.

#### Revolving Credit Facility Agreement

In May 2018, we and certain of our subsidiaries entered into a revolving credit facility agreement with several international financial institutions for a principal amount of R\$5,426.3 million (US\$1,000.0 million), which matures in May 2023. We had not drawn any amount on this credit facility as of December 31, 2019. In April 2020, we borrowed the amount of R\$5,426.3 million (US\$1,000.0 million) on this credit facility.

#### Credit Facilities with Banks Denominated in Dollars

On April 8, 2019, we entered into a credit facility with international institutions in the aggregate principal amount of R\$436.3 million (US\$80.4 million) with a term of seven years. To consummate this facility, certain assets of the Company's plants were transferred to the financial institutions and, by the maturity date, Braskem has the option to repurchase them for a residual value. In accordance with IFRS15, this transfer is not considered a sale. This facility bears interest at a rate equivalent to LIBOR minus 1.00% per year, payable semi-annually to maturity in April 2026. The principal amount is payable in successive semi-annual installments beginning in September 30, 2019. As of December 31, 2019, the outstanding amount under this facility was R\$368.4 million (US\$67.9 million).

In October 2019, we entered in an export pre-payment facility and received a disbursement in an aggregate principal amount of R\$542.6 million (US\$100.0 million). This facility bears interest at a rate of LIBOR plus 1.75% per year, payable semi-annually to maturity in October 2024. The principal amount is payable in a single installment at maturity. As of December 31, 2019, the outstanding amount under this facility was R\$545.9 million (US\$100.6 million).

Issue Date	Outstanding Principal plus Interest Amount as of December 31, 2019		Interest Rate	Amortization Schedule	Final Maturity
	(in millions of US\$)	(in millions of reais)			
April 2019	67.9	368.4	LIBOR - 1.00%	Semi-annual	April 2026
October 2019	100.6	545.9	LIBOR + 1.75%	Bullet	October 2024

#### Credit Facilities with Banks Denominated in Reais

In April 2018, we entered into a credit export note facility in the aggregate principal amount of R\$400.0 million. This facility bears interest at a rate equivalent to CDI plus 0.70% per year, payable semi-annually to maturity in March 2024. The principal amount is payable in two installments, in March 2023 and March 2024. As of December 31, 2019, the outstanding amount under this facility was R\$405.6 million.

Issue Date	Outstanding Principal and Interest Amount as of December 31, 2019		Interest Rate	Amortization Schedule	Final Maturity
	(in millions of US\$)	(in millions of reais)			
April 2018	74.7	405.6	CDI + 0.70%	2023 and 2024	October 2024

## Indebtedness of Braskem Idesa

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 R\$17.4 billion (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.

On November 25, 2019, Braskem Idesa issued R\$4,883.7 million (US\$900.0 million) in aggregate principal amount of 7.450% senior secured notes due 2029. The notes are senior secured obligations of Braskem Idesa and rank *pari passu* with the existing Braskem Idesa project finance debt until the full repayment of the outstanding amount of the Braskem Idesa project finance facility. After the full amortization of the outstanding amount of the Braskem Idesa project finance facility, Braskem Idesa's notes will convert into senior unsecured notes. Interest on the notes is payable semi-annually, and the principal amount becomes due at maturity. The proceeds of the notes were used to partially refinance Braskem Idesa's existing secured project finance indebtedness incurred in 2012 to construct a plant in Mexico. Excess proceeds of the issuance were used to prepay certain other indebtedness of Braskem Idesa.

Security <sup>(1)</sup>	Outstanding Principal plus Interest Amount as of December 31, 2019		Final Maturity
	<i>(in millions of US\$)</i>	<i>(in millions of reais)</i>	
7.45% Notes due 2029	903.2	4,901.0	November 2029

(1) Represents notes issued by Braskem Idesa.

## Capital Expenditures

During 2019, investing activities for which we used cash on a consolidated basis primarily consisted of: (1) acquisitions to property, plant and equipment of R\$1,749.3 million, in Brazilian units, which were allocated primarily to industrial operations including the investments related to HES, productivity and modernization, (2) acquisitions to property, plant and equipment of R\$1,026.9 million invested in the USA and Europe Unit, equivalent to US\$259.7 million, allocated both to industrial operations and strategic projects, such as our new polypropylene plant; and (3) acquisitions to property, plant and equipment of R\$104.5 million in Mexico, equivalent to US\$25.8 million.

## Capital Expenditure Budget

We plan to invest R\$3,010.3 million in 2020, of which R\$1,152.9 million is pegged to the U.S. dollar, related to investments in the United States and Europe units.

Of the total investment, R\$1,836.2 million will be allocated to Health, Environment & Safety (HES) projects, as well as maintenance, productivity and operating efficiency projects, including the investment to be made in the scheduled shutdown of the cracker in São Paulo, which is scheduled for the third quarter of 2020.

Braskem Idesa plans to invest approximately R\$122.1 million (US\$22.5 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, 2019, we produced 800,783 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 each 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 2020, Pemex TRI volume deliveries under the Long-Term Performance Test remained close but above 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 general shareholders' meetings require the approval of at least 50% plus one of the voting shares of Braskem Idesa. Decisions considered by Braskem Idesa's board of directors require the approval by a simple majority of votes of its members;
- 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 R\$8,063.5 million (US\$1,486 million) senior secured syndicated facility on a timely basis, certain defaults not related to payment obligations have occurred 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. In October 2019, a waivers and consent package was approved by the intercreditor agent on behalf of the lenders, thereby extending the date for achieving the guaranteed physical completion date from November 30, 2016 to December 30, 2020 and the guaranteed financial completion date from December 31, 2016 to December 31, 2020.

On November 25, 2019, Braskem Idesa issued R\$4,883.7 million (US\$900.0 million) in aggregate principal amount of 7.450% senior secured notes due 2029. The notes are senior secured obligations of Braskem Idesa and rank *pari passu* with the existing Braskem Idesa project finance debt until the full repayment of the outstanding amount of the Braskem Idesa project finance facility. After the full amortization of the outstanding amount of the Braskem Idesa project finance facility, Braskem Idesa's notes will convert into senior unsecured notes.

#### *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. Our contingent equity commitment that remains available is in the amount of up to US\$208 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.

To develop our Mexico Complex, Braskem Idesa required significant capital expenditure and incurred significant debt. The ability of Braskem Idesa's shareholders to comply with the obligation to make certain contingent equity contributions to cover additional amounts necessary to complete the project, as agreed in the equity support agreement in connection with the project finance facility, could affect the operation of the Mexican Complex. See "Risk Factors—Risks Relating to Us and the Petrochemical Industry—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."

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<sup>®</sup>C Project*

Our new production line of ultra-high molecular weight polyethylene (UHMWPE), commercially known as UTE<sup>®</sup>C 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 complements the capacity of the already existing line in Brazil, in the petrochemical complex of Camaçari. With 100% Brazilian technology, the UTE<sup>®</sup>C 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<sup>®</sup>C plant is the North-American market, but we also export resin to Europe, India and China. The 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.

##### *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\$675.0 million, as of December 31, 2019, we had already invested US\$555.4 million in the engineering project detailing and in the purchase of equipment. In 2019, the project had an 89.7% completion rate: 88.5% of the construction was completed, and 100% of the engineering detailing and equipment and material acquisitions were completed. Linde Group was hired to lead the EPC (engineering, procurement and construction) of the project and the choice of Grace's UNIPOL<sup>®</sup> technology.

Braskem America entered into a credit facility in the amount of up to R\$1,220.5 million (US\$225.0 million) with 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 the date of this annual report, R\$973.5 million (US\$179.4 million) had been disbursed.

*Energy efficiency project in our cracker at the São Paulo Complex*

To improve energy efficiency and competitiveness of the cracker at the São Paulo Complex, Braskem and Siemens will invest approximately R\$600 million to improve the thermoelectric system of the unit at the complex by replacing some of the steam-powered turbines with high-efficiency electric engines supported by a new co-generation plant that will consume the residual gas from the unit's own production process. To enable the investment by Siemens in the new co-generation plant, Braskem signed an agreement with Siemens for a term of 15 years under a build, own and operate model. With startup expected in 2021, the project will not only reduce the site's energy consumption, but also reduces the cracker's water consumption by 11.4% and its greenhouse gas emissions by 6.3%.

As of the date of this annual report, R\$72.2 million (US\$13.3 million) was already invested and the project was approximately 11% complete.

*Technology change at our chlor-alkali facility in Alagoas*

We are investing R\$59.3 million in a project at our chlor-alkali facility located in the district of Pontal da Barra, in Maceió, in the state of Alagoas, which aims to change the raw material processing from brine to sea salt.

With this project, we will be able to resume operations of our chlor-alkali and dichloroethane plants in the region that have been suspended since May 2019 following the developments stemming from the publication of Report no. 1 by the Brazilian Geological Service (CPRM). See "Item 3. Key Information—Risk Factors—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."

The new technology consists of sourcing salt from third parties. Salt could be sourced from the Northeast region of Brazil by road or imported from other regions using the port of Maceió, which is located near the chlor-alkali facility. Salt sourced from third parties would be initially stored, dissolved into water to produce brine, treated and then sent to be processed in the chlor-alkali facility.

As of the date of this annual report, R\$115.0 million (US\$21.2 million) had already been invested.

*Fast-Track Solution to import ethane for the Braskem Idesa facility in Mexico*

Braskem Idesa is investing in logistics infrastructure to import ethane from the United States to increase the capacity utilization rate of its cracker. With regard to ethane supply, Braskem Idesa is currently negotiating and may enter into a long-term agreement, or opt to acquire ethane in the spot market.

To ensure the feasibility of the Fast-Track Solution, Braskem Idesa executed agreements with Smart Pass, a logistics operator, and with Enestas, a company specializing in cryogenic gas transportation. Smart Pass will be responsible for receiving liquid ethane at the docks of the Port of Coatzacoalcos and unloading it from the vessels in cryogenic tanks. Enestas will transport the ethane by truck to the Braskem Idesa petrochemical complex, where the ethane will be stored in existing tanks and regasified for use in the production process.

With an approximate investment of R\$22 million (US\$4 million), this complementary solution for acquiring feedstock will make it possible to import up to 12,800 barrels per day of ethane to the Petrochemical Complex in Mexico, which represents 19% of its ethane needs. In February 2020, Braskem Idesa imported its first shipment of ethane.

In addition, Braskem Idesa continues to assess a complementary solution for larger-scale ethane imports whose scope consists of building a terminal for importing ethane and a pipeline to transport it to its petrochemical complex. For additional information, particularly relating to the risks associated with this project, please see “Item 3. Key Information—Risk Factors—Risks Relating to Mexico—If we fail to develop an alternative source of ethane, it may have a negative impact on our business because we cannot operate our Mexico Complex at full capacity.”.

#### 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 chairman of the board of directors, and, in his absence, the vice-chairman of the board of directors. The chairman and the vice-chairman 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
José Mauro Mettrau Carneiro da Cunha	December 20, 2019	Chairman of the Board	70
João Cox Neto	June 8, 2016	Vice-Chairman of the Board	57
Roberto Lopes Pontes Simões	May 22, 2019	Board Member	64
Gesner José de Oliveira Filho <sup>(1)</sup>	June 27, 2017	Board Member	64
Pedro Oliva Marcílio de Sousa <sup>(1)</sup>	June 27, 2017	Board Member	47
Roberto Faldini	May 22, 2019	Board Member	72
João Pinheiro Nogueira Batista	April 22, 2019	Board Member	64
Julio Soares de Moura Neto <sup>(1)</sup>	April 22, 2019	Board Member	77
Rogério Bautista da Nova Moreira	November 12, 2019	Board Member	44
Andrea da Motta Chamma <sup>(1)</sup>	May 29, 2020	Board Member	55
Maria Isabel de Faria Perez	May 29, 2020	Alternate	39
André Amaro da Silveira	June 8, 2016	Alternate	57
Marcelo Rossini de Oliveira	April 22, 2019	Alternate	42
Marcelo Mancini Stella	June 8, 2016	Alternate	57
Daniel Pereira de Albuquerque Ennes	May 29, 2020	Alternate	40
José Marcelo Lima Pontes	May 22, 2019	Alternate	66
Guilherme Duarte Abud	May 29, 2020	Alternate	37
Guilherme Simões de Abreu	May 29, 2020	Alternate	69

(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*

*José Mauro Mettrau Carneiro da Cunha.* Mr. Carneiro da Cunha is the chairman of our board of directors and was elected as a member of our board of directors by our shareholder Odebrecht S.A. Mr. Carneiro da Cunha has been a member of the board of directors of Odebrecht S.A. since October 2019 and of Oi S.A. since September 2018, and has previously acted as chairman of the board of directors of Oi S.A. since 2009. Mr. Carneiro da Cunha started his career as an employee of BNDES, where he held several executive positions (from 1974 to 1990) and was also appointed officer (from 1991 to 1998) and vice-president responsible for the industrial operations, legal and fiscal matters areas (from 1998 to 2002). He has held the following positions: (i) member of the board of directors of Telemar Participações S.A. (from 2008 until the merger of Telemar Participações S.A., in September 2015); (ii) member of the board of directors of Vale S.A. (from 2010 to April 2015); (iii) interim CEO of Oi S.A., in 2013; (iv) chairman of the board of directors of the following companies: (a) Tele Norte Leste Participações S.A. (from 1999 to 2003 and from 2007 to 2012), where he also acted as alternate member of the board of directors in 2006; (b) Telemar Norte Leste S.A. (from 2007 to 2012); (c) TNL PCS S.A. (from 2007 to 2012); (d) Tele Norte Celular Participações S.A. (from 2008 to 2012); (e) Coari Participações S.A. (from 2007 to 2012); and (f) Dommo Empreendimentos Imobiliários S.A., formerly known as Calais Participações S.A. (from 2007 to December 2016); (v) member of the board of directors of Log-In Logística Intermodal S.A. (from 2007 to 2011); (vi) member of the board of directors of Lupatech S.A. (from 2006 to 2012); (vii) member of the board of directors of Santo Antonio Energia S.A. (from 2008 to 2017); (viii) member of the Board of Directors of the following Companies: (a) Braskem S.A. (from 2007 to 2010), where he previously held the position of vice-president of strategic planning (from 2003 to 2005); (b) LIGHT Serviços de Eletricidade S.A. (from 1997 to 2000); (c) Aracruz Celulose S.A. (from 1997 to 2002); (d) Politeno Indústria e Comércio S.A. (from 2003 to 2004); (e) BANESTES S.A. – Banco do Estado do Espírito Santo (from 2008 to 2009); and (f) Pharol, SGPS, S.A. (from 2015 to 2017). Mr. Carneiro da Cunha holds a bachelor's degree in mechanical engineering from Universidade Católica de Petrópolis (1971). He also completed the Executive Program in Management at Anderson School, University of California, in December 2002.

*João Cox Neto.* Mr. Neto was elected as a member of our Board of Directors after nominated by the shareholder Petróleo Brasileiro – Petrobras. Currently, he serves as Chairman of the Board of Vivara S.A. and as a member of the Board of Directors of Embraer S.A., Petrobras S.A. and Linx S.A. He is the founding partner and Chief Executive Officer of Cox Investments & Advisory. From 2006 to 2010, he served as Chief Executive Officer and Vice-Chairman of the Board of Directors of Claro. In 2005, he served as Vice-Chairman of the Board of Directors of Cellcom Israel. From April 1999 to August 2004, he served as Chief Financial and Investor Relations Officer of Telemig Celular Participações and Tele Norte Celular Participações, as well as Chief Executive Officer of Telemig Celular and Amazônia Celular from August 2002 to August 2004. Mr. Cox also served as member of the Boards of Directors of other companies in Brazil, Argentina, Netherlands and Israel. He also was a member of the Brazilian Financial System Resources Board (CRSFN), the Brazilian Association of Publicly Held Companies (ABRASCA) and Brazilian Investor Relations Institute. Mr. Cox holds a B.A. in Economics from the Federal University of Bahia, and continued his studies in economics at the Université du Québec à Montreal and Oxford University's College of Petroleum Studies.

*Roberto Lopes Pontes Simões.* Mr. Simões is currently the Chief Executive Officer of Braskem as well as a member of our Board of Directors appointed by the shareholder Odebrecht S. A. He has served as the chair or member on the Boards of Directors of major companies such as: Odebrecht Engenharia e Construção, Consorcio Baía de Sepetiba, Itaguaí Construções Navais, Petroquímica Paulínia, Ipiranga Química, Ipiranga Petroquímica, Refinaria Ipiranga, COPESUL, Petroflex and CETREL. He served as the Chief Executive Officer of Ocyan S.A. (2012-2019), Odebrecht Defesa e Tecnologia (2010-2012) and Santo Antônio Energia (2008-2010), and as the Vice-CEO of Braskem (2004-2008). He was COO and CEO of iG-Internet Group from 2000 to 2004. He was CEO of Oportrans Concessão Metroviária - Metro Rio from 1999 to 2000. He joined the Odebrecht Group in 1994 as Chief Contract Officer at Tenenge and at CNO, serving until 1999. He was awarded a B.Sc. in Mechanical Engineering from the Federal University of Bahia in 1978 and completed the Petrochemical Maintenance & Project Engineering Program (CEMANT) of Petrobras/UFBA. He is a member of the Assembly of the private philanthropic organization Obras Sociais de Irmã 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 as a member of our Board of Directors by the shareholder Odebrecht S.A. He holds a B.A. in Business Administration from the Getúlio Vargas Foundation (1972) and completed non-degree programs in (i) Advanced Management at the Dom Cabral Foundation and at INSEAD (1991); (ii) Entrepreneurship at Babson College (2004); and (iii) Corporate Governance at the IFC and IBGC (2009, 2011, 2013 and 2016). He is the President and a Partner at Faldini Participações Administração e Investimentos Ltda. and the Chief Executive Officer of MBF Administração e Serviços. In addition to participating on the board of Braskem S.A., he currently is a member of the Boards of Directors of Vulcabras/Azaleia, Marfrig General Foods, Irani Papel e Embalagens SA, Cia. Habitusul de Participações and Odebrecht S. A. He participates voluntarily as a member of the Board of Curators of the Dorina Nowill Foundation for the Blind and the Crespi Prado Foundation. He is executive officer of the Ema Gordon Klabin Cultural Foundation. He is a visiting professor at the Dom Cabral Foundation and an arbitrator of the Market Arbitration Chamber (CAM) of the B3. He was a member of the Boards of Directors and Advisory Boards of various companies in Brazil and abroad, including BOVESPA, Metal Leve, Marau, Livrarias Siciliano, CPFL, Inpar, Klicknet, Sadia, BRF and Bco. BMG. He co-founded the Brazilian Corporate Governance Institute (IBGC) in 1995 and continues to participate on several of its commissions. He is an associate member of the Brazilian Institute of Financial Executives (IBEF) and of the Family Business Network (FBN). For over 20 years, he was an executive officer, shareholder and member of the Board of Directors of Metal Leve S.A., and served as President of the Securities and Exchange Commission of Brazil (CVM), in 1992. He was a coordinator for five years (2002-07) in São Paulo of the Family Business Center (PDA) of the Dom Cabral Foundation.

*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.

*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.

*Rogério Bautista da Nova Moreira.* Mr. Moreira was elected as a member of our board of directors as a nominee of our shareholder Odebrecht S.A. Mr. Moreira is currently a director of Empreendimentos Imobiliários S.A. and Lagoa da Barra S.A. and the general counsel of Odebrecht S.A. Previously, he worked as director at Santo Antonio Energia S.A. and Odebrecht Comercializadora de Energia S.A., between 2014 and 2015. He also worked as general counsel of OR Empreendimentos Imobiliários S.A., between 2016 and 2019, of Odebrecht Energia S.A., between 2012 and 2016, and as a lawyer at Odebrecht Energia S.A., between 2008 and 2012, at Braskem S.A., between 2002 and 2008, at the law firm Veirano Advogados, between 2000 and 2001, and at Deloitte, between 1999 and 2000. Mr. Moreira holds a degree in law from Universidade Católica de Salvador (1999), a specialization degree in tax law from Instituto Brasileiro de Direito Tributário and an MBA in business management from Fundação Getúlio Vargas.

*Andrea da Motta Chamma.* Ms. Chama was elected as a member of our board of directors as a nominee of our shareholder Petróleo Brasileiro S. A. – Petrobras. Currently, she is a member of the board of directors and head of the People Committee of Fleury Group and an advisor and member of the advisory board specializing in fintech and blockchain startups at 3C Advisors. Previously, she served as Vice-Chairman and Head of Equity Sales of Bank of America Merrill Lynch and Executive Officer of Brokerage and Equity Sales at ABN Amro. Ms. Chamma holds a B.A. in business administration from the Getúlio Vargas Foundation (FGV) and completed non-degree programs in management at Harvard University and Columbia University.

*Alternate Directors*

*Maria Isabel de Faria Perez.* Ms. Perez was elected as an alternate member of our board of directors by our shareholder Petróleo Brasileiro S.A. – Petrobras. Currently, she acts as general manager in the area of business integration and interest at Petrobras, having previously acted as its legal manager. Ms. Perez holds a law degree from Universidade do Estado do Rio de Janeiro (UERJ) and a graduate degree in Oil and Gas Exploration and Production Business Management from Instituto Brasileiro de Petróleo (IBP). She also holds a Business Acumen for the Energy Executive certification from McCombs School of Business (University of Texas) and has completed extension courses in anticorruption compliance for the energy sector at Instituto Brasileiro de Petróleo (IBP) and in national and international commercial arbitration at IBMEC.

*André Amaro da Silveira.* Mr. Silveira was elected as 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 Ocyan and Odebrecht Transport, acting also on its respective Compliance Committees and as a board member of Santo Antonio Energia S.A. 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. He was a member of the boards of directors of Odebrecht Engenharia e Construção, Atvos and OR, acting also as coordinator of the compliance committees and as a member of the people committees. 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.

*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.

*Daniel Pereira de Albuquerque Ennes.* Mr. Ennes was elected as an alternate member of our board of directors by our shareholder Petróleo Brasileiro S.A. – Petrobras. Currently, he is a member of the board of directors of Liquigas Distribuidora S.A. and a Structured Bank Financing Relations Manager at Petrobras. Previously, he was the Coordinator of Banking Market, Coordinator of Domestic Capital Market and Coordinator of the Export Credit Agency at Petrobras. Mr. Daniel Pereira holds a bachelor's degree in economics from Universidade Federal do Rio de Janeiro (UFRJ), a law degree from Universidade do Estado do Rio de Janeiro (UERJ) and a master's degree in industrial economy from Universidade Federal do Rio de Janeiro (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.

*Guilherme Duarte Abud.* Mr. Abud was appointed as an alternate member of our board of directors as a nominee of Odebrecht S.A. He is currently a lawyer at Odebrecht S.A. Previously, he served as Chief Legal & Corporate Governance Officer at Enseada Industria Naval S.A. from 2012 to 2019 and as a lawyer at Construtora Norberto Odebrecht S.A. from 2008 to 2012 and at the law firm Machado Meyer Advogados from 2002 to 2008. Mr. Abud holds a degree in law from the Pontifical Catholic University of São Paulo (2006) and an LL.M. in corporate law from Insper (2008).

*Guilherme Simões de Abreu.* Mr. Abreu was appointed as an alternate member of our board of directors as a nominee of Odebrecht S.A. He has served as Chief People, Communication & Organization Officer at Odebrecht S.A. since January 2020. From June 2018 to December 2019, he was executive secretary to the board of directors of Odebrecht S.A. From 2013 to March 2017, he held the position of People & Organization Manager at Odebrecht S.A.

**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:

<b>Name</b>	<b>Year of First Appointment</b>	<b>Position Held</b>	<b>Age</b>
Roberto Lopes Pontes Simões	2019	Chief Executive Officer	63
Pedro van Langendonck Teixeira de Freitas	2016	Chief Financial Officer, Investor Relations and External Affairs Officer	44
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	48
		Executive Officer and Head of People, Communication, Marketing and Sustainable Development	
Marcelo Arantes de Carvalho	2015		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	63

Summarized below is information regarding the business experience, areas of expertise and principal outside business interests of our current executive officers:

*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 our 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 Gas 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
Amós da Silva Cancio	2020
Heloisa Belotti Bedicks	2020
Ivan Silva Duarte (alternate)	2016
Tatiana Macedo Costa Rego Tourinho (alternate)	2018
Herbert Luiz de Araujo Guimarães (alternate)	2020
Rafael Menezes Peres (alternate)	2020
Reginaldo Ferreira Alexandre (alternate)	2020

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 our fiscal council by the shareholder Odebrecht S.A. Mr. Braga is a business consultant in the following areas: financial, capital markets, corporate, tax, expert evidence and support for court-ordered expert. He also is as member of the audit boards, boards of directors and audit committees of publicly held companies and professional associations. He was member of CVM's Investment Fund Accounting Standards Consulting Commission, a professor in the undergraduate and corporate governance graduate programs of the Dom Cabral Foundation, IBMEC, PUC and FGV, a broadcaster at CBN and FM 94 radio stations in Rio de Janeiro and a writer for the newspaper *O Dia*. He holds a B.A. in Economics from UCAM Ipanema and in Accounting from UGF, a graduate degree in Financial Administration from IAG-PUC Rio and a master's degree in Business Administration (Finances and Capital Markets) from IBMEC-Rio. He is a member of the Brazilian Corporate Governance Institute (IBGC).

*Carlos Alberto Rechelo Neto.* Mr. Neto was elected as a member of our fiscal council by the shareholder Petróleo Brasileiro – Petrobras. Mr. Neto joined Petrobras in 2007, starting his career in the risk management of Oil & Energy assets and businesses. As Executive Manager for three years, he led the corporate risk management structuring process at Petrobras S.A and coordinated, as head of the Governance team, the corporate efforts to adjust internal policies and procedures in accordance with Federal Law 13,303/2016, which enabled Petrobras to obtain the highest score in the Governance Highlight certification process of the B3. Currently he is the Chief Financial Officer at Transportadora Brasileira Gasoduto Bolívia Brasil S.A. and Executive Officer at Petrobras Europe Limited (Petrobras' trading company in London). Mr. Rechelo Neto holds a B.Sc. in Engineering, completed a non-degree program in Portfolio Management from Wharton, and received a master's degree in Energy from the University of São Paulo (partially attended at Ecole Nationale Supérieure du Pétrole et des Moteurs – Institut Français du Pétrole), an MBA in Finance from the Federal University of Rio de Janeiro and a FRM certification from GARP.

*Amós da Silva Cancio.* Mr. Cancio was elected a member of our fiscal council by our shareholder Petróleo Brasileiro S.A. – Petrobras. Currently, he is General Accounting Manager of the parent company, subsidiaries and consolidated entities of Petrobras and has previously served as Accounting Planning and Orientations Manager. Mr. Cancio holds a bachelor's degree in accounting from the Fluminense Federal University (UFF), an MBA in economics and financial engineering and a master's degree in production engineering (with major in strategy, management and corporate finances) from the same institution, and a bachelor's degree in oil & gas exploration and production business management from the Brazilian Oil & Gas Institute (IBP). He is also a Certified Public Accountant (CPA) in the United States.

*Heloise Belotti Bedicks.* Ms. Bedicks was elected a member of our fiscal council by our non-controlling shareholders. She is member of the audit committee of Mapfre Group, of the audit board of Boticário Foundation and the non-profit organization Conselho do Portas Abertas no Brasil. She served as General Director of the Brazilian Corporate Governance Institute (IBGC) from April 2001 to January 2020, and as Deputy Chair of the Global Network of Director Institutes – GNDI for two consecutive terms of office until 2019. She served on the board of the Association of Supporters of the Mergers and Acquisition Committee (ACAF) (B3, Anbima and IBGC), on the boards of MAPFRE Seguradora de Garantias e Créditos S.A., on the advisory boards of the Ethical Fund of ABN AMRO Asset Management, and on the Sustainability Studies Centers of the Getúlio Vargas Foundation (FGV) and the Corporate Sustainability Index (ISE) of the B3. She was Director of the International Corporate Governance Network – ICGN and President of the Latin America Corporate Governance Network (IGCLA). She started her career as an auditor at Arthur Andersen in 1983. She was responsible for several IBGC technical missions to the United States, Europe, Asia, Israel and Australia. She served as chairwoman of the boards of Tecelagem de Fitas Progresso and of PH-Fit, both family companies of the Serveng group. Ms. Bedicks holds a bachelor's degree in economics from Unicamp, a bachelor's degree in accounting from PUC Campinas and a master's degree in financial management from Mackenzie Presbyterian University. She also completed non-degree programs in corporate governance at Yale University and in boards of directors at Chicago University.

#### Alternate Members of Fiscal Council

*Ivan Duarte.* Mr. Duarte was elected as an alternate member of our fiscal council by the shareholder Odebrecht S.A. Mr. Duarte is a Director of Kieppe Participações e Administração Ltda. since January 2016, which belongs to the same business group of the issuer and indirectly holds more than 5% of the capital stock. Previously, he served as manager of KPMG - Auditores Independentes from 1995 to 2001, when he started to work as senior manager of PricewaterhouseCoopers Auditores Independentes where he served until 2008. From 2008 to 2015, Mr. Duarte served as director of EAO Empreendimentos Agropecuários e Obras S.A., a company of the Odebrecht Group operating in the Agriculture and Food & Beverage sectors. Mr. Duarte holds a B.Sc. in Accounting Sciences from the University of Salvador (UNIFACS), an MBA in Corporate Finance from the Getúlio Vargas Foundation and an MBA in Entrepreneurship from Babson College (Boston/USA).

*Tatiana Macedo.* Ms. Macedo was elected as an alternate member of our fiscal council by the shareholder Odebrecht S.A. Currently, she serves as the controller of Odebrecht Engineering & Construction (OEC). Previously, she served as a Director of Tax Planning at Construtora Norberto Odebrecht S.A. (CNO). From 2000 to April 2007, she worked in the tax department of VIVO S/A, a company in the telecommunication sector, as Manager of the Tax Planning Department. Previously, she worked for 2 years at Arthur Andersen. Ms. Macedo holds a B.A. in Public and Private Business Administration from the Federal University of Bahia and an MBA in Management from IBMEC.

*Herbert Luiz de Araújo Guimarães.* Mr. Guimarães was elected as an alternate member of our fiscal council by our shareholder Petróleo Brasileiro S.A. – Petrobras. Currently, he is a Coordinator of the Financial and Insurance Analysis Department, having prior experience as the Financial Director of Petrobras Paraguay Distribución Limited (UK) and as a member of the Audit Board of BSBios Indústria e Comércio de Biodiesel Sul Brasil S.A. Mr. Guimarães holds a bachelor's degree in production engineering from Universidade Federal Fluminense (UFF) and an MBA in finance (major in risk management) from the Universidade Federal do Rio de Janeiro (UFRJ).

*Rafael Menezes Peres.* Mr. Peres was elected as an alternate member of our fiscal council by our shareholder Petróleo Brasileiro S.A. – Petrobras. Currently, he serves as Manager in the Tax Assessment for Business area, having prior experience in the Tax Department of Petrobras and as a member of the Audit Board of Termobahia S.A. and of Gasbrasiliano S.A. Mr. Peres holds a bachelor's degree in accounting from Moraes Junior College and a graduate degree from IBMEC.

*Reginaldo Ferreira Alexandre.* Mr. Alexandre was elected as an alternate member of our fiscal council by our minority shareholders. He holds a bachelor's degree in economics and has 18 years of experience in investment research as an analyst, organizer and director of research teams, having held these positions at Citibank, Unibanco, BBA (now Itaú BBA) and Itaú Corretora de Valores. He has also worked as an corporate credit analyst (Citibank) and as a consultant in the strategy (Accenture) and corporate finance (Deloitte) areas. He also worked at ProxyCon Consultoria Empresarial, a company that provides consulting and other services in the areas of capital markets, finance and corporate governance, from 2003 to 2017. He is a member of the Accounting Pronouncements Committee (CPC), the organization that formulates Brazilian accounting standards, since its founding in 2005 and a Vice-Coordinator of Corporate Affairs at CPC. Mr. Peres is a Certified Investment Analyst (CNPI), a securities manager accredited by the CVM, and a fiscal council member certified by IBGC. Mr. Peres has been a board member of Mahle Metal Leve S.A. (elected in June 2007 and re-elected in April 2018 and April 2019). Currently, he is a member of the audit boards of the following publicly traded companies: Cia. de Saneamento do Paraná – Sanepar (elected in April 2017 and re-elected in April 2018); Cia. Energética de Brasília – CEB (elected in April 2019); Rumo S.A. (elected in April 2019); Ser Educacional S.A. (chairman, elected in April 2015 and re-elected in April 2016, 2017 and 2018). Mr. Peres currently is also an alternate member of the boards of the following publicly traded companies: Bradesco S.A. (alternate member of the fiscal council, elected in March 2017 and re-elected in March 2018 and March 2019); CPFL Energia S.A. (alternate member of the fiscal council, elected in April 2017 and re-elected in April 2018 and April 2019). He has also served as a member of the Audit Committee of Paranapanema S.A. (2017) and on the Audit Boards of the following companies: Petrobras S.A. (elected in April 2013 and re-elected in April 2014, 2015, 2016, 2017 and 2018); Iochpe Maxion S.A. (elected in April 2013 and re-elected in April 2014, 2015, 2016 and 2017); BRF S.A. (elected in April 2015 and re-elected in April 2016); Aliansce Shopping Centers S.A. (elected in April 2014 and re-elected in April 2015); Cremer S.A. (chair of the Audit Board; elected in April 2011 and re-elected in April 2012); Movida S.A. (elected in January 2017); Paraná Banco S.A. (elected in April 2011 and re-elected in April 2012, 2013, 2014 and 2015); Tecnisa S.A. (elected in April 2011 and re-elected in April 2012); Tele Norte Celular Participações S.A. (elected in April 2006 and re-elected in April 2007); Unipar Carbocloro S.A. (elected in April 2012 and re-elected in April 2013 and April 2015); Bradespar S.A. (alternate; elected in April 2012); Former Companhia Siderúrgica Belgo-Mineira, today Arcelor Mittal (alternate; elected in April 2004 and re-elected in April 2005); Grendene S.A. (alternate; elected in April 2012 and re-elected in April 2013 and 2014); Indústrias Romi (alternate, elected in April 2015); Graziotin S.A. (alternate; elected in April 2015); SLC Agrícola S.A. (alternate; elected in April 2013 and re-elected in April 2014 and 2015). He is a former president of the Association of Capital Markets Analysts and Investment Professionals (APIMEC), elected for the 2015-2016 term, and a former president of the São Paulo Office of APIMEC, elected for the 2011-2012 term. He was one of the authors of the Brazilian Corporate Governance Code – Listed Companies. He is a member of the State-Owned Company Governance Committee of the B3; a member of the Audit Board of the São Paulo Museum of Modern Art, and a former member of the Mergers & Acquisitions Committee (CAF).

**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](http://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 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 (coordinator) 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 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 and Rogério Bautista da Nova Moreira (coordinator).

#### *Compliance Committee*

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 Pedro Oliva Marcilio de Sousa.

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\$63.3 million in 2019, R\$53.8 million in 2018 and R\$47.6 million in 2017. On May 29, 2020, at our annual general shareholders' meeting, our shareholders established the compensation for our board of directors, our board of executive officers and the members of our fiscal council for the year 2020 of R\$84.2 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 our 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 end of each of the years indicated.

<b>Number of Employees by Geographic Location</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
State of Bahia	1,637	1,692	1,650
State of Rio Grande do Sul	1,537	1,589	1,601
State of São Paulo	1,971	1,978	1,823
State of Alagoas	511	512	508
State of Rio de Janeiro	389	397	408
Other Brazilian states	5	5	6
Brazil	6,050	6,173	5,996
United States	759	754	699
Germany	202	188	173
Mexico	830	812	785
Other countries	99	81	60
<b>Total</b>	<b>7,940</b>	<b>8,008</b>	<b>7,713</b>

We do not employ a material number of temporary employees.

In March 2020, in view of the progression of the novel coronavirus (COVID-19) outbreak, we formed a crisis committee with the aim of establishing global procedures focusing on the health of our team members and the continuity of our operations. We have taken the following measures, among others: (i) recommended that all team members and contractors work remotely; (ii) established a minimum team in industrial areas to ensure safety and operational continuity matters; and (iii) prohibited all national and international business travel, apart from exceptional cases.

#### ***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, 2019, 27.3% 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 (90.6%) 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 2019, we paid R\$49.9 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 2019, we spent R\$101.01 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, 2019, 56 % 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 on May 3, 2023.

#### ***Post-Employment Benefits in the United States***

Braskem America administers a closed defined benefit pension plan that, as of December 31, 2019, had 34 active participants, compared to 38 participants in 2018. Due to the current funding levels of the pension plan, Braskem America was not required to contribute to the plan during the 2019 plan year and, as a consequence, there were no additional cash contributions made in 2019. Additionally, there were no participant contributions in 2019.

We offer a 401(k) savings plan, which, as of December 31, 2019, had total assets of R\$761.9 million (US\$140.4 million), including R\$90.6 million (US\$16.7 million) in participant contributions made in 2019.

*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 64 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 42 active participants 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, 2019, all of the 830 employees of Braskem Idesa were active participants in this government retirement plan. In 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, and by the end of 2019, we had the participation of 362 out of 830 employees.

*Other Benefits in Mexico*

Braskem Idesa offers other benefits, including saving plans, food coupons, meals vouchers, canteen, and life 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 2019 and 2018, we recorded expenses of R\$320.5 million and R\$375.4 million, respectively, related to this program with respect to 7,940 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 May 31, 2020 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 May 31, 2020, all of our authorized shares were issued and outstanding, other than 1,226,559 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 an 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 December 31, 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
Alaska Investimentos Ltda .	—	—	21,734,100	6.3	21,734,100	2.7
All directors, fiscal council members, their alternates and executive officers as a group (35 persons)	—	—	83,518	*	83,518	*

(\*) 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, or the Alliance Agreement, 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\$2.8 million in 2019 and 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. This agreement would have expired on December 31, 2028, but was terminated in May 2019.

The aggregate amount we paid under this agreement was R\$45.1 million in 2019.

#### *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\$22 million in 2019.

#### *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., which was a wholly owned subsidiary of Odebrecht Transport S.A. until August 9, 2019. The agreement has an estimated maximum value of R\$93 million and is valid for 10 years. Services under this agreement amounted to R\$5.6 million in 2019 up until the date on which Odebrecht still owned Liquiport Vila Velha S.A.

#### *Furnaces, Boilers and Tanks Maintenance*

In 2019, we conducted a bid process that selected TENENGE as a non-exclusive provider of maintenance services and efficiency enhancement projects for furnaces, boilers and tanks at each of our industrial plants. Such agreement was unanimously approved by our board of directors in December 2019. Services to be provided under this agreement were contracted through pre-defined maintenance scopes and a list of unit prices per activity. TENENGE's compensation for the execution of the services under the agreement is capped at R\$669.0 million. The agreement became effective in February 2020 and is valid until January 2027.

#### *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\$15.3 million in 2019. 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\$82 million in 2019.

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 2019 was R\$13.4 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 through 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 included an advance of R\$200.0 million, which was 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 Braskem, valid through April 30, 2019. In January 2019, we entered into an amendment to the agreement for the purchase of feedstock for future delivery between January and March 2019. The amendment provided for an advance of R\$100.4 million. As of December 31, 2019, there was no outstanding balance under this agreement.

**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 our 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 had an estimated value of R\$200 million, a 10-year term and expired in September 2019. The aggregate amount we purchased under this contract was R\$42.6 million in 2019.

- 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\$13.6 million in 2019.
- Braskem has handed down a contract from Petrobras and Rio Polímeros S.A. pursuant to which Petrobras will provide water transportation services. This contract is for a term of 30 years and has no global value clause. The aggregate amount of services we purchased under this contract was R\$11 million in 2019.
- Since June 2016, Braskem has had agreements for the sale of gasoline A to BR Distribuidora, which used to be a subsidiary of Petrobras, renewable on a monthly basis. As BR Distribuidora was privatized in July 2019, it is no longer considered a related party. Sales under this agreement amounted to R\$392.9 million in 2019.
- 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 2019 was R\$73.6 million.
- 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 2019 was R\$5.0 million.
- 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 2019 was R\$25.0 million.
- A two-year contract for storage tanks leasing 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 2019 for pipeline leasing was R\$6.4 million and storage tanks leasing was R\$15.8 million, for a total amount of R\$22.2 million.
- On July 3, 2019, Braskem S.A. and CDGN Logística S.A. entered into an agreement for the supply of compressed natural gas for a total period of five years. The aggregate amount throughout the term of the agreement is approximately R\$210.0 million.
- On September 2019, we signed an amendment to our agreement with Gás de Alagoas S.A. (Algás) for the supply of natural gas to Braskem to extend the agreement for two years until December 31, 2021. The aggregate amount throughout the term of the agreement, as amended, is R\$500.0 million.
- In December 2019, we signed an amendment to our natural gas purchase agreement with Companhia de Gás da Bahia (BahiaGás), with a term from January to December 2020 and an additional amount of R\$820.0 million relating to the amendment. The aggregate amount to be paid throughout the term of the agreement, as amended, is approximately R\$1.6 billion.
- Braskem S.A. entered into two agreements with Companhia de Gás do Estado do Rio Grande do Sul (Sulgás) for the supply of natural gas. During 2019, the amount of gas supplied under the agreement was approximately R\$228.7 million.
- Braskem S.A. entered into an agreement with Petrocoque S.A. Indústria e Comércio in 2008 for the supply of steam, which was amended in September 2019 to extend its term until 2020. The aggregate amount throughout the term of the agreement is approximately R\$326.0 million.
- On December 2019, Petrobras and Braskem entered into a settlement agreement (*Termo de Encerramento de Pendências*, or TEP) for the refund by Petrobras to Braskem of overpayments of ICMS tax in the state of São Paulo in the amount of: (i) R\$24.4 million, related to a judgment entered into in connection with the administrative proceeding GDOC 12782-984681/2017; and (ii) R\$26.4 million, related to a judgment entered into in connection with the administrative proceeding GDOC 12782-984681/20.

We purchased raw materials, finished goods services and utilities from Petrobras and its subsidiaries in the aggregate amount of R\$12,795.8 million in 2017, R\$15,540.1 million in 2018 and R\$12,578.2 million in 2019, and sold products to Petrobras and its subsidiaries in the aggregate amount of R\$1,810.8 million in 2017, R\$1,225.4 million in 2018 and R\$665.4 million in 2019.

**Other Related Party Transactions**

***Our Jointly Controlled Company***

*Refinaria de Petróleo Rio-grandense S.A. ("RPR")*

The revenue of gasoil, gasoline and solvents to RPR was approved in 2019 for a total amount of R\$845.0 million per year. The agreement for the sale of gasoil and solvents sets forth that sales prices will be determined on a spot basis. Since March 2016, Braskem has had agreements for the sale of gasoline to RPR, renewable on a monthly basis. In 2019, Braskem provided solvent to RPR in the aggregate amount of approximately R\$36.2 million (gross sales). Additionally, in 2019, Braskem provided an aggregate of R\$146.9 million of gasoline and gasoil to from RPR.

*Fábrica Carioca de Catalisadores S.A. ("FCC")*

On August 1, 2019, Braskem and FCC entered into an agreement for the sale of caustic soda for a period of two years. The aggregate amount throughout the term of the agreement is approximately R\$50.0 million.

***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, R\$242.7 million in 2018 and R\$175.9 million in 2019. We account for Borealis under the equity method of accounting.

Additionally, on March 1, 2018, Braskem and Borealis entered in an agreement for the rendering by Braskem of certain services related to the set up and management of Borealis' energy portfolio. This agreement was subsequently amended on November 1, 2019 to extend it until February 28, 2021. The aggregate amount of the services to be provided under the agreement is R\$230.4 thousand.

***Non-controlling shareholders of Braskem Idesa***

As of December 31, 2019, we had R\$2,395.9 million in outstanding indebtedness relating to a loan payable to the non-controlling shareholder of Braskem Idesa, maturing in December 2029 and accruing interest at 7% p.a., whose proceeds were used by Braskem Idesa to fund its construction project.

***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 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\$672.1 million as of December 31, 2019. 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.

### IR/CSLL Tax Assessment Notices

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 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 and November 2019, two of the claims regarding the tax assessment notices were decided partially in our favor by the Administrative Court, thereby reducing our liabilities by R\$403 million. We believe that a loss of these claims is possible and our external legal counsel expect that the administrative discussions will end in 2022. As of December 31, 2019, we had made no provision with respect to these claims and there is no deposit or guarantee related to them.

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. In April 2019, one of the claims regarding the tax assessment notices was decided in our favor by the Administrative Court, thereby reducing our liabilities by R\$407 million. Despite this favorable decision, the risk of loss is possible and our external legal counsel expect that the administrative discussions will end in 2020, and the judicial discussion will end in 2027. As of December 31, 2019, we had 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 later confirmed by a judicial award 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 aforementioned commissions; and (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 has 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 which only resulted in the decrease of its tax losses; (iii) the net interest paying company is non-resident in Brazil; and (iv) marketing expenses are related to our activities. The amount under discussion is R\$133 million, including interest and fines. We believe that a loss of this claim is possible and our external legal counsel expect that the administrative discussion will end in 2022. As of December 31, 2019, we had made no provision with respect to this claim and there is no deposit or guarantee related to it.

In December 2017, we received a 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\$103 million. We believe that a loss of this claim is possible and our external legal counsel expect that the administrative discussion will end by 2022. As of December 31, 2019, we had 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 income tax and social contribution. The amount under discussion, corresponding to taxes whose compensation was not ratified, is R\$196 million, including interest and fines. We believe that a loss of this claim is possible and our external legal counsel expect the administrative discussion to end by 2024. As of December 31, 2019, we had made no provision with respect to this claim and there is no deposit or guarantee related to it.

In November 2018, we received a tax assessment notice from the Federal Brazilian Revenue Service demanding the payment of income tax on exports made by Braskem Qpar S.A. to Braskem Incorporated Limited, due to resale of goods abroad. According to the Federal Brazilian Revenue Service, Braskem Incorporated Limited omitted revenue when making resales abroad for an amount greater than that recorded. This supposedly omitted revenue was attributed directly to Braskem, as successor of Braskem Qpar. Based on this premise, the inspection department issued a second tax assessment notice to impose a fine. As of December 31, 2019, the aggregate amount of these tax assessment notices was approximately R\$75.0 million. We believe that a loss of this claim is possible and our external legal counsel expect that the case will be resolved by 2023. There are no deposits or guarantees related to these assessments.

*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 and (ii) the advances for future capital increases made by Quattor Participações S/A and Quattor Química S/A. The amount claimed is R\$167 million. We believe that these operations do not constitute loans under Brazilian legislation and, as such, are not subject to IOF. We believe that a loss in this claim is possible and our external legal counsel expect that the judicial discussion will end in 2024. We presented a guarantee for the debt under judicial litigation in the amount of R\$59 million.

*ICMS Tax Assessment Notice*

From 1999 to 2019, the internal revenue department of the States of Bahia, Alagoas, Pernambuco, 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\$740 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 administrative cases are expected to be resolved by 2025 and the judicial cases by 2030. If an unfavorable decision is rendered against us, it is expected that the debts would be paid at 50% of the current value, based on the favorable precedents at judicial and administrative levels. A guarantee was offered in the amount of R\$148 million for the debts under discussion in the judiciary. We believe that a loss of these claims is possible and, as of December 31, 2019, we had 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 credits informed in invoices issued by Proquiigel Química S.A.; and (iii) in the amount of R\$3.1 million from August 2004 to November 2005, related to credits informed in invoices issued by Proquiigel Química S.A. for export, not subject to ICMS;
- (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; and
- (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, and the remaining debt is under discussion in the judiciary. Due to favorable decisions, 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, 2019, we had established related provisions in the amount of R\$297.5 million. We offered a guarantee to the debts and our external legal counsel expect the cases to be resolved by 2025.

*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; (4) credits claimed at inappropriate times, relating to various acquisitions; and (5) fixed assets. As of December 31, 2019, the amount in dispute in connection with these claims was R\$1.2 billion. 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 of these claims is possible and our external legal counsel expect that the administrative discussions will end in 2024 and the judicial discussion will end in 2030. We presented a guarantee for the debt under judicial discussion in the amount of R\$30 million.

The Federal Brazilian Revenue Service did not recognize the compensation of PIS and COFINS credits for the following reasons:

- the amount of the credits informed in the compensation files were greater than the amount informed in the PIS and COFINS declaration (DACON);
- freight expenses not linked to sales operations or without a proven connection, link to the national territory, but related to imported products;
- credits relating to the acquisition of fixed assets from incorporated companies whose documentation was not found; and
- taxation of taxable revenues erroneously classified as exempt, at zero rate or not taxed.

A loss of this claim is likely and our external legal counsel expects that the administrative discussion will end in 2022. As of December 31, 2019, we had established related provisions in the amount of R\$193.1 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 Nos. 2,445 and 2,449; (3) undue compensation of PIS and COFINS debts with PIS credits (Decree-Law Nos. 2,445 and 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. 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 of these claims is possible and our external legal counsel expect the cases to be resolved by 2023. As of December 31, 2019, we had established related provisions in the amount of R\$63.3 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, and fines exoneration afforded in installments of the MP No.470/09 are taxable. 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. In November 2018 and August 2019, two of the claims regarding the tax assessment notices were decided in our favor by the Administrative Court. As of December 31, 2019, the amount of PIS and COFINS claimed was R\$883 million. We believe that a loss of this claim is possible and our external legal counsel expect that the administrative discussion will end in 2020. There are 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-Law Nos. 2,445 and 2,449); and (5) COFINS. The proceedings are also related to debts of COFINS levied on interest calculated on equity. As of December 31, 2019, the amount in material disputes relating to PIS and COFINS was R\$148 million. We offered guarantee in the amount of the judicial litigation. We believe that a loss of this claim is possible and our external legal counsel expect that the judicial discussion will end in 2024. As of December 31, 2019, we had not recognized any provision with respect to these proceedings.

We are involved in lawsuits related to the payment of PIS and COFINS offsetting with Cide-Combustíveis credits, as authorized by Law No. 10,336/2001. As of December 31, 2019, the aggregate amount of these cases was R\$144 million. We believe that a loss of this claim is possible and our external legal counsel expect that the discussion will end in 2030. We constituted a guarantee in the amount under discussion.

#### *Isolated Fine Tax Assessment Notices*

From 2016 to 2019, we received tax assessment notices from the federal internal revenue department imposing isolated fines due to the use of credits of: (i) non-cumulative PIS/COFINS; (ii) negative Balance of IRPJ/CSLL; (iii) REINTEGRA and (iv) other credits, offset and not homologated. As of December 31, 2019, the amount claimed was R\$289 million. We believe that a loss of these claims is possible and our external legal counsel believe that the administrative proceedings will end in 2024. 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 to the contracting of two separate companies, one to supply the parts and technology and the other 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 import duty to be paid. The administrative proceeding was closed in 2019 and currently the debt is under discussion in the judiciary. As of December 31, 2019, the amount claimed was R\$82 million. We believe that a loss of this claim is possible and our external legal counsel expect the case to be resolved by 2030. We offered a guarantee in the amount of the judicial litigation.

#### *SUDENE – Income Tax Reduction*

Since 2015, we have obtained favorable decisions in administrative proceedings and 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 2019, 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 2019, the amount was R\$67.8 million (R\$81.9 million in 2018). As PRODESIN is considered an investment subsidy, it was allocated to 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 2019 at US\$31.5 billion. By 2019, 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%.

#### *Social Security Contributions – Withholding of 11%*

We received a tax assessment from the Brazilian 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\$53 million as of December 31, 2019.

Our external legal counsel, in view of prior decisions by the Administrative Council of Tax Appeals (CARF) and the evidence provided by us, consider the chances of loss at the administrative level as possible. Our external legal counsel expect that the administrative proceeding will be resolved in 2020. There are no deposits or any other type of guarantee for such procedures, since they are still being discussed at the administrative level.

#### *Social Security Contributions – Harmful Agents*

We are involved in several judicial and administrative proceedings related to the payment of social security contributions in which the following issues are discussed: (i) the collection through tax assessments of the additional Workplace Accident Risk ("RAT") for the costing of special retirement, due to the alleged exposure of workers to harmful agents, in addition to a fine for non-disclosure of this information in GFIP (in the period from April 1999 to February 2006); and (ii) the requirement, in terms of tax enforcement, of additional RAT (in the period from November 2000 to January 2001, and from November 2001 to June 2002). The aggregate amount of these claims, as of December 31, 2019, was approximately R\$47 million. Our external legal counsel expect that the discussions at the administrative level will be concluded in 2021 and in 2027 at the judicial level. There is no deposit or other type of guarantee for the proceedings that are still under administrative discussion and the only one that is under judicial discussion is guaranteed by bond in the amount of R\$3.7 million.

## 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 ADSs 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 Controllorship (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\$2.3 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;
- CHF16.1 million (R\$58 million) to the OAG, on June 27, 2019; and
- R\$278 million on January 30, 2020 with respect to the leniency agreements with MPF and CGU/AGU.

The outstanding amount of R\$1.5 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\$900 million 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 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 were required to cooperate with these governmental authorities and improve our governance and anti-corruption compliance practices. We were also subject to external monitorship for a period of three years from 2017, which ended in March 2020, during which time the monitor assessed 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 could be terminated early or extended for up to one year at the authorities' discretion depending on our compliance with the Global Settlement.

On May 13, 2020, the MPF, the DoJ and the SEC confirmed the conclusion of the independent compliance monitorship at Braskem, which had been established in the settlement agreements entered into by Braskem, the DoJ and the SEC on December 21, 2016. The decision of the DoJ and the SEC was based on a final report from the independent monitors, who certified that the Company implemented all of the recommendations regarding the structure and execution of its compliance program and concluded that the Company meets the standards set out in the settlement agreements entered into with the DoJ and the SEC. Following the end of the independent monitorship period and the certification by the MPF, the DoJ and the SEC, the Company has complied with its obligations established in the settlement agreements entered into with these authorities and has successfully concluded the three-year monitorship.

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

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 Braskem S.A. has breached the Plea Agreement and to determine the consequences of such breach. Currently, based on the advice of our counsel, we believe that it is unlikely that it will incur in losses as a result of this matter.

***Labor Proceedings***

***Employment and Occupational Health and Safety Proceedings***

We have provisioned R\$315.4 million, as of December 31, 2019, with respect to employment and occupational health and safety proceedings, relating to 604 labor proceedings, including cases of occupational health and safety (in 2018, there were 477 proceedings). Our external legal counsel estimate that the time for completion of each of such proceedings in Brazil is more than five 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, 2019, we were involved in several social security proceedings in connection with which the aggregate amount claimed was R\$941.2 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, 2019, totaled R\$65.8 million. The claimants seek indemnity for damages related to the alleged non-performance of the distribution agreement. Our management's evaluation, supported by the opinion of external legal counsel, is that the lawsuits will possibly be dismissed within an eight-year period as of December 2019. 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\$61.2 million, as of December 31, 2019. 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 the defendant in a civil lawsuit filed by a former reseller of solvents, claiming alleged breach of a distribution agreement. As of December 31, 2019, the damages claimed in the lawsuit amounted to R\$204.6 million. Based on the opinion of external legal counsel, our management believes that the lawsuit has a possible risk of loss. As a result, no provision has been made by us. No judicial deposit or other form of guarantee was constituted for this lawsuit.

***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, 2019, the amount involved in this proceeding was R\$75.6 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 eight 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 a higher court. Currently, there is a special appeal that was filed by the customer pending before the Superior Court of Justice (STJ). As of December 31, 2019, the amount in dispute was R\$144 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 three years. No judicial deposit or other form of guarantee was constituted for this lawsuit.

***Corporate Related Proceedings***

As of December 31, 2019, 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 are also 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 2019, Braskem established a provision of R\$64.3 million for this lawsuit 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 opinion of our external legal counsel, as of December 31, 2019, On December 31, 2019, we constituted a provision of R\$64.3 million.

***Reverse Logistic System***

Braskem is directly or indirectly (through industry associations) involved in public civil actions and proceedings currently pending before the municipality of São Paulo, the municipality of Porto Alegre, and 27 municipalities in the state of Mato Grosso do Sul and the state of Paraná 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 R14.5 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\$0.52 million). According to the opinion of our external legal counsel, 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.

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 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 according to 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 the states of Alagoas and Bahia, in Brazil; and (iii) sea salt to supply the Chlorine Soda plant in the state of Bahia. We have continuously cooperated with relevant authorities and the local community.

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). On January 15, 2020, the trial court denied the injunctive relief requests.

On November 14, 2019 we issued a material fact in which we informed the market that we submitted to the Brazilian National Mining Agency (*Agência Nacional de Mineração*, or ANM) a plan with measures to permanently end salt extraction activities in Maceió and close all of its wells. We proposed to the ANM the creation of a protection area around certain wells, which will involve resettling people, vacating properties and taking certain additional monitoring measures. These measures are based on a study conducted by the Institute of Geomechanics of Leipzig (IFG), Germany, which is a global reference in geomechanics of salt wells, and is expected to be implemented in coordination with Brazilian civil defense and other authorities. Our preliminary estimates, which still need to be confirmed with relevant authorities, indicate that the protection area will cover an area of approximately 400 properties and 1,500 people. For certain other wells, the recommendation is that additional monitoring measures be taken, without the need to vacate properties and resettle residents. The proposed measures are related to the permanent termination of salt extraction activities at our salt mine in Alagoas and the closure of its wells. With regard to the geological incident that occurred in Maceió, Braskem will continue to cooperate with authorities, and count on the support of independent experts, to identify the causes of the incident and to implement all other necessary actions.

On January 3, 2020, we entered into an agreement with the Alagoas State Public Defender's Office (*Defensoria Pública do Estado de Alagoas*), the Federal Prosecutor's Office (*Ministério Público Federal*), the State of Alagoas Prosecutor's Office (*Ministério Público do Estado de Alagoas*) and the Federal Public Defender's Office (*Defensoria Pública da União*) to support the relocation of, and indemnification to, residents in the areas at risk located in the districts of Mutange, Bom Parto, Pinheiro and Bebedouro in the city of Maceió, in the state of Alagoas, as set forth in the agreement, which was ratified by the Federal Judge of the 3<sup>rd</sup> District Court in the state of Alagoas. We estimate that the support for relocation set forth in the agreement and in surrounding areas will involve approximately 17,000 people. We also estimate that the following amounts will be provisioned in connection with the agreement: (i) R\$1.7 billion for the implementation of the Financial Compensation and Support for Relocation Program; and (ii) R\$1.0 billion for the actions required to close certain salt wells previously operated by us. The provisions will be disbursed in the coming years and may be changed based on new developments.

Based on such agreement, the plaintiffs agreed to: (i) release the amount of R\$3.7 billion that had been frozen, of which R\$1.7 billion is to be transferred to a bank account of Braskem specifically for funding a financial compensation and relocation program, which must maintain at minimum balance of R\$100 million, subject to audit by an external auditor; and (ii) substitute the surety bonds that had been presented by Braskem in the approximate aggregate amount of R\$6.4 billion for two new surety bonds in the approximate aggregate amount of R\$3.0 billion to guarantee the public interest civil lawsuit filed by 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*) and the public interest civil lawsuit filed by the Federal Prosecutor's Office (*Ministério Público Federal*). Of the amount of R\$3.7 billion, which has been fully reimbursed to the Company, R\$1.7 billion was transferred to a bank account controlled by Braskem specifically for funding the financial compensation and relocation program, as set forth in the agreement described below.

On February 14, 2020, we entered into an agreement with the Labor Prosecutors' Office in the state of Alagoas (*Ministério Público do Trabalho do Estado de Alagoas*) to end the civil lawsuit filed against the Company in July 2019, with the commitment to invest R\$40.0 million to implement a Business Recovery and Promotion of Educational Activities Program for residents and workers in the districts of Mutange, Bom Parto, Pinheiro and Bebedouro in Maceió, in the state of Alagoas. Such program consists in constructing day care centers and schools, implementing vocational training programs and providing support to the Civil Defense authorities in hiring qualified personnel for continuing the process of monitoring the areas at risk in these districts. As per the settlement, the Labor Prosecution Office agreed to withdraw the public-interest civil action and the request to freeze funds made in said action, as per the notices to the market disclosed by the Company on July 25 and October 10, 2019.

Braskem is still cooperating with authorities to identify the causes of the geological event in Maceió and necessary measures to deal with the problem with the support of independent experts. The Company is also committed to fulfilling all of its obligations under the agreements it has signed and to a continuous dialogue with the authorities and the community in order to support measures that may guarantee the safety and well-being of those involved in the event.

## 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, 2017 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
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	—
2018	December 30, 2019	0.84	0.84	0.61	0.21	0.21	0.15

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 32 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, 2019, 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 of December 31, 2019, there were 16,992,383 ADSs outstanding, representing 33,984,766 class A preferred shares, or 4.3% 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 our 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 and under our by-laws, 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 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, in excess of the amount of our authorized capital;
- 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. Companies that have issued ADSs with voting rights must publish the notice of a shareholders' meeting to resolve on matters with regard to which ADS holders have voting rights at least 30 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, by means of a decision made at our shareholders' meeting, 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 book 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 a 4,373 Holder, 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.

**Depository 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 depository 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 in 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) where its legislation does 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 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 class A preferred 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 class A preferred 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 a 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 depositary 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 and the non-resident holder 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 Article 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 Instruction 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 taxes 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.

*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 cancelation 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 Equity and Debt Securities.”

***U.S. Federal Income Tax Considerations***

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 ADSs. 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.

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 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 receipts or shares and the issuer, may be taking actions that are inconsistent with the claiming of U.S. foreign tax credits by U.S. persons that hold 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 be reported as qualifying for the reduced rates of taxation, a public SEC filing must contain a statement that the preferred shares will be, should be, or more likely than not will be treated as equity rather than debt for U.S. federal income tax purposes. We have included the appropriate statement in this filing. 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 U.S. source 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. Subject to the discussion under "—Passive Foreign Investment Company Rules," 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 in an amount equal to the difference between the U.S. holder's adjusted basis in the 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 class A preferred share or ADS, 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, exchange or other disposition 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 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 to a U.S. holder that purchases such shares for non-U.S. currency is the U.S. dollar value of the purchase price determined on the date of purchase. If our class A preferred shares 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 U.S. dollar value of the cost of any such class A preferred shares 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 non-U.S. currency and the immediate use of that currency to purchase class A preferred shares generally will not result in taxable gain or loss for a U.S. holder.

With respect to the sale, exchange or other disposition of class A preferred shares for non-U.S. currency, 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 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 U.S. dollar value of the payment received on the sale, exchange or other disposition of any such class A preferred shares by translating the amount received at the spot rate of exchange on the settlement date of the sale, exchange or other disposition.

*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 are 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, 2019. Our Company’s status in future years will depend on its income, assets and activities in those years. Our Company has no reason to believe that its income, 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, 2020 or any future year, but there can be no assurance that our 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 other disposition of, and certain distributions with respect to, the class A preferred shares or ADSs. In addition, non-corporate U.S. holders will not be eligible for reduced tax rates on any dividends received from our Company (as described above) if we are a PFIC in the taxable year in which such dividends are paid or in the preceding taxable year.

If we were a PFIC, a U.S. holder of class A preferred shares or ADSs may be able to make one of certain elections that may alleviate certain of the tax consequences referred to above. However, it is expected that the conditions necessary for making one 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 our 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 U.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 advisors 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 other disposition of, our class A preferred shares or the ADSs 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 other disposition of, our 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 currently 24%.

Backup withholding is not an additional tax. Holders generally will be entitled to a credit for 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 U.S. Internal Revenue Service in a timely manner.

The above description 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 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](http://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, 2<sup>nd</sup> floor, Rio de Janeiro, RJ, and Rua Cincinato Braga, 340, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> 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 – 24º 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](http://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, 2019, we had currency options with an aggregate notional amount of US\$1,928.8 million in puts and US\$1,402.8 million in calls. In addition, we had an interest rate swap related to Project Ethylene XXI with an aggregate notional amount of US\$703.7 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 updated in July 2019, 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 our 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, 2019 we had R\$4,722.8 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 4.40% per annum as of December 31, 2019, from 6.40% per annum as of December 31, 2018 and 6.89% per annum as of December 31, 2017; and
- the TLP decreased to 5.09% per annum as of December 31, 2019, from 7.06% per annum as of December 31, 2018 and 7.0% per annum as of December 31, 2017.
- the IPCA recorded in 2019 was 4.31%, increasing from 3.75% in 2018 and 2.95% in 2017.

The table below provides information about our significant interest-rate sensitive instruments:

	Expected Maturity Date as of December 31, 2019						Total	Fair Value <sup>(1)</sup>	
	2020	2021	2022	2023	2024	Thereafter			
	<i>(in millions of reais, unless otherwise indicated)</i>								
<b>Liabilities:</b>									
<b>Loans and financings (excluding debentures):</b>									
Fixed rate, denominated in U.S. dollars	417.1	—	1,165.9	833.9	3,426.1	19,145.8	24,988.9	25,714.8	
Average interest rate	5.8%	—	5.4%	3.5%	6.1%	5.4%	—	—	
Variable rate, denominated in U.S. dollars	332.8	368.9	369.5	370.2	370.9	1,349.4	3,161.8	2,894.5	
Average interest rate (over LIBOR)	0.8%	0.7%	0.7%	0.7%	0.7%	0.8%	—	—	
Ethylene XXI Project finance fixed rate, denominated in U.S. dollars	279.7	287.0	210.3	308.3	324.0	1,048.9	2,458.2	2,265.7	
Average interest rate	4.9%	4.8%	4.8%	4.8%	4.8%	4.7%	—	—	
Bond of Braskem Idesa (denominated in U.S. dollars)	21.0	—	—	—	—	3,619.4	3,640.4	3,870.5	
Average interest rate	7.5%	—	—	—	—	7.5%	—	—	
Ethylene XXI Project finance variable rate, denominated in U.S. dollars	485.2	553.8	527.3	621.2	689.5	1,350.6	4,227.5	3,928.2	
Average interest rate..	3.5%	3.5%	3.4%	3.5%	3.5%	3.7%	—	—	
Fixed rate, denominated in reais	59.5	26.2	20.8	12.4	5.0	7.3	131.2	121.8	
Average interest rate	4.6%	4.1%	4.0%	4.6%	6.5%	6.5%	—	—	
Variable rate, denominated in reais	46.5	42.7	45.8	246.8	640.8	9.4	1,032.0	867.9	
Average interest rate (CDI)	4.7%	4.7%	4.7%	4.5%	4.4%	5.6%	—	—	
Variable rate, denominated in reais	0.2	0.1	—	—	—	—	0.3	0.3	
Average interest rate (over TJLP)	6.0%	6.0%	—	—	—	—	—	—	
Variable rate, denominated in reais	39.1	65.1	67.4	67.4	67.4	173.3	479.7	397.6	
Average interest rate (over IPCA)	5.9%	6.0%	6.0%	6.0%	6.0%	6.0%	—	—	
<b>Total loans and financings</b>	<b>1,681.3</b>	<b>1,343.7</b>	<b>2,407.0</b>	<b>2,460.1</b>	<b>5,523.7</b>	<b>26,704.1</b>	<b>40,119.9</b>	<b>40,061.2</b>	
<b>Assets:</b>									
<b>Cash and cash equivalents and other instruments:</b>									
Fixed rate, denominated in foreign currency	4,722.8	—	—	—	—	—	4,722.8	4,722.8	
Variable rate, denominated in reais	3,745.3	—	—	—	—	—	3,745.3	3,745.3	
<b>Total cash and cash equivalents and other investments</b>	<b>8,468.1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>8,468.1</b>	<b>8,468.1</b>	

(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, 2019.

In the event that the average interest rate applicable to our financial assets and debt in 2020 are one percentage point higher than the average interest rate in 2019, our financial income would increase by R\$84.7 million and our financial expenses would increase by R\$401.2 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:

	Expected Maturity Date as of December 31, 2019						Total	Fair Value <sup>(1)</sup>
	2020	2021	2022	2023	2024	Thereafter		
	<i>(in millions of reais)</i>							
<b>Liabilities:</b>								
<b>Loans, financings and trade payables:</b>								
Loans and financings denominated in U.S. dollars	1,535.8	1,209.6	2,273.1	2,133.6	4,810.5	26,514.1	38,476.7	38,673.7
Accounts payable denominated in U.S. dollars	6,946.8	—	—	—	—	—	6,946.8	6,946.8
<b>Total loans, financings and trade payables</b>	<b>8,482.7</b>	<b>1,209.6</b>	<b>2,273.1</b>	<b>2,133.6</b>	<b>4,810.5</b>	<b>26,514.1</b>	<b>45,423.6</b>	<b>45,620.6</b>
<b>Assets:</b>								
Cash and cash equivalents and other investments denominated in foreign currency	4,722.8	—	—	—	—	—	4,722.8	4,722.8
<b>Total cash and cash equivalents and other investments</b>	<b>4,722.8</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>4,722.8</b>	<b>4,722.8</b>
<b>Hedge Accounting:</b>								
Hedge Accounting designated Exports/Sales	3,643.7	2,196.3	738.8	1,737.1	3,791.8	27,196.7	39,304.4	39,304.4

(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, 2019.

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, 2019 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\$38,476.7 million (US\$9,545.9 million) and R\$35,102.8 million (US\$9,059.3 million) as of December 31, 2019. 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 2019 as compared to the *real*/U.S. dollar exchange rate as of December 31, 2019, our financial expenses indexed to the dollar in 2020 would have increased by R\$3,847.7 million, and our financial income would have increased by R\$472.3 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, 2019, we did not receive any amount from the depository of our ADSs.

**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, 2019. 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, 2019, 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. Projections of any evaluation of the effectiveness of internal control to future periods are also 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, 2019 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, 2019, 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 insufficient resources with an appropriate level of knowledge, training, expertise and skills commensurate with our financial reporting requirements. This resulted in a material weakness in our risk assessment as we did not effectively design and perform 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 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 certain ancillary 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, in particular the completeness and accuracy of information from such systems, also being considered ineffective because they could have been adversely impacted. In addition, there were ineffective controls over reports from our ERP system and lack of controls over spreadsheets used in the operation of certain controls.
- (ii) Ineffective design and operation of controls within the financial reporting process including consolidation, analysis of complex and unusual transactions, review of manual journal entries, and the preparation and review of the financial statements, including the technical application of generally accepted accounting principles and applicability of required disclosures;
- (iii) Ineffective operation of controls over legal contingencies related primarily to completeness of the legal contingences assessment;
- (iv) Ineffective operation of controls over the purchase of and payment for certain legal services.
- (v) Ineffective controls over the quantity of product shipped for sales transactions.

Material weaknesses (ii) resulted in a material misstatement to the consolidated financial statements that was corrected. The other material weaknesses did not result in material misstatement, in the consolidated financial statements.

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, 2019, which is included in this annual report.

#### **Remediation Actions Addressing Material Weaknesses Reported in 2019**

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 resources with the appropriate knowledge and training needed to account for specific transactions and assess risk associated with financial reporting, and that the individuals involved in our risk assessment have the time and skills to perform adequate risk evaluation over the financial statements. Additionally, as further described below we are focused on ensuring controls are effectively designed and operating to completely mitigate the risks associated with our financial statements by addressing all components and principles of internal control framework over financial reporting.

The following specific actions are being implemented and monitored:

- (i) *Ineffective design and operation of GITCs over certain ancillary IT operating systems and completeness and accuracy of ERP reports:*
  - Review of internal procedures for users with generic and privileged accesses and redesign controls to monitor these users;
  - Improvement on the controls over (a) approval of access, (b) changes to applications made by users with privileged access, (c) access management protocols (granting, changing or revoking access), (d) physical data environment and data management (backup and restore), (d) physical access to the infrastructure, (e) monitoring of automated routines (job schedule); and
  - Implementation and improvement of parameters for change management, including segregation of duties (development and quality environments);
  - Implementation of controls over completeness and accuracy of ERP reports in order to ensure the completeness and accuracy.
- (ii) *Ineffective design and operation of controls within the financial reporting process:*
  - Improvements on controls related to preparing financial statements and review of checklist on disclosures required in the financial statements;
  - Hiring of new specialized team members for the Corporate Accounting department.
  - Review of controls over significant unusual transactions and supporting documentation; and
  - Improvement of communication by the Corporate Accounting with the other (business) departments.
  - Assessment of the current manual journal entries process and implementation of appropriate measures to ensure the controls effectiveness.

- (iii) *Ineffective operation of legal contingencies controls:*
  - Review of legal contingencies and the information included in the litigation database;
  - Review by the Company's Legal Team of information provided by the external law firms.
- (iv) *Ineffective operation of controls over the purchase of and payment for legal services:*
  - Review of the contracting of external legal services process, ensuring the effectiveness of controls performed by Legal department;
  - Implementation of new process for contracting carried out without the involvement of the proper team, requiring an approval by the Legal Vice President;
  - Training of Legal team members on the procedure for contracting external legal services.
- (v) *Ineffective controls over the quantity of products shipped:*
  - Assessment of the current sales process and implementation of adequate measures to ensure the controls effectiveness.

#### **Remediation Actions Addressing Material Weaknesses Reported in 2018**

We have implemented improved procedures and control activities, which allowed us to remediate certain material weaknesses described in our 2018 annual report on Form 20-F.

Regarding the material weaknesses related to our control environment and risk assessment, we have implemented several actions to address the complete mitigation of risks associated with our financial statements, however we believe we will be able fully cover all the components and principles of internal control framework over financial reporting only during 2020.

##### *Ineffective design and operation of GITCs:*

Braskem has performed several actions related to improvement in the general information technology controls environment. These efforts were able to ensure the remediation of a material weakness regarding GITCs for our ERP system, however some controls applicable to other ancillary systems were not fully remediated in 2019, and Braskem is committed to remediating these controls in 2020.

##### *Ineffective design and operation of controls within the financial reporting process:*

Our Accounting department has reviewed the financial reporting process and implemented new controls in 2019, however Management understands additional actions should be taken in 2020, in order to improve the effectiveness of financial reporting process.

##### *Ineffective operation of controls over the provision for legal contingencies:*

In 2019, our Legal department has reviewed the legal contingencies process and significantly improved the controls, including the reconciliation of litigation process analysis and the general ledger, the controls implemented by Legal department were also able to ensure the completeness and accuracy of contingencies, and the communication between our Legal and Accounting departments has improved. However, evidences of controls operation was not captured and evaluated, as part of the performance of controls, the Company will further enhance the controls in 2020.

##### *Ineffective operation of controls over the purchase of and payment for legal services:*

Our Legal department has designed controls over the purchase of and payment for legal services in 2019 and is committed on enhancing the effectiveness of these controls in 2020, in order to fully mitigate the existing process risks.

##### *Ineffective design of controls over the purchase of raw materials:*

In 2019, the Feedstock department implemented new controls related to oversight of purchases and payment of raw materials. This controls were able to ensure the raw material received from suppliers were adequate, in terms of quantity and quality. These efforts were able to ensure the remediation of the material weakness.

#### **Changes in Internal Control over Financial Reporting**

Other than certain of the changes and certain of the remediation activities described above, there were no changes to internal control over financial reporting during the year ended December 31, 2019 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](http://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 firm KPMG Auditores Independentes during the fiscal years ended December 31, 2019 and December 31, 2018.

	Year Ended December 31,	
	2019	2018
	<i>(in millions of reais)</i>	
Audit fees <sup>(1)</sup>	12.7	11.9
Audit-related fees <sup>(2)</sup>	2.1	0.0
Tax fees <sup>(3)</sup>	1.9	1.9
All other fees	0.2	0.0
Total fees	16.9	13.8

(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) Audit-related fees refer to services provided in connection with prior debt offerings.

(3) 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**

	<u>Total Number of Shares Purchased</u>	<u>Average Price Paid per Share</u>	<u>Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs</u>	<u>Maximum Number of Shares that May Yet be Purchased Under the Plans or Programs</u>
<b>Period:</b>				
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**

Not applicable.

**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 one-third of the members of Braskem's board of directors can be elected to management positions. With the exception of the CEO of the Company, currently all of Braskem's directors are non-management directors. The non-management directors are not expressly empowered to serve as a check on Braskem's management, and there is no legal requirement that those directors meet regularly without management.

### ***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. On March 21, 2018, our shareholders approved our Long Term Incentive Plan, which is an equity incentive compensation plan that provides the yearly opportunity for certain members of our Company, selected by the Board of Directors, to voluntarily adhere to the plan by acquisition of our 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](http://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

Independent Auditor's Reports on the Financial Statements	F-1
Consolidated Statement of Financial Position as of December 31, 2019, 2018 and 2017	F-7
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Consolidated Statement of Comprehensive Income as of December 31, 2019, 2018 and 2017	F-10
Consolidated Statement of Changes in Equity as of December 31, 2019, 2018 and 2017	F-11
Consolidated Statement of Cash Flows as of December 31, 2019, 2018 and 2017	F-13
Notes to the Consolidated Financial Statements	F-14

(b) List of Exhibits

Exhibit Number	Exhibit
<a href="#">1.01</a>	<a href="#">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).</a>
<a href="#">2.01</a>	<a href="#">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).</a>
<a href="#">2.02</a>	<a href="#">Description of Securities.</a>
<a href="#">3.01</a>	<a href="#">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).</a>
<a href="#">4.03</a>	<a href="#">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).</a>
<a href="#">4.04</a>	<a href="#">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).</a>
<a href="#">8.01</a>	<a href="#">List of subsidiaries (incorporated by reference to note 2.1.1 to our audited consolidated financial statements included elsewhere in this annual report).</a>
<a href="#">11.01</a>	<a href="#">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).</a>
<a href="#">12.01</a>	<a href="#">Certification of Principal Executive Officer dated June 12, 2020 pursuant to Exchange Act Rules 13a-15(e) and 15d-15(e).</a>
<a href="#">12.02</a>	<a href="#">Certification of Principal Financial Officer dated June 12, 2020 pursuant to Rules 13a-15(e) and 15d-15(e).</a>
<a href="#">13.01</a>	<a href="#">Certifications of Principal Executive Officer and Principal Financial Officer dated June 12, 2020 pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</a>
<a href="#">99.01</a>	<a href="#">Disclosure of Mine Safety and Health Administration Safety Data.</a>

**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.

Date: June 12, 2020

BRASKEM S.A.

By: /s/ Roberto Lopes Pontes Simões  
Name: Roberto Lopes Pontes Simões  
Title: Chief Executive Officer

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**Braskem S.A.**  
**Consolidated financial statements**  
**at December 31, 2019**  
**and Independent Auditors' Report**

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## 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, 2019, 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, 2019, 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, 2019 and 2018, the related consolidated statements of profit and loss, comprehensive income, changes in equity, and cash flows for each of the years in the two-year period ended December 31, 2019, and the related notes (collectively, the *consolidated* financial statements), and our report dated June 12, 2020 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 resulting in 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, as well as the completeness and accuracy of reports used by the Company, which resulted in business process controls that are dependent on the affected GITCs also being considered ineffective because they could have been adversely impacted; (ii) controls within the financial reporting process including consolidation, the analysis of complex and unusual transactions, review of manual journal entries and the preparation of and review financial statements, including the technical application of generally accepted accounting principles and applicability of required disclosures; (iii) controls over the provision for legal contingencies, (iv) controls over the purchase of and payment for legal services and (v) controls over the quantity of product shipped for sales transactions. These material weaknesses were considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2019 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 appearing under Item 15 of the Company's Annual Report on Form 20-F. 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  
June 12, 2020

# 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, 2019 and 2018, the related consolidated statements of profit or loss, comprehensive income, changes in equity, and cash flows for each of the years in the two-year period ended December 31, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2019, 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, 2019, 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 June 12, 2020, 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 lease arrangements as of January 1, 2019 due to the adoption of IFRS 16 "Leases".

## *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 audits 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 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 provides a reasonable basis for our opinion.

### *Critical Audit Matters*

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

#### *Evaluation of impairment of cash generating units that contain goodwill*

As discussed in notes 3.2.3 and 13 (a) to the consolidated financial statements, the balance of goodwill was R\$ 2,058,873 thousand as of December 31, 2019. To evaluate the impairment of goodwill, the Company identifies its cash generating units ("CGU"), estimates the recoverable amount of each CGU, and compares this with its carrying value. The estimate of the recoverable value of the CGUs requires significant judgment on the part of the Company to make certain assumptions including those related to: the discount rate; the growth rates for the next 10 years; the inflation rate, which is used for cash flows to perpetuity; and, where the recoverable value is based on fair value less costs of disposal, future capital expenditure and its associated impact on costs.

We identified the evaluation of impairment of CGUs that contain goodwill as a critical audit matter. The assessment of certain assumptions used in the estimates of recoverable values, specifically the discount rate, the growth rates for the next 10 years, the inflation rate and future capital expenditure, including its associated impact on costs, was complex and involved a high degree of subjectivity which required the application of greater auditor judgment.

The primary procedures we performed to address this critical audit matter included the following:

- We tested certain internal controls over the Company's goodwill impairment assessment process, including the Company's review of the calculation of the recoverable value for each CGU and the underlying assumptions, such as the discount rate, the growth rate for the next 10 years and the inflation rate.

- We involved corporate finance professionals with specialized skills and knowledge, who assisted in:

- evaluating the discount rate used by the Company by comparing to a discount rate developed using an independent methodology;
- evaluating the growth rates for the next 10 years used by the Company by comparing to historic growth rates and market projections;
- evaluating the inflation rate used by the Company by comparing with market information;
- evaluating the future capital expenditure and its associated impact on costs by comparing to historic information; and
- performing sensitivity analyses on the interest rate and discount rate to assess their impact on the estimation of the recoverable value of each CGU.

We compared the projected cash flows for 2019 made by the Company in the prior year with the Company's actual cash flows for that year to assess the Company's ability to accurately forecast.

#### *Evaluation of the provision and disclosures related to the salt mining activities in Alagoas*

As discussed in notes 3.2.5, 24.2 and 26 to the consolidated financial statements the Company has recorded a provision related to the geological phenomenon in the vicinity of the Company's salt mining wells in the state of Alagoas of R\$ 3,383,067 thousand as of December 31, 2019 and made disclosures in relation to civil lawsuits, related to the same geological phenomenon, to which it is a party. The provision is for the estimated future outflows of resources required to honor the Company's commitments under an agreement signed with the Brazilian government authorities following the occurrence of the geological phenomenon. These commitments include taking measures to close and stabilize the salt mines as well as relocating and compensating residents and businesses in the region. The Company has determined that it is possible, but not probable, that it will be required to make payments under the civil lawsuits and therefore made disclosures but recorded no provisions as of December 31, 2019.

We identified the evaluation of the provision and disclosures related to the salt mining activities in Alagoas as a critical audit matter. The evaluation of the estimates and assumptions used by the Company to determine the provision amount required challenging auditor judgment and the use of specialized skills and knowledge. Specifically, the key estimates and assumptions related to the extent and cost of the remediation actions required to stabilize and close the wells, the market value of the properties of residents and businesses in the region and the other costs to relocate and compensate the residents and business owners. In addition, subjective auditor judgment was required to assess the likelihood of an outflow of resources occurring as a result of the civil lawsuits.

The primary procedures we performed to address this critical audit matter included the following:

We tested certain internal controls over the Company's litigation process, including controls related to the evaluation of information from external and internal legal counsel, as well as controls over the financial statement disclosures.

We evaluated the expertise, objectivity and professional experience of the external legal counsel who assisted the Company in evaluating the likelihood of an outflow of economic resources as a result of the civil lawsuits and estimating the amounts involved.

In addition, we obtained legal confirmation, directly from the Company's legal counsel, that included an evaluation of the likelihood of loss and an estimation of the amounts involved, and compared these evaluations and estimates to those of the Company and with the disclosure made.

We involved fixed asset and infrastructure valuation professionals, with specialized skills and knowledge, who assisted in:

- evaluating the technical appraisal reports regarding the stability of the salt mining wells and the required remediation actions to stabilize and close the wells, the remediation plans established by the Company and the Company's estimate of the significant costs to implement these plans;
- evaluating the assumptions used by the Company to estimate the market value of properties and the significant components of the other costs to relocate and compensate the residents and business owners impacted by the geological phenomenon, by comparing them to internal and external information, as applicable, including publicly available information on real estate values in the region and property sizes, contracts with third party service providers and estimates received from external legal advisors; and
- performing a sensitivity analysis of certain of the assumptions used by the Company to estimate the market value of properties and the significant components of the other costs to relocate and compensate the residents and business owners impacted by the geological phenomenon.

KPMG Auditores Independentes

We have served as the Company's auditor since 2018.

São Paulo, Brazil  
June 12, 2020

## 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 statements of profit or loss, comprehensive income, changes in equity and cash flows of Braskem S.A. and its subsidiaries (the "Company") for the year 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 results of operations and cash flows of the Company for the year ended December 31, 2017 in conformity with the 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 audit. 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 audit 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 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.

/s/ PricewaterhouseCoopers Auditores Independentes  
Salvador, Bahia, Brazil  
October 07, 2019

We served as the Company's auditor from 2002 to 2019.

## Statement of financial position at December 31

All amounts in thousands of reais

Assets	Note	2019	2018
<b>Current assets</b>	0		
Cash and cash equivalents	5	6,803,880	5,547,637
Financial investments	6	1,687,504	2,357,613
Trade accounts receivable	7	2,285,750	3,075,218
Inventories	8	7,625,084	8,486,577
Taxes recoverable	10	1,238,011	423,188
Income tax and social contribution		439,933	423,900
Dividends and interest on capital	9	3,074	890
Prepaid expenses		115,096	239,500
Derivatives	20.3.1	4,712	27,714
Judicial deposits	26	2,571,683	
Other receivables		614,827	451,578
		<b>23,389,554</b>	<b>21,033,815</b>
<b>Non-current assets</b>			
Financial investments	6	9,708	9,998
Trade accounts receivable	7	20,901	17,785
Inventories	8	16,325	31,394
Taxes recoverable	10	2,257,718	1,332,791
Income tax and social contribution		239,847	241,788
Deferred income tax and social contribution	22(b)	2,662,596	1,104,158
Judicial deposits	26	1,508,880	169,536
Insurance claims		83,167	63,054
Derivatives	20.3.1	17,877	46,664
Other receivables		175,698	189,724
Investments	11	63,843	65,954
Property, plant and equipment	12	32,315,181	31,759,890
Intangible assets	13	2,762,088	2,740,982
Right of use of assets	14	2,605,654	
		<b>44,739,483</b>	<b>37,773,718</b>
<b>Total assets</b>	0	<b>68,129,037</b>	<b>58,807,533</b>

The notes are an integral part of the consolidated financial statements.

Liabilities and shareholders' equity	Note	2019	2018
<b>Current liabilities</b>			
Trade payables	15	9,116,989	8,341,252
Borrowings	16	774,924	737,436
Braskem Idesa borrowings	17	744,408	10,504,592
Debenture	18	46,666	27,732
Derivatives	20.3.1	49,251	70,305
Payroll and related charges		623,723	645,396
Taxes payable	21	322,886	432,005
Income tax and social contribution		34,856	69,268
Dividends		6,502	672,395
Advances from customers		355,764	153,264
Leniency agreement	25	362,719	288,123
Sundry provisions	23	203,134	191,536
Other payables		930,638	623,007
Provision - geological event in Alagoas	26	1,450,476	
Other financial liabilities	28	516,933	
Lease	14(b)	676,291	9,767
		<b>16,216,160</b>	<b>22,766,078</b>
<b>Non-current liabilities</b>			
Trade payables	15	3,837	37,252
Borrowings	16	28,242,052	24,160,720
Braskem Idesa borrowings	17	9,237,318	
Debenture	18	227,901	266,777
Derivatives	20.3.1	169,513	161,694
Taxes payable	21	129,353	85,904
Loan to non-controlling shareholders of Braskem Idesa	9(a)	2,395,887	2,183,830
Deferred income tax and social contribution	22(b)	273,036	381,582
Post-employment benefits	27	389,075	206,373
Contingencies	24.1	1,151,524	965,317
Leniency agreement	25	1,379,549	1,554,395
Sundry provisions	23	302,072	233,006
Provision - geological event in Alagoas	26	1,932,591	
Other payables		133,858	59,145
Lease	14(b)	2,000,605	90,790
		<b>47,968,171</b>	<b>30,386,785</b>
<b>Shareholders' equity</b>			
	29		
Capital		8,043,222	8,043,222
Capital reserve		232,472	232,430
Revenue reserves		1,905,255	4,673,220
Additional paid in capital		(488,388)	(488,388)
Other comprehensive income		(4,757,539)	(5,623,020)
Treasury shares		(49,724)	(49,819)
Accumulated losses			(256,575)
Total attributable to the Company's shareholders		4,885,298	6,531,070
Non-controlling interest in subsidiaries		(940,592)	(876,400)
		<b>3,944,706</b>	<b>5,654,670</b>
<b>Total liabilities and shareholders' equity</b>		<b>68,129,037</b>	<b>58,807,533</b>

The notes are an integral part of the consolidated 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

Continued operations	Note	2019	2018	2017
	2.7		<b>Restated</b>	
<b>Net revenue</b>	31	<b>52,323,525</b>	<b>57,999,866</b>	<b>49,260,594</b>
Cost of products sold	35	(45,879,118)	(46,576,657)	(36,177,408)
<b>Gross profit</b>		<b>6,444,407</b>	<b>11,423,209</b>	<b>13,083,186</b>
<b>Income (expenses)</b>				
Selling and distribution	35	(1,783,455)	(1,689,179)	(1,446,153)
(Loss) reversals for impairment of trade accounts receivable	35	(7,069)	87,008	(13,455)
General and administrative	35	(2,224,180)	(1,793,185)	(1,434,272)
Research and development	35	(247,730)	(219,256)	(167,456)
Results from equity investments	11(c)	10,218	(888)	39,956
Other income	33	2,408,434	1,027,222	314,934
Other expenses	33	(4,446,942)	(554,713)	(1,169,814)
<b>Profit before net financial income (expense) and taxes</b>		<b>153,683</b>	<b>8,280,218</b>	<b>9,206,926</b>
<b>Financial results</b>	34			
Financial expenses		(3,882,785)	(3,007,551)	(3,747,217)
Financial income		850,554	589,052	603,630
Exchange rate variations, net		(1,724,520)	(2,256,983)	(798,762)
		<b>(4,756,751)</b>	<b>(4,675,482)</b>	<b>(3,942,349)</b>
<b>(Loss) profit before income tax and social contribution</b>		<b>(4,603,068)</b>	<b>3,604,736</b>	<b>5,264,577</b>
Current and deferred income tax and social contribution	22(a)	1,962,670	(736,551)	(1,357,682)
<b>(Loss) profit for the year of continued operations</b>		<b>(2,640,398)</b>	<b>2,868,185</b>	<b>3,906,895</b>
<b>Discontinued operations results</b>				
Profit from discontinued operations				13,499
Current and deferred income tax and social contribution				(4,623)
				8,876
<b>(Loss) profit for the year</b>		<b>(2,640,398)</b>	<b>2,868,185</b>	<b>3,915,771</b>
<b>Attributable to:</b>				
Company's shareholders		(2,540,995)	2,827,650	3,865,440
Non-controlling interest in subsidiaries		(99,403)	40,535	50,331
<b>(Loss) profit for the year</b>		<b>(2,640,398)</b>	<b>2,868,185</b>	<b>3,915,771</b>
<b>(Loss) earnings per share - basic and diluted - R\$</b>	30			
Common		(3.1922)	3.5543	4.8479
Preferred shares class "A"		(3.1922)	3.5543	4.8479
Preferred shares class "B"		(3.1922)	0.5910	0.6069

The notes are an integral part of the consolidated financial statements.

**Braskem S.A.**
**Statement of comprehensive income**
**Years ended December 31**

All amounts in thousands of reais

	<u>Note</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
<b>(Loss) profit for the year of continued operations</b>		<b>(2,640,398)</b>	<b>2,868,185</b>	<b>3,915,771</b>
<b>Other comprehensive income:</b>				
<b>Items that will be reclassified subsequently to profit or loss</b>				
Fair value of cash flow hedge		55,274	(151,718)	605,204
Income tax and social contribution - cash flow hedge		(19,805)	54,481	(203,186)
Fair value of cash flow hedge from jointly-controlled		(978)	(2,329)	3,534
		<u>34,491</u>	<u>(99,566)</u>	<u>405,552</u>
Exchange variation of foreign sales hedge	20.4(a.i)	(856,068)	(3,145,857)	(397,045)
Sales Hedge - transfer to profit or loss	20.4(a.i)	1,385,121	1,022,782	1,022,830
Income tax and social contribution on exchange variation	-	(179,878)	721,845	(212,767)
Exchange variation of foreign sales hedge - Braskem Idesa	20.4(a.ii)	464,806	16,681	472,717
Sales Hedge - transfer to profit or loss - Braskem Idesa	20.4(a.ii)	267,146	236,570	163,696
Income tax on exchange variation - Braskem Idesa		(219,586)	(75,975)	(190,924)
		<u>861,541</u>	<u>(1,223,954)</u>	<u>858,507</u>
Foreign subsidiaries currency translation adjustment		136,722	801,223	(602)
<b>Total</b>		<b><u>1,032,754</u></b>	<b><u>(522,297)</u></b>	<b><u>1,263,457</u></b>
<b>Items that will not be reclassified to profit or loss</b>				
Defined benefit plan actuarial loss, net of taxes		(24,597)	(1,289) #	(5,750)
Post-employment plans - Health plan, net of taxes		(85,031)	(280)	(2,904)
Long term incentive plan, net of taxes		13,921	6,406 #	-
Loss on investments		(84)	(65) #	-
<b>Total</b>		<b><u>(95,791)</u></b>	<b><u>4,772</u></b> #	<b><u>(8,654)</u></b>
<b>Total comprehensive income for the year</b>		<b><u>(1,703,435)</u></b>	<b><u>2,350,660</u></b> #	<b><u>5,170,574</u></b>
<b>Attributable to:</b>				
Company's shareholders		(1,644,368)	2,398,250	5,049,617
Non-controlling interest in subsidiaries		(59,067)	(47,590)	120,957
		-	-	-
<b>Total comprehensive income for the year</b>		<b><u>(1,703,435)</u></b>	<b><u>2,350,660</u></b>	<b><u>5,170,574</u></b>

The notes are an integral part of the consolidated financial statements.

Statement of changes in equity  
All amounts in thousands of reais

Note	Revenue reserves							Attributed to shareholders' interest			Total Braskem shareholders' interest	Non-controlling interest in subsidiaries	Total shareholders' equity
	Capital	Capital reserve	Legal reserve	Tax incentive	Retention of profits	Additional dividends proposed	Additional paid in capital	Other comprehensive income	Treasury shares	Retained earnings			
<b>At December 31, 2016</b>	<b>8,043,222</b>	<b>232,430</b>	<b>229,992</b>		<b>604,624</b>			<b>(6,321,859)</b>	<b>(49,819)</b>		<b>2,738,590</b>	<b>(1,017,880)</b>	<b>1,720,710</b>
Comprehensive income for the year:													
Profit for the year										3,865,440	3,865,440	50,331	3,915,771
Exchange variation of foreign sales hedge, net of taxes								747,135			747,135	111,372	858,507
Fair value of cash flow hedge, net of taxes								394,251			394,251	11,301	405,552
Foreign subsidiaries currency translation adjustment								51,445			51,445	(52,047)	(602)
								1,192,831		3,865,440	5,058,271	120,957	5,179,228
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)		(5,750)
Post-employment benefits - health plan, net of taxes								(2,904)			(2,904)		(2,904)
Long-term incentive plan, net of taxes													
								(36,464)		27,810	(8,654)		(8,654)
Contributions and distributions to shareholders:													
Lapsed dividends										482	482		482
Tax incentive reserve				71,745						(71,745)			
Prepaid dividends										(1,000,000)	(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)		(488,388)
Non-controlling interest in subsidiaries												69,422	69,422
			204,150	71,745	1,335,387	1,500,000	(488,388)			(4,110,800)	(1,487,906)	69,422	(1,418,484)
<b>At December 31, 2017</b>	<b>8,043,222</b>	<b>232,430</b>	<b>434,142</b>	<b>71,745</b>	<b>1,940,011</b>	<b>1,500,000</b>	<b>(488,388)</b>	<b>(5,165,492)</b>	<b>(49,819)</b>	<b>(217,550)</b>	<b>6,300,301</b>	<b>(827,501)</b>	<b>5,472,800</b>
Comprehensive income for the year:													
Profit for the year										2,827,650	2,827,650	40,535	2,868,185
Exchange variation of foreign sales hedge, net of taxes								(1,268,273)			(1,268,273)	44,319	(1,223,954)
Fair value of cash flow hedge, net of taxes								(112,241)			(112,241)	12,675	(99,566)
Foreign subsidiaries currency translation adjustment								946,342			946,342	(145,119)	801,223
								(434,172)		2,827,650	2,393,478	(47,590)	2,345,888
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 gain with post-employment benefits, net of taxes								(1,289)			(1,289)		(1,289)
Post-employment benefits - health plan, net of taxes								(280)			(280)		(280)
Long term incentive plan, net of taxes								6,406			6,406	133	6,539
Fair value adjustments of trade accounts receivable, net of taxes								(449)			(449)		(449)
								(23,291)		27,679	4,388	133	4,521
Contributions and distributions to shareholders:													
Prescribed dividend										460	460		460
Additional dividends approved in the board meeting										(73)	(1,500,073)	(1,396)	(1,501,469)
Reversal of fiscal incentive										130			
Legal reserve			143,334							(143,334)			
Tax incentive reserve				81,863						(81,863)			
Mandatory minimum dividends										(667,419)	(667,419)		(667,419)
Additional dividends proposed						2,002,255				(2,002,255)			
Loss on investments								(65)			(65)	65	
Sale of investments												(111)	(111)
			143,334	81,733		502,255		(65)		(2,894,354)	(2,167,097)	(1,442)	(2,168,539)
<b>At December 31, 2018</b>	<b>8,043,222</b>	<b>232,430</b>	<b>577,476</b>	<b>153,478</b>	<b>1,940,011</b>	<b>2,002,255</b>	<b>(488,388)</b>	<b>(5,623,020)</b>	<b>(49,819)</b>	<b>(256,575)</b>	<b>6,531,070</b>	<b>(876,400)</b>	<b>5,654,670</b>

The notes are an integral part of the consolidated financial statements.

Statement of changes in equity  
All amounts in thousands of reais

Note	Revenue reserves						Attributed to shareholders' interest				Total Braskem shareholders' interest	Non-controlling interest in subsidiaries	Total shareholders' equity
	Capital	Capital reserve	Legal reserve	Tax incentive	Retention of profits	Additional dividends proposed	Additional paid in capital	Other comprehensive income	Treasury shares	Retained earnings			
<b>At December 31, 2018</b>	<b>8,043,222</b>	<b>232,430</b>	<b>577,476</b>	<b>153,478</b>	<b>1,940,011</b>	<b>2,002,255</b>	<b>(488,388)</b>	<b>(5,623,020)</b>	<b>(49,819)</b>	<b>(256,575)</b>	<b>6,531,070</b>	<b>(876,400)</b>	<b>5,654,670</b>
Comprehensive income for the year:													
Loss for the year										(2,540,995)	(2,540,995)	(99,403)	(2,640,398)
Exchange variation of foreign sales hedge, net of taxes							733,449				733,449	128,092	861,541
Fair value of cash flow hedge, net of taxes							38,919				38,919	(4,428)	34,491
Foreign currency translation adjustment							220,228				220,228	(83,506)	136,722
							992,596			(2,540,995)	(1,548,399)	(59,245)	(1,607,644)
Equity valuation adjustments:													
Realization of additional property, plant and equipment price-level restatement, net of taxes	25(e.2)						(26,717)		26,717				
Realization of deemed cost of jointly-controlled investment, net of taxes							(883)		883				
Actuarial loss with post-employment benefits, net of taxes							(109,492)				(109,492)	(136)	(109,628)
Long term incentive plan, net of taxes							13,573				13,573	348	13,921
Fair value adjustments of trade accounts receivable, net of taxes							15				15		15
Exchange variation in hyperinflationary economy, net of taxes							(3,561)				(3,561)		(3,561)
							(127,065)			27,600	(99,465)	212	(99,253)
Contributions to shareholders:													
Incentive long term plan payments with treasury shares									95		95		95
Retention of profits - non-approval of additional dividends	29(e)				2,002,255	(2,002,255)							
Prescribed dividend										2,005	2,005	(5,125)	2,005
Additional dividends of subsidiary												(34)	(84)
Loss on interest in subsidiary							(50)				(50)		
Absorption of losses	29(c.ii)				(2,767,965)					2,767,965			
Gain on transfer of shares in custody long term incentive plan			42								42		42
		42			(765,710)	(2,002,255)	(50)	95	2,769,970	2,092	2,092	(5,159)	(3,067)
<b>At December 31, 2019</b>	<b>8,043,222</b>	<b>232,472</b>	<b>577,476</b>	<b>153,478</b>	<b>1,174,301</b>	<b>(2,002,255)</b>	<b>(488,388)</b>	<b>(4,757,539)</b>	<b>(49,724)</b>	<b>2,092</b>	<b>4,885,298</b>	<b>(940,592)</b>	<b>3,944,706</b>

The notes are an integral part of the consolidated financial statements.

**Braskem S.A.**
**Statement of cash flows**  
**Years ended December 31**  
**All amounts in thousands of reais**

	<b>Note</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
(Loss) profit before income tax and social contribution		(4,603,068)	3,604,736	5,264,577
Adjustments for reconciliation of profit				
Depreciation, amortization and depletion		3,632,265	2,990,577	2,928,855
Results from equity investments	11(c)	(10,218)	888	(39,956)
Interest foreign exchange gain/losses		4,145,110	6,013,944	3,697,714
Gain from divestment in subsidiary				(276,816)
Reversal of provisions		320,439	23,725	(223,340)
Provisions - Leniency agreement	25			375,476
Provision - geological event in Alagoas	26	3,383,067		
PIS and COFINS credits - exclusion of ICMS from the calculation basis	10(c) e 33	(1,904,206)	(519,830)	
Loss (reversals) for impairment of financial assets		7,069	(87,008)	13,455
Provision for losses and write-offs of long-lived assets		225,204	72,470	213,184
		<b>5,195,662</b>	<b>12,099,502</b>	<b>11,953,149</b>
Changes in operating working capital				
Judicial deposits - other financial assets	26	(3,680,460)		
Financial investments		797,445	98,349	(953,228)
Trade accounts receivable		895,046	223,418	(1,611,847)
Inventories		867,817	(1,537,290)	(1,351,028)
Taxes recoverable		1,195,427	1,022,242	469,293
Prepaid expenses		202,732	(105,163)	(30,521)
Other receivables		(273,665)	(248,988)	25,802
Trade payables		282,445	1,343,375	(1,642,649)
Taxes payable		(569,793)	(977,248)	(215,514)
Advances from customers		197,965	(199,958)	(13,512)
Leniency agreement	25	(341,605)	(330,006)	(1,343,803)
Sundry provisions		(215,548)	(116,458)	194,596
Other payables		362,203	833,227	55,541
<b>Cash generated (used) from operations</b>		<b>4,915,671</b>	<b>12,105,002</b>	<b>5,536,279</b>
Interest paid		(2,238,445)	(1,916,801)	(2,154,053)
Income tax and social contribution paid		(411,951)	(937,831)	(920,606)
<b>Net cash generated (used) from operating activities</b>		<b>2,265,275</b>	<b>9,250,370</b>	<b>2,461,620</b>
Proceeds from the sale of fixed and intangible assets		12,590	95,133	39,660
Proceeds from the sale of investments			81,000	450,000
Funds received in the investments' capital reduction			2,254	
Dividends received		3,513	41,791	
Additions to investments in subsidiaries				(608,181)
Acquisitions to property, plant and equipment and intangible assets		(2,682,522)	(2,706,328)	(2,273,197)
Premium in the dollar put option			(2,167)	(14,683)
<b>Net cash used in investing activities</b>		<b>(2,666,419)</b>	<b>(2,488,317)</b>	<b>(2,406,401)</b>
Short-term and Long-term debt				
Acquired		20,586,103	4,301,626	8,492,341
Payments		(17,425,409)	(6,592,197)	(8,779,091)
Derivative transactions				
Payments				(810,279)
Braskem Idesa borrowings				
Acquired		3,497,622		187,959
Payments		(4,398,453)	(812,929)	(1,080,502)
Lease	14(c)	(454,190)		
Dividends paid		(668,904)	(1,499,900)	(998,893)
Other financial liabilities	28	499,999		
<b>Net cash generated (used) in financing activities</b>		<b>1,636,768</b>	<b>(4,603,400)</b>	<b>(2,988,465)</b>
Exchange variation on cash of foreign subsidiaries		20,619	(386,109)	6,475
<b>Increase (decrease) in cash and cash equivalents</b>		<b>1,256,243</b>	<b>1,772,544</b>	<b>(2,926,771)</b>
Represented by				
Cash and cash equivalents at the beginning of the year		5,547,637	3,775,093	6,701,864
Cash and cash equivalents at the end of the year		6,803,880	5,547,637	3,775,093
<b>Increase (decrease) in cash and cash equivalents</b>		<b>1,256,243</b>	<b>1,772,544</b>	<b>(2,926,771)</b>

The notes are an integral part of the consolidated financial statements.

**Notes to the consolidated financial statements  
at December 31, 2019**

All amounts in thousands, except as otherwise stated

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**1 Operations**

Braskem S.A. is a public corporation headquartered in Camaçari, Bahia (“BA”), which, jointly with its subsidiaries (hereinafter referred to as “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 has 36 industrial plants in Brazil, the United States, Germany and Mexico. The units produce thermoplastic resins, namely polyethylene (“PE”) and polypropylene (“PP”), polyvinyl chloride (“PVC”), as well as basic petrochemicals.

Braskem also is engaged in the manufacture, sale, 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.

**2 Accounting policies**

Except for the changes that occurred with the adoption of the new standards (Note 2.5), the accounting practices were applied consistently in the preparation of these consolidated financial statements and are described in the respective notes.

**2.1 Basis of preparation and presentation of the consolidated financial statements**

The consolidated 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, 2019 were authorized for issue on April 3, 2020, 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 April 3, 2020.

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 financial statements are disclosed in Note 3.

The issue of these consolidated financial statements was authorized by the Executive Board on June 12, 2020.

**2.1.1 Consolidated financial statements**

The consolidated financial statements were prepared and presented in accordance with International Financial Reporting Standards (“IFRS”) issued by the International Accounting Standards Board (“IASB”).

## (a) Consolidation

The consolidated financial statements comprises the financial statements of the Braskem S.A. and the following entities:

		Headquarters	2019	Total and voting interest - %	
				2018	2017
<b>Direct and Indirect subsidiaries</b>					
	BM Insurance Company Limited ("BM Insurance")	(i) Bermuda	100.00	100.00	
	Braskem America Finance Company ("Braskem America Finance")	EUA	100.00	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 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 International GmbH ("Braskem Austria")	(ii) Austria			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
	Cetrel S.A. ("Cetrel")	Brazil	63.70	63.66	63.66
	Distribuidora de Água Camaçari S.A. ("DAC")	Brazil	63.70	63.66	63.66
	Lantana Trading Co. Inc. ("Lantana")	Bahamas	100.00	100.00	100.00
<b>Specific Purpose Entity ("SPE")</b>					
	Fundo de Investimento Caixa Júpiter Multimercado Crédito Privado Longo Prazo ("FIM Júpiter")	Brazil	100.00	100.00	100.00
	Fundo de Investimento Santander Netuno Multimercado Crédito Privado Longo Prazo ("FIM Netuno")	(iii) Brazil	100.00	100.00	

(i) Created in October 2018.

(ii) Terminated in June 2018.

(iii) Multi-asset fund created in December 2018.

## 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, unless otherwise stated. All amounts have been rounded to the nearest thousand, unless otherwise indicated.

### (b) Functional currency other than the Brazilian real

Transactions in foreign currencies are translated into the respective functional currency of the Braskem's entities at the exchange rates on the transaction dates. Monetary assets and liabilities denominated and measured in foreign currency on the reporting date are re-translated into the functional currency at the exchange rate on said date. Non-monetary assets and liabilities measured at fair value in foreign currency are re-translated into the functional currency at the exchange rate on the date on which the fair value was determined. Non-monetary items that are measured based on the historical cost in foreign currencies are translated at the exchange rate on the date of the transaction. The differences in foreign currencies resulting from conversion are generally recognized in the profit or loss.

Assets and liabilities from foreign operations are translated into Brazilian real at the exchange rates determined on the reporting date. Revenues and expenses from foreign operations are translated into Brazilian real at the exchange rates determined on the transaction dates. Differences in foreign currencies generated by translation into the reporting currency are recognized in other comprehensive income and accrued in asset valuation adjustments in equity.

The results and financial position of an entity whose functional currency is not the currency of a hyperinflationary economy must be translated into the reporting currency. The assets and liabilities for each balance sheet reported (including the comparative balance sheets) must be translated using the closing quote of the exchange rate on the respective reporting dates, and the income and expenses for each comprehensive statement of operations or statement of operations reported (including comparative statements) must be translated using the exchange rates in effect on the transaction dates. All exchange variation gains and losses must be recognized in other comprehensive income.

The subsidiaries with a functional currency different from that of the Braskem S.A. are listed below:

	<u>Functional currency</u>
<b>Subsidiaries</b>	
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
Braskem Argentina	Argentinean peso
Braskem Chile	Chilenean peso

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(c) Exchange variation effects

The effects from exchange variation on the Company's transactions are mainly due to the variations in the following currencies:

	End of period rate at December 31			Average rate				
	2019	2018	Variation	2019	2018	2017	2019-2018	2018-2017
U.S. dollar - Brazilian real	4.0307	3.8748	4.02%	3.9461	3.6558	3.1925	7.94%	14.51%
Euro - Brazilian real	4.5305	4.4390	2.06%	4.4159	4.3094	3.6089	2.47%	19.41%
Mexican peso - Brazilian real	0.2134	0.1972	8.22%	0.2049	0.1901	0.1694	7.80%	12.24%
U.S. dollar - Mexican peso	18.8858	19.6655	-3.96%	19.2568	19.2363	18.9142	0.11%	1.70%
U.S. dollar - Euro	0.8926	0.8729	2.26%	0.8930	0.8471	0.8871	5.42%	-4.50%

(d) Hyperinflationary economy

In July 2018, the International Accounting Standards Board (IASB) issued a report updating the list of countries with hyperinflationary economies in which Argentina was included. IAS 29 - Financial Reporting in Hyperinflationary Economies details the procedures that must be carried out at Braskem Argentina after such change in scenario. According to IAS 21 - Effects of changes in foreign exchange rates and conversion of financial statements, the conversion procedure for a balance sheet from a hyperinflationary economy differs from the procedures for a non-inflationary economy. For converting the balance sheet of Braskem Argentina, assets, liabilities, equity, income and expenses (including comparative balances) must be translated into the reporting currency using the closing quote of the exchange rate on the reporting date.

2.3 Consolidation

2.3.1 Business combinations

Business combinations are recognized using the acquisition method when control is transferred to the Company. The consideration transferred generally is measured at fair value, as also is the identifiable net assets acquired. Any goodwill arising from the transaction is tested annually for impairment loss. Gains on bargain purchase are immediately recognized in the profit or loss. Transaction costs are recognized into the result as incurred, except any costs associated with issuances of debt or equity instruments. Any contingent consideration payable is measured at its fair value on the acquisition date. If the contingent consideration is classified as an equity instrument, it is not remeasured and the settlement is recognized in equity. Other contingent considerations are remeasured at fair value on each reporting date and subsequent changes to fair value are recognized in the income statement for the fiscal year.

2.3.2 Subsidiaries

The Company controls an entity when it is exposed to, or entitled to, the variable returns originating from its involvement with the entity and has the capacity to affect such returns by exercising its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements as from the date the Company obtains control until the date of the loss of control.

### **2.3.3 Investments in entities with accounting treatment using the equity method**

The Company's investments in entities with accounting treatment using the equity method consist of their interests in associated companies. Associated companies are those over which the Company, directly or indirectly, holds significant influence, but not control or joint control, over the financial and operational policies. Such investments are initially recognized at cost, which includes the expenses with the transaction. After initial recognition, the financial statements include the Company's interest in the net profit or loss for the fiscal year and other comprehensive income in the investee until the date on which the significant influence or joint control ceases to exist.

### **2.3.4 Transactions eliminated in consolidation**

Intragroup balances and transactions and any unrealized revenues or expenses arising from intragroup transactions are eliminated. Unrealized gains originating from transactions with investees recorded using the equity method are eliminated against the investment proportionately to the Company's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment loss.

## **2.4 Employee benefits**

### **2.4.1 Short-term benefits for employees**

The obligations of short-term benefits for employees are recognized as personnel expenses as the corresponding service is rendered. The liability is recognized at the amount of the expected payment if the Company has a legal or constructive obligation to pay the amount due to services rendered by an employee in the past and the obligation can be reliably estimated.

### **2.4.2 Share-based payment agreement**

The fair value at the issue date of share-based payments granted to employees is recognized as personnel expenses, with a corresponding increase in shareholders' equity, during the period the employees acquire the full right to the award. The amount recognized as an expense is adjusted to reflect the number of awards for which there is an expectation that the service and performance requirements will be fulfilled, so that the final amount recognized as an expense is based on the number of awards that effectively fulfill the service and performance conditions on the vesting date. For share-based payment awards with non-vesting conditions, the fair value at the grant date of the share-based awards is measured to reflect such conditions and no further adjustments are made for the differences between the expected and actual results. The fair value of the amount payable to employees related to rights on stock price appreciation, which are settled in cash, is recognized as an expense with a corresponding increase in liabilities during the period in which the employees acquire the full right to the payment. The liabilities are remeasured on each reporting date and on the settlement date, based on the fair value of the rights to stock price appreciation. Any changes in the fair value of the liability are recognized in the income statement as personnel expenses.

### 2.4.3 Defined benefit plan

The Company's net obligation for defined benefit plans is calculated for each of the plans based on the estimated amount of future benefit that employees will receive in return for services rendered in the current and prior periods. Such amount is discounted to its present value and is reported net of the fair value of any of the plan's assets. The calculation of the obligation of the defined benefit plan is made annually by a qualified accountant using the projected unit credit method. When calculations results in a potential asset for the Company, the asset to be recognized is limited to the present value of economic benefits available as future plan reimbursements or as a reduction in future contributions to the plan. To calculate the present value of economic benefits, any applicable minimum cost requirements are taken into account. Remeasurements of net obligation, which include: actuarial gains and losses, return on plan assets (excluding interest) and the effects of the asset cap (if any, excluding interest), are immediately recognized in other comprehensive income.

### 2.5 Changes in key accounting policies

#### (a) IFRS 16 – Leases

For its transition, the Company adopted the modified retrospective approach, i.e., it applied the requirements of the lease standard to all existing agreements on the initial adoption date, i.e. January 1, 2019. Therefore, information and balances were not restated for comparison purposes.

After the date of the first-time application, on January 1, 2019, leases were recognized as a right-of-use asset and a corresponding liability on the date on which the leased asset becomes available to the Company. For each right-of-use asset measured, an equivalent liability was recorded. The payment is recorded as a reduction of the lease liability. The financial cost of the lease liability is recorded in the profit and loss during the enforceable term of the lease, applying a constant interest rate on the remaining balance of the liability. The right-of-use asset is depreciated using the straight-line method considering the shortest period between the useful life of the asset and the enforceable term of the lease.

#### Definition of a Lease

Previously, the Company determined at contract inception whether an arrangement was or contained a lease under IFRIC 4 *Determining whether an Arrangement contains a Lease*. The Company now assesses whether a contract is or contains a lease based on the definition of a lease, according to IFRS 16 Leases

#### As a lessee

To determine the enforceable term of the lease, the management considers all facts and circumstances that create an economic incentive for exercising the option of extension or create economic disincentives for not exercising the option of early termination.

When adopting IFRS 16, the Company recognized its lease liabilities in relation to the lease agreements previously classified as "operating leases" under IAS 17. Up to the financial statements for 2018, the payments of these leases, net of any incentives received from the lessor, were recognized as profit or loss during the lease period.

For leases previously classified as "financial leases" the Company recognized the lease asset and liability considering the amount immediately prior to the date of first-time adoption.

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On the date of adoption, the assets and liabilities from lease agreements were measured at their present value, considering the outstanding payments of each agreement, discounting by the Company's incremental borrowing rate on January 1, 2019. The weighted average incremental rate applied upon first-time adoption was 5.58% p.a.. The lease liability considers the net present value of the following lease payments:

- Fixed payments discounting any incentive received;
- Variable payments based on rates or indexes;
- Expected payables to the lessor referring to the guaranteed residual amount;
- Exercise price of a purchase option, if it is reasonably certain that lessee will exercise such option; and
- Payment of fines for termination of the lease if the contractual terms provide for lessee's exercise option.

**Commitments of operating leases as of December 31, 2018**

**3,257,982**

**Lease liability recognized on January 1, 2019**

Lease commitments discounted at the incremental rate on the date of initial application	2,177,138
(Plus) Financial leases as of December 31, 2018	100,557
(Minus): short-term leases recognized immediately in profit or loss	(103,929)
(Minus): low value contracts recognized immediately in profit or loss	(1,071)
(Plus): Extension options reasonably certain to be exercised	119,770
<b>Total</b>	<b><u>2,292,465</u></b>

The right-of-use assets were measured by the amount of the lease liabilities, adjusted by any amount of advanced payments and provisions for lease payments related to the lease recognized on January 1, 2019. There were no onerous leases that required adjustment to the right-of-use assets on the date of first-time adoption.

Upon first-time adoption, the Company used the following practical expedients permitted under IFRS 16:

- Not to reevaluate whether the contract is or contains any lease on the initial adoption date. Instead, applied the standard to agreements that were previously identified as leases;
- Opt not to separate non-lease components from lease components, considering them, therefore, as a single lease component;
- Not to record contracts, that on the date of the initial adoption date, will end within 12 months; as long as the Company is not reasonably certain to exercise the purchase option at the end of the contract;
- Not to record low-value agreements (R\$30 for companies in Brazil and US\$10 for foreign subsidiaries), in accordance with the policy defined by Management;
- Excluded the direct initial costs from measuring the right of use asset on the initial adoption date;
- Used hindsight, such as determining the term of the lease, if the contract contains options to postpone or terminate the lease, among others; and

- Applied 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”).

#### Leases classified as finance leases under IAS 17

The Company leases some equipments classified as finance leases under IAS 17. For these finance leases, the carrying amount of the right-of-use asset and the lease liability at 1 January 2019 were determined at the carrying amount of the lease asset and lease liability under IAS 17 immediately before that date.

#### (b) IFRIC 23 – Uncertainty on Income Tax Treatment

The new interpretation establishes requirements for recognition and measurement in situations where the Company has defined, 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 tax authorities.

The Company concluded the analyses of the application of this standard and did not identify any impacts on the consolidated financial statements.

#### 2.6 New or revised pronouncements not yet in effective

New standards and amendments of standards come into force in annual periods starting after January 1, 2020 and their early adoption is permitted. The Company did not early adopt the following new standards and interpretations for preparing these consolidated financial statements:

- Changes to references to the conceptual structure of IFRS;
- Definition of business (changes to IFRS 13);
- Definition of materiality (amendments to IAS 1 and IAS 8);
- IFRS 17 – Insurance agreements.

The amended standards and interpretations are not expected to produce a significant impact on the consolidated financial statements.

#### 2.7 Change in the presentation of provision, expense method by function

In the year ended December 31, 2019, the Company changed the classification of the profit sharing expenses in order to report the effects of this expense by function for better presentation of the consolidated financial statements.

The Company has reclassified the prior year financial statements to conform to the current year presentation. In the year ended December 31, 2018, the amounts related to this item were reclassified from “Other expenses” (R\$375,360) to “cost of goods sold” (R\$145,437, “selling and distribution expenses” (R\$50,306), “general and administrative expenses” (R\$160,182) and research and development (R\$19,435). For the year ended December 31, 2017 the effect of the reclassification was not material.

### 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.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to estimates are recognized prospectively.

#### 3.1 Judgments

Information about judgements made in applying accounting policies that have the most significant effects on the amounts recognized in the consolidated financial statements include the following:

- (a) **Note 14.b – Leasing:** if the Company is reasonably sure of exercising options to extend the lease term.

#### 3.2 Uncertainties about assumptions and estimates

Information about assumptions and estimation uncertainties at December 31, 2019 that have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next year are as follows:

##### 3.2.1 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. In evaluating the plan, the Company uses its historical performance, strategic planning and market projections produced by specialized third party consulting firms, which are reviewed and supplemented based on Management’s experience.

Information on deferred income tax and social contribution is presented in Note 22(c).

##### 3.2.2 Useful life of assets

The Company recognizes the depreciation, amortization and depletion of its tangible and intangible assets with estimated useful life approved by the Company’s technicians with experience in the management of Braskem’s plants. The useful lives of assets are reviewed at the end of every year by the Company’s technicians in order to check 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.

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The Company's management also decided that (i) depreciation should cover all assets value because when the equipment and installations are no longer operational, the sales amount is close to the residual value; 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, amortization and depletion rates:

	<u>2019</u>	<u>2018</u>
Buildings and improvements	3.42	3.42
Machinery, equipment and installations	8.01	8.04
Mines and wells	8.70	8.84
Furniture and fixtures	10.00	10.03
IT equipment	20.04	20.13
Lab equipment	9.45	9.53
Security equipment	9.45	9.72
Vehicles	16.90	17.83
Other	18.23	18.82

Information on property, plant and equipment is presented in Note 12.

### 3.2.3 Impairment test and analysis

#### (a) Tangible and intangible assets with definite useful lives

Annually, or whenever there is any indication that the value of the asset could be impaired, the Company conducts an analysis to determine the existence of any indication that the book balance of tangible and intangible assets with definite 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. If the aforementioned variables indicate any material risk to cash flows, the Management of Braskem conducts impairment tests in accordance with Note 3.2.3(b).

For impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or CGUs ("Cash Generating Units").

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. Value in use is based on the estimated future cash flows, discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU. The fair value less costs of disposal is estimated using discounted cash flows and discount rate in an orderly transaction between market participants at the measurement date under current market conditions, less incremental costs directly attributable to the disposal.

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Impairment loss is recognized in profit or loss if the book value of the asset or CGU exceeds its recoverable value. They are allocated first to reduce the carrying amount of any goodwill allocated to the CGU (or group of CGUs), and then to reduce the carrying amounts of the other assets in the CGU (or group of CGUs) on a pro rata basis.

An impairment loss in respect of goodwill is not reversed. For other assets, an impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

When identifying whether cash inflows from an asset (or group of assets) are largely independent of cash inflows from other assets (or groups of assets), the Company considers several factors, such as: product lines, individual locations and the way Management monitors and makes decisions about the continuity of the entity's operations.

At December 31, 2019, assets are grouped according to the following CGUs:

**Brazil:**

- CGU Northeastern petrochemical complex (NE): represented by assets of the ethylene, PE plants located in the Northeast region;
- CGU Vinyls: represented by assets of PVC and chlorine soda plants located in Brazil;
- CGU Southern petrochemical complex (South): represented by assets of the ethylene, propylene, PE and PP plants, located in the South region;
- CGU Rio de Janeiro petrochemical complex (RJ): represented by assets of the ethylene, propylene, PE and PP plants, located in Rio de Janeiro state;
- CGU São Paulo petrochemical complex (SP): represented by assets of the ethylene and PE plants, located in the cities of Santo André and Cubatão;
- CGU Paulínia: represented by assets of the PP plant;
- CGU ABC, greater São Paulo region: represented by assets of the PP plant.

**United States and Europe:**

- CGUs Polypropylene USA: there are 5 PP plants located in the United States, the assets of each plant represent a UGC;
- CGUs Polypropylene Europe: there are 2 PP plants located in Germany, each plan represents a UGC.

**Mexico:**

- CGU 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 arising from business combinations are tested for impairment once a year. Goodwill from business combination is allocated to the CGUs or groups of CGUs that are expected to benefit from the synergies of the combination.

These tests are based on the projected cash flow in each CGU or groups of CGUs, which are extracted from the business plan of the Company for a five-year period, mentioned in Note 3.2.1, and the Management plan for a period greater than 5 years to reflect industry cycle patterns, in a total projection period of 10 years. 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").

Goodwill and results of impairment tests are presented in Note 13(a) and (b).

### 3.2.4 Provisions and contingencies

Provisions are recorded when there is a present obligation (legal or constructive) as a result of a past event, and it is more likely than not that an outflow of resources will be required to settle the obligation.

Contingent liabilities are mainly related to discussions in the judicial and administrative spheres arising from primarily labor, corporate claims, civil and tax lawsuits.

The Management of Braskem, based on its assessment and of its external legal advisors, classifies these proceedings in terms of probability of loss as follows:

- (i) Probable loss – these are proceedings for which there is a higher probability of loss than of a favorable outcome;
- (ii) Possible loss - these are proceedings for which the possibility of loss is greater than remote and lesser than probable. For these claims, the Company does not recognize a provision and discloses the most significant matters in Note 24.2.

The provision for labor, corporate claims, civil and tax lawsuits correspond to the value of the claims plus charges by the estimated value of probable losses. On the acquisition date in business combination operations, in accordance with IFRS 3, a contingent liability is recorded when it represents a present obligation.

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 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 24.

### 3.2.5 Provision of expenses – Geological event in Alagoas

The provision arises from actions and security measures based on studies and dealings with the competent authorities as of the Term of Agreement to Support the Reallocation of People in Risk Areas ("Term"), disclosed in Note 26.1 (i).

The actions for closure and monitoring wells and support the evacuation of residents of the protection area involve various estimates in determining the future expenses for implementation of these measures. Therefore, factors such as the time taken to execute the action plans, results of future studies experts, changes in the structure of the wells, the outcome of ongoing legal actions, among others, may result in a material impact on the amount of the provision.

### 3.2.6 Derivative and non-derivative financial instruments

#### (a) 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 20.

#### (b) 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, reviewed and approved by Management of the Company.

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 for the Braskem S.A. and the subsidiary Braskem Idesa will be characterized by the first sales in U.S. dollars in each quarter until the amount designated for each period is reached (Note 20.4(a.i) and 20.4(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 rates. 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 20.3.

#### 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 20.6(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, 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 20.3.

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, 2019, Braskem prepared a sensitivity analysis for its exposure to the fluctuation in the U.S. dollar, as disclosed in Note 20.6.

###### (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 2019, Braskem held swap contracts (Note 20.3.1) in which it receives Libor and pays a fixed rate.

On December 31, 2019, Braskem prepared a sensitivity analysis for the exposure to the floating interest rates Libor, CDI, IPCA, TJLP and Selic, as disclosed in Notes 20.6(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 bank checking accounts, 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, 2019, 45.9% 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 16). 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, 2019, the balance of trade accounts receivable was net of allowance for doubtful accounts (Note 7).

#### 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. As of December 31, 2019, this new credit line had not been used. As per note 39(b), the credit line was withdrawal on April 1<sup>st</sup>, 2020.

The table below shows Braskem’s financial liabilities by maturity, including the amounts due under the Leniency Agreement (Note 25). These amounts are gross and undiscounted and include contractual interest payments, therefore 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	9,194,081	3,837			9,197,918
Borrowings	857,768	2,277,351	7,198,320	40,087,917	50,421,356
Debentures	51,348	126,754	143,307	28,703	350,112
Braskem Idesa borrowings	806,378	1,743,252	2,351,076	9,504,803	14,405,509
Derivatives	49,251	76,791	92,287	435	218,764
Loan to non-controlling shareholder of Braskem Idesa				2,395,887	2,395,887
Other financial liabilities	534,456				534,456
Leniency agreement (Note 25)	363,720	376,294	1,043,168	175,058	1,958,240
Lease	665,164	565,824	1,174,827	710,044	3,115,859
<b>At December 31, 2019</b>	<b>12,522,166</b>	<b>5,170,103</b>	<b>12,002,985</b>	<b>52,902,847</b>	<b>82,598,101</b>

#### 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 the case of liquidity, capital is not managed at the Parent Company level, but only at the level of the consolidated entities, with the exception of the liquidity and capital of Braskem Idesa, whose specific management is concentrated at the Braskem Idesa level.

#### 5 Cash and cash equivalents

		2019	2018
Cash			
Domestic market		13,495	47,735
Foreign market	(i)	2,289,736	2,181,229
Cash equivalents:			
Domestic market		1,963,185	1,754,561
Foreign market	(i)	2,537,464	1,564,112
Total		<b>6,803,880</b>	<b>5,547,637</b>

(i) On December 31, 2019, it includes cash of R\$598,591 and R\$418,644 of cash equivalents (R\$963,357 on December 31, 2018) of the subsidiary Braskem Idesa, which cannot be used by the other subsidiaries of the Company.

This item includes cash, bank deposits and highly liquid financial investments available for redemption within three months from the date of purchase. These assets are convertible into a known cash amount and are subject to insignificant risk of change in value.

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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 (time deposit).

## 6 Financial investments

	<u>2019</u>	<u>2018</u>
<b>Amortized cost</b>		
Time deposit investments	38,759	49,630
<b>Fair value through profit or loss</b>		
<i>LFT's and LF's</i>	(i) 1,588,426	2,247,272
Restricted funds investments	(ii) 9,708	9,998
Other	60,319	60,711
<b>Total</b>	<u><b>1,697,212</b></u>	<u><b>2,367,611</b></u>
Current assets	1,687,504	2,357,613
Non-current assets	9,708	9,998
<b>Total</b>	<u><b>1,697,212</b></u>	<u><b>2,367,611</b></u>

- (i) 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.
- (ii) 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 derecognized. At December 31, 2019, total amount of the operation was R\$ 2.0 billion.

	<u>Note</u>	<u>2019</u>	<u>2018</u>
Customers			
Domestic market			
Third parties		1,049,412	1,402,638
Related parties	9	8,814	22,806
		<u>1,058,226</u>	<u>1,425,444</u>
Foreign market			
Third parties		1,477,748	1,901,184
		<u>1,477,748</u>	<u>1,901,184</u>
Allowance for doubtful accounts	(i)	(229,323)	(233,625)
<b>Total</b>		<u><b>2,306,651</b></u>	<u><b>3,093,003</b></u>
Current assets		2,285,750	3,075,218
Non-current assets		20,901	17,785
<b>Total</b>		<u><b>2,306,651</b></u>	<u><b>3,093,003</b></u>

- (i) Company's expected credit losses are determined based on the following stages:

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Stage 1 – when the securities are still performing in 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; in 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.

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:

		<b>Estimated loss percentage</b>	<b>Trade accounts receivable</b>	<b>Allowance for doubtful accounts</b>
Stage 1 (Performing)	Operation risk 1	Minimum risk	1,635,553	
	Operation risk 2	Minimum risk	337,044	
	Operation risk 3	0.24%	201,126	485
	Operation risk 4	0.57%	126,250	720
	Operation risk 5	100%	1,778	1,778
			<b>2,301,751</b>	<b>2,983</b>
Stage 2 (Significant Increase in Loss Risk)	1st Renegotiation lower than 24 months	24% or 100%	6,631	1,717
	2nd Renegotiation greater than 24 months	91% or 100%	1,558	1,558
	Legal	100%	170,698	170,698
			<b>178,887</b>	<b>173,973</b>
Stage 3 (No payment performance - Indicative of impairment)	Between 90 and 180 days	50% or 100%	6,126	3,157
	Above 180 days	100%	49,210	49,210
			<b>55,336</b>	<b>52,367</b>
<b>Total</b>			<b>2,535,974</b>	<b>229,323</b>

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The changes in the allowance for doubtful accounts are presented below:

	<u>2019</u>	<u>2018</u>
Balance of provision at the beginning of the year	(233,625)	(350,025)
Provision in the year	(59,885)	(24,604)
Reversal in the year	45,501	124,579
Write-offs	18,686	16,425
Balance of provision at the end of the year	<u>(229,323)</u>	<u>(233,625)</u>

The breakdown of trade accounts receivable by maturity is as follows:

	<u>2019</u>	<u>2018</u>
Accounts receivables not past due	2,001,326	2,616,104
Past due securities:		
Up to 90 days	318,852	492,265
91 to 180 days	15,368	10,941
As of 180 days	200,428	207,318
	<u>2,535,974</u>	<u>3,326,628</u>
Allowance for doubtful accounts	(229,323)	(233,625)
Total customers portfolio	<u><b>2,306,651</b></u>	<u><b>3,093,003</b></u>

## 8 Inventories

	<u>2019</u>	<u>2018</u>
Finished goods	4,634,192	5,542,220
Raw materials, production inputs and packaging	1,665,797	1,578,523
Maintenance materials	608,693	465,684
Advances to suppliers	68,382	93,445
Imports in transit	664,345	838,099
Total	<u><b>7,641,409</b></u>	<u><b>8,517,971</b></u>
Current assets	7,625,084	8,486,577
Non-current assets	16,325	31,394
Total	<u><b>7,641,409</b></u>	<u><b>8,517,971</b></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, reduced by all costs of sale, projected for the period during which it expects to sell the product. This period is determined based on historical data for turnover of the respective inventory.



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The effect of the provision for inventories in 2019 and 2018 is shown below:

	<u>2019</u>	<u>2018</u>
Additions	(72,672)	(23,674)
Reversals	10,636	14,721
Total	<u>(62,036)</u>	<u>(8,953)</u>



**(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 transaction or R\$60,000 collectively per 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) associates 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 Santa Luzia S.A. ("USL")
- Odebrecht Engenharia & Construção S.A. ("OEC")
- 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").

**Non-controlling shareholders of Braskem Idesa:**

- Etileno XXI, S.A. de CV.
- Grupo Idesa, S.A. de CV.

During 2019 and 2018, the main transactions between the Company and related parties under normal market terms and conditions, are as follows:

- Odebrecht and its subsidiaries:
  - (i) 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. In August 2019, the company Odebrecht Transport S.A. sold Liquiport to the company Terminal Portuário de Espírito Santo. The payments made during the year to the date of sale amounted to R\$5,633 (R\$5,844 in 2018).

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(ii) In January 2019, the Company signed an amendment to the agreement entered into in December 2017 with Agro Energia Santa Luzia S.A. - USL, Usina Conquista do Pontal S. A. - UCP, Atvos Agroindustrial S. A. and Brenco Companhia Brasileira de Energia Renovável, for the purchase of feedstock for future delivery between January and March 2019. This amendment involved an advance of R\$100,413, which, on December 31, 2019, did not record any balance.

● Petrobras and its subsidiaries:

(i) Since December 2015, the Company has maintained an agreement with Petrobras for the annual supply of up to 7 million tons of petrochemical naphtha, which has a duration of five years.

(ii) Since December 2000, Braskem has maintained feedstock supply agreements for ethane and propane with Petrobras. These agreements have different expiration dates, between May 2021 and April 2028, with prices based on international references to ensure the competitiveness of the feedstock. If renewed, the same terms and conditions currently in force will be maintained.

(iii) Braskem maintains agreements for the sale of gasoline to Petrobras Distribuidora S.A., which is renewed on a monthly basis. Sales in 2019 amounted to R\$1,011,839 (R\$1,122,417 in 2018).

(iv) In July 2019, Braskem entered into a natural gas purchase agreement with CDGN LOGÍSTICA S.A., whose effective term is five years and maximum value is estimated at R\$210,000.

(v) In December 2019, an amendment to the natural gas purchase agreement was signed with Companhia de Gás da Bahia (“BahiaGás”). The term of the agreement is from January to December 2020 and the amended agreement amount is R\$820,000.

● Braskem joint venture:

(i) In 2019, sales of gasoil to RPR amounted to R\$37,873. The product is used as feedstock in the diesel production process (R\$127,342 in 2018).

(ii) Sales of gasoline to RPR are negotiated monthly. In 2019, these sales amounted to R\$257,295 (R\$440,801 in 2018).

● Non-controlling shareholders of Braskem Idesa

Loan payable, maturing December 2029 and 7% p.a., to the non-controlling shareholder. These proceeds were used by Braskem Idesa to fund its construction project.

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## (b) Key management personnel

Statement of profit or loss transactions	2019	2018	2017
<b>Remuneration</b>			
Short-term benefits	70,366	60,922	60,303
Post-employment benefit	1,104	989	664
Long term incentive plan	14,724	4,404	
<b>Total</b>	<b>86,194</b>	<b>66,315</b>	<b>60,967</b>

## 10 Taxes recoverable

		2019	2018
<b>Parent Company and subsidiaries in Brazil</b>			
IPI		477	9,050
Value-added tax on sales and services (ICMS) - normal operations	(a)	255,945	427,331
ICMS - credits from PP&E		166,824	170,998
Social integration program (PIS) and social contribution on revenue (COFINS) - normal operations		45,604	482
PIS and COFINS - credits from PP&E		316,973	255,739
REINTEGRA program	(b)	19,848	20,615
Federal tax credits	(c)	2,459,293	688,111
Other		5,434	2,852
<b>Foreign subsidiaries</b>			
Value-added tax ("IVA")		217,630	173,051
Other		7,701	7,750
<b>Total</b>		<b>3,495,729</b>	<b>1,755,979</b>
Current assets		1,238,011	423,188
Non-current assets		2,257,718	1,332,791
<b>Total</b>		<b>3,495,729</b>	<b>1,755,979</b>

## (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, 2015;
- (ii) 1%, between March 1, 2015 and November 30, 2015;
- (iii) 0.1% between December 1, 2015 and December 31, 2016;
- (iv) 2% between January 1, 2017 and May 31, 2018; and
- (v) 0.1% as of June 1, 2018.

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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.

At the year ended December 31, 2019, the Company recorded credits in the amount of R\$9,157 (R\$69,055 in 2018) and offset the amount of R\$9,532 (R\$144,957 in 2018). In the Statement of Operations, credits were recognized in the item "Cost of Products Sold."

**(c) Recovery of Federal Tax Credits**

The main tax credit refers to the exclusion of ICMS tax from the PIS/COFINS tax base. During 2019, a lawsuit of Braskem S.A. and lawsuits of acquired companies were certified as final and unappealable, the oldest period retroactive to 1991. The effects of these decisions were assessed by the Company and, during 2019, a total of R\$2,048,782 was recognized related to PIS and COFINS taxes, of which R\$1,904,206 was recorded under "Other operating income (expenses)" and R\$207,582 under "Financial income."

The balance on December 31, 2019 is R\$2,350,817 (current assets of R\$783,199 and non current assets of R\$1,567,618).

The Company has lawsuits related to other acquired companies discussing the same tax matter, for which there was no final judgment yet. The oldest period of these lawsuits retroactive to February 1999, the calculations to estimate the tax credit have not been finalized.

**11 Investments**

**(a) Information on investments**

		Interest in total and voting capital (%) Direct and indirect	Net profit (loss) for the year		Equity 2018		
			2019	2018		2017	2019
<b>Jointly-controlled investment</b>							
RPR	(i)	33.20	29,687	6,358	106,109	93,025	99,672
Odebrecht Comercializadora de Energia S.A. ("OCE")	(ii)			(48)	(543)		
<b>Associate</b>							
Borealis	(iii)	20.00	17,622	(2,900)	17,752	164,086	163,884

(i) RPR – its main activities are the refine, processing and sale and import of oil, its byproducts and correlated products.

(ii) Terminated in June 2018.

(iii) Borealis – its main activities are the production and commercialization of petrochemical byproducts and correlated products.

**(b) Changes in investments**

	Balance at 2018	Dividends and interest on equity	Equity in results of investees	Equity valuation adjustments	Other	Balance at 2019
	<b>Domestic associate</b>					
Borealis	32,776	(3,002)	3,042			32,816
RPR	33,094	(4,295)	9,857	(7,769)		30,887
Other	84	-			56	140
	<b>65,954</b>	<b>(7,297)</b>	<b>12,899</b>	<b>(7,769)</b>	<b>56</b>	<b>63,843</b>

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## (c) Impact on the consolidation of Braskem Idesa

In compliance with IFRS 12, the Company is presenting the financial statements of the subsidiary in which the non-controlling shareholder holds interest, and the material effects on the Company's consolidated statements.

Balance sheet	Consolidated Braskem without the effect of Braskem Idesa consolidated		Braskem Idesa consolidated (i)		Eliminations		Consolidated	
	2019	2018	2019	2018	2019	2018	2019	2018
<b>Assets</b>								
<b>Current</b>								
Cash and cash equivalents	5,786,645	4,584,280	1,017,235	963,357			6,803,880	5,547,637
Financial investments	1,687,504	2,357,613					1,687,504	2,357,613
Trade accounts receivable	1,973,414	2,574,791	331,838	627,879	(19,502)	(127,452)	2,285,750	3,075,218
Inventories	7,028,641	7,907,429	596,443	579,148			7,625,084	8,486,577
Taxes recoverable	1,084,055	313,499	153,956	109,689			1,238,011	423,188
Income tax and social contribution	439,933	423,900					439,933	423,900
Derivatives	4,712	6,714		21,000			4,712	27,714
Judicial deposits	2,571,683						2,571,683	
Other receivables	393,593	372,846	339,404	319,122			732,997	691,968
	<b>20,970,180</b>	<b>18,541,072</b>	<b>2,438,876</b>	<b>2,620,195</b>	<b>(19,502)</b>	<b>(127,452)</b>	<b>23,389,554</b>	<b>21,033,815</b>
<b>Non-current</b>								
Taxes recoverable	2,257,652	1,332,730	66	61			2,257,718	1,332,791
Income tax and social contribution	239,847	241,788					239,847	241,788
Deferred tax	1,713,837	114,000	948,759	990,158			2,662,596	1,104,158
Related parties	6,729,486	6,137,206			(ii) (6,729,486)	(6,137,206)		
Derivatives	17,877			46,664			17,877	46,664
Judicial deposits	1,508,880	169,536					1,508,880	169,536
Other receivables	369,137	377,356	505	553			369,642	377,909
Property, plant and equipment	20,488,870	20,102,981	12,537,615	12,365,063 (iii)	(711,304)	(708,154)	32,315,181	31,759,890
Intangible	2,568,347	2,562,722	193,741	178,260			2,762,088	2,740,982
Right of use of assets	2,309,506		296,148				2,605,654	
	<b>38,203,439</b>	<b>31,038,319</b>	<b>13,976,834</b>	<b>13,580,759</b>	<b>(7,440,790)</b>	<b>(6,845,360)</b>	<b>44,739,483</b>	<b>37,773,718</b>
<b>Total assets</b>	<b>59,173,619</b>	<b>49,579,391</b>	<b>16,415,710</b>	<b>16,200,954</b>	<b>(7,460,292)</b>	<b>(6,972,812)</b>	<b>68,129,037</b>	<b>58,807,533</b>
<b>Liabilities and shareholders' equity</b>								
<b>Current</b>								
Trade payables	8,903,168	8,099,755	233,323	368,949	(19,502)	(127,452)	9,116,989	8,341,252
Borrowings	774,924	737,436					774,924	737,436
Debentures	46,666	27,732					46,666	27,732
Braskem Idesa Borrowings			744,408	10,504,592			744,408	10,504,592
Payroll and related charges	598,147	617,079	25,576	28,317			623,723	645,396
Taxes payable	306,453	419,204	16,433	12,801			322,886	432,005
Income tax and social contribution	34,856	69,268					34,856	69,268
Lease	619,217	9,767	57,074				676,291	9,767
Provision - geological event in Alagoas	1,450,476						1,450,476	
Other financial liabilities	516,933						516,933	
Other payables	1,798,865	1,922,781	109,143	75,849			1,908,008	1,998,630
	<b>15,049,705</b>	<b>11,903,022</b>	<b>1,185,957</b>	<b>10,990,508</b>	<b>(19,502)</b>	<b>(127,452)</b>	<b>16,216,160</b>	<b>22,766,078</b>
<b>Non-current</b>								
Loan agreements	28,242,052	24,160,720					28,242,052	24,160,720
Braskem Idesa Borrowings			9,237,318				9,237,318	
Debentures	227,901	266,777					227,901	266,777
Accounts payable to related parties			6,714,236	6,147,768 (ii)	(6,714,236)	(6,147,768)		
Loan to non-controlling shareholders of Braskem Idesa			(v) 2,395,887	2,183,830			2,395,887	2,183,830
Deferred income tax and social contribution	273,036	381,582					273,036	381,582
Provision for losses on subsidiaries	3,082,173	2,871,819			(iv) (3,082,173)	(2,871,819)		
Lease	1,767,314	90,790	233,291				2,000,605	90,790
Provision - geological event in Alagoas	1,932,591						1,932,591	
Other payables	3,625,695	3,292,738	33,086	10,348			3,658,781	3,303,086
	<b>39,150,762</b>	<b>31,064,426</b>	<b>18,613,818</b>	<b>8,341,946</b>	<b>(9,796,409)</b>	<b>(9,019,587)</b>	<b>47,968,171</b>	<b>30,386,785</b>
<b>Shareholders' equity</b>								
Attributable to the Company's shareholders	4,886,089	6,531,070	(3,384,065)	(3,131,500)	3,383,274	3,131,500	4,885,298	6,531,070
Non-controlling interest in subsidiaries	87,063	80,873			(1,027,655)	(957,273)	(940,592)	(876,400)
	<b>4,973,152</b>	<b>6,611,943</b>	<b>(3,384,065)</b>	<b>(3,131,500)</b>	<b>2,355,619</b>	<b>2,174,227</b>	<b>3,944,706</b>	<b>5,654,670</b>
<b>Total liabilities and shareholders' equity</b>	<b>59,173,619</b>	<b>49,579,391</b>	<b>16,415,710</b>	<b>16,200,954</b>	<b>(7,460,292)</b>	<b>(6,972,812)</b>	<b>68,129,037</b>	<b>58,807,533</b>

(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 payable, maturing December 2029 and 7% p.a., to the non-controlling shareholder. These proceeds were used by Braskem Idesa to fund its construction project.

Notes to the consolidated financial statements  
at December 31, 2019

All amounts in thousands, except as otherwise stated

## Statement of profit or loss

	Consolidated Braskem			Braskem Idesa consolidated			Eliminations			Consolidated		
	Ex consolidated	Braskem Idesa		2019	2018	2017	2019	2018	2017	2019	2018	2017
	2019	2018	2017	2019	2018	2017	2019	2018	2017	2019	2018	2017
		Restated									Restated	
<b>Net revenue</b>	<b>49,961,286</b>	<b>54,851,243</b>	<b>46,207,109</b>	<b>3,050,420</b>	<b>3,766,371</b>	<b>3,656,801</b>	<b>(688,181)</b>	<b>(617,748)</b>	<b>(603,316)</b>	<b>52,323,525</b>	<b>57,999,866</b>	<b>49,260,594</b>
Cost of products sold	(44,111,980)	(44,928,721)	(34,675,494)	(2,509,060)	(2,314,998)	(2,125,031)	741,922	667,062	623,117	(45,879,118)	(46,576,657)	(36,177,408)
	<b>5,849,306</b>	<b>9,922,522</b>	<b>11,531,615</b>	<b>541,360</b>	<b>1,451,373</b>	<b>1,531,770</b>	<b>53,741</b>	<b>49,314</b>	<b>19,801</b>	<b>6,444,407</b>	<b>11,423,209</b>	<b>13,083,186</b>
<b>Income (expenses)</b>												
Selling and distribution	(1,582,794)	(1,495,507)	(1,274,362)	(200,661)	(193,672)	(171,791)				(1,783,455)	(1,689,179)	(1,446,153)
(Loss) reversals for impairment of trade accounts receivable	(4,772)	87,008	(13,455)	(2,297)						(7,069)	87,008	(13,455)
General and administrative	(2,082,002)	(1,669,277)	(1,336,072)	(141,269)	(123,576)	(122,043)	(909)	(332)	23,843	(2,224,180)	(1,793,185)	(1,434,272)
Research and development	(247,730)	(219,256)	(167,456)							(247,730)	(219,256)	(167,456)
Results from equity investments	(326,427)	76,821	191,949				336,645	(77,709)	(151,993)	10,218	(888)	39,956
Other income	2,102,684	656,725	282,629	305,750	370,497	32,305				2,408,434	1,027,222	314,934
Other expenses	(4,466,450)	(502,795)	(1,169,814)	19,508	(51,918)					(4,446,942)	(554,713)	(1,169,814)
	<b>(758,185)</b>	<b>6,856,241</b>	<b>8,045,034</b>	<b>522,391</b>	<b>1,452,704</b>	<b>1,270,241</b>	<b>389,477</b>	<b>(28,727)</b>	<b>(108,349)</b>	<b>153,683</b>	<b>8,280,218</b>	<b>9,206,926</b>
<b>Financial results</b>												
Financial expenses	(3,009,471)	(2,227,544)	(3,044,668)	(1,205,412)	(1,090,019)	(973,952)	332,098	310,012	271,403	(3,882,785)	(3,007,551)	(3,747,217)
Financial income	1,135,118	867,185	850,367	47,534	31,879	24,666	(332,098)	(310,012)	(271,403)	850,554	589,052	603,630
Exchange rate variations, net	(1,768,850)	(2,014,205)	(936,804)	75,610	(232,064)	132,186	(31,280)	(10,714)	5,856	(1,724,520)	(2,256,983)	(798,762)
	<b>(3,643,203)</b>	<b>(3,374,564)</b>	<b>(3,131,105)</b>	<b>(1,082,268)</b>	<b>(1,290,204)</b>	<b>(817,100)</b>	<b>(31,280)</b>	<b>(10,714)</b>	<b>5,856</b>	<b>(4,756,751)</b>	<b>(4,675,482)</b>	<b>(3,942,349)</b>
<b>Profit (loss) before income tax and social contribution</b>	<b>(4,401,388)</b>	<b>3,481,677</b>	<b>4,913,929</b>	<b>(559,877)</b>	<b>162,500</b>	<b>453,141</b>	<b>358,197</b>	<b>(39,441)</b>	<b>(102,493)</b>	<b>(4,603,068)</b>	<b>3,604,736</b>	<b>5,264,577</b>
IR and CSL - current and deferred	1,873,207	(639,394)	(1,057,699)	89,463	(97,157)	(299,983)				1,962,670	(736,551)	(1,357,682)
	<b>1,873,207</b>	<b>(639,394)</b>	<b>(1,057,699)</b>	<b>89,463</b>	<b>(97,157)</b>	<b>(299,983)</b>				<b>1,962,670</b>	<b>(736,551)</b>	<b>(1,357,682)</b>
<b>Profit (loss) for the year</b>	<b>(2,528,181)</b>	<b>2,842,283</b>	<b>3,856,230</b>	<b>(470,414)</b>	<b>65,343</b>	<b>153,158</b>	<b>358,197</b>	<b>(39,441)</b>	<b>(102,493)</b>	<b>(2,640,398)</b>	<b>2,868,185</b>	<b>3,906,895</b>
<b>Discontinued operations results</b>												
Profit (loss) from discontinued operations			13,499									13,499
IR and CSL - current and deferred			(4,623)									(4,623)
			8,876									8,876
<b>Profit (loss) for the year</b>	<b>(2,528,181)</b>	<b>2,842,283</b>	<b>3,865,106</b>	<b>(470,414)</b>	<b>65,343</b>	<b>153,158</b>	<b>358,197</b>	<b>(39,441)</b>	<b>(102,493)</b>	<b>(2,640,398)</b>	<b>2,868,185</b>	<b>3,915,771</b>

**Notes to the consolidated financial statements  
at December 31, 2019**

All amounts in thousands, except as otherwise stated

Statement of cash flows	Consolidated Braskem			Braskem Idesa consolidated			Eliminations			Consolidated		
	Ex consolidated	Braskem Idesa		2019	2018	2017	2019	2018	2017	2019	2018	2017
Profit (loss) before income tax and social contribution	(4,401,388)	3,481,677	4,913,929	(559,877)	162,500	453,141	358,197	(39,441)	(102,493)	(4,603,068)	3,604,736	5,264,577
Adjustments for reconciliation of profit (loss)												
Depreciation, amortization and depletion	2,732,181	2,228,978	2,230,466	952,916	810,581	742,033	(52,832)	(48,982)	(43,644)	3,632,265	2,990,577	2,928,855
Results from equity investments	326,427	(76,821)	(191,949)				(336,645)	77,709	151,993	(10,218)	888	(39,956)
Interest and monetary and exchange variations, net	3,050,987	4,658,342	2,900,745	1,062,843	1,344,888	802,825	31,280	10,714	(5,856)	4,145,110	6,013,944	3,697,714
Gain from divestment in subsidiary			(276,816)									(276,816)
Reversal of provisions	320,439	23,725	(223,340)							320,439	23,725	(223,340)
Provisions - Leniency agreement			375,476									375,476
Provision - geological event in Alagoas PIS and COFINS credits - exclusion of ICMS from the calculation basis	3,383,067									3,383,067		
Loss (reversals) for impairment of trade accounts receivable	(1,904,206)	(519,830)								(1,904,206)	(519,830)	
Provision for losses and write-offs of long-lived assets	7,069	(87,008)	13,455							7,069	(87,008)	13,455
	224,825	69,270	212,759	379	3,200	425				225,204	72,470	213,184
	<b>3,739,401</b>	<b>9,778,333</b>	<b>9,954,725</b>	<b>1,456,261</b>	<b>2,321,169</b>	<b>1,998,424</b>				<b>5,195,662</b>	<b>12,099,502</b>	<b>11,953,149</b>
Changes in operating working capital												
Other financial assets	(3,680,460)									(3,680,460)		
Financial investments	797,445	98,349	(953,228)							797,445	98,349	(953,228)
Trade accounts receivable	677,176	251,683	(1,317,929)	325,820	(7,348)	(373,066)	(107,950)	(20,917)	79,148	895,046	223,418	(1,611,847)
Inventories	825,236	(1,337,618)	(1,387,696)	42,581	(199,672)	36,668				867,817	(1,537,290)	(1,351,028)
Taxes recoverable	1,216,225	1,068,637	415,923	(20,798)	(46,395)	53,370				1,195,427	1,022,242	469,293
Prepaid expenses	85,549	(67,051)	(21,732)	117,183	(38,112)	(8,789)				202,732	(105,163)	(30,521)
Other receivables	(242,727)	(12,596)	34,500	(30,938)	(236,392)	(8,698)				(273,665)	(248,988)	25,802
Trade payables	330,633	1,113,381	(1,444,468)	(156,138)	209,077	(119,033)	107,950	20,917	(79,148)	282,445	1,343,375	(1,642,649)
Taxes payable	(485,309)	(828,222)	(132,697)	(84,484)	(149,026)	(82,817)				(569,793)	(977,248)	(215,514)
Advances from customers	176,189	(218,623)	(3,089)	21,776	18,665	(10,423)				197,965	(199,958)	(13,512)
Leniency agreement	(341,605)	(330,006)	(1,343,803)							(341,605)	(330,006)	(1,343,803)
Sundry provisions	(226,519)	(116,458)	194,596	10,971						(215,548)	(116,458)	194,596
Other payables	348,916	415,468	(70,546)	13,287	417,759	126,087				362,203	833,227	55,541
<b>Cash generated (used) from operations</b>	<b>3,220,150</b>	<b>9,815,277</b>	<b>3,924,556</b>	<b>1,695,521</b>	<b>2,289,725</b>	<b>1,611,723</b>				<b>4,915,671</b>	<b>12,105,002</b>	<b>5,536,279</b>
Interest paid	(1,576,526)	(1,328,420)	(1,648,971)	(661,919)	(588,381)	(505,082)				(2,238,445)	(1,916,801)	(2,154,053)
Income tax and social contribution paid	(403,614)	(937,557)	(919,236)	(8,337)	(274)	(1,370)				(411,951)	(937,831)	(920,606)
<b>Net cash generated (used) by operating activities</b>	<b>1,240,010</b>	<b>7,549,300</b>	<b>1,356,349</b>	<b>1,025,265</b>	<b>1,701,070</b>	<b>1,105,271</b>				<b>2,265,275</b>	<b>9,250,370</b>	<b>2,461,620</b>
Proceeds from the sale of fixed assets and intangible assets	12,590	95,133	39,660							12,590	95,133	39,660
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	3,513	41,791								3,513	41,791	
Additions to investments in subsidiaries			(608,181)									(608,181)
Acquisitions to property, plant and equipment and intangible assets	(2,578,558)	(2,635,906)	(2,185,567)	(103,964)	(70,422)	(87,630)				(2,682,522)	(2,706,328)	(2,273,197)
Other investments		(2,167)	(14,683)								(2,167)	(14,683)
<b>Net cash used in investing activities</b>	<b>(2,562,455)</b>	<b>(2,417,895)</b>	<b>(2,318,771)</b>	<b>(103,964)</b>	<b>(70,422)</b>	<b>(87,630)</b>				<b>(2,666,419)</b>	<b>(2,488,317)</b>	<b>(2,406,401)</b>
Short-term and long-term debt												
Acquired	20,586,103	4,301,626	8,492,341							20,586,103	4,301,626	8,492,341
Payments	(17,425,409)	(6,592,197)	(8,779,091)							(17,425,409)	(6,592,197)	(8,779,091)
Derivative transactions												
Payments			(810,279)									(810,279)
Braskem Idesa borrowings												
Acquired				3,497,622		187,959				3,497,622		187,959
Payments				(4,398,453)	(812,929)	(1,080,502)				(4,398,453)	(812,929)	(1,080,502)
Related parties												
Acquired loans (payment of loans )		72,880	20,637		(72,880)	(20,637)						
Lease	(407,320)			(46,870)						(454,190)		
Dividends paid	(668,904)	(1,499,900)	(998,893)							(668,904)	(1,499,900)	(998,893)
Other financial liabilities	499,999									499,999		
<b>Cash generated (used) in financing activities</b>	<b>2,584,469</b>	<b>(3,717,591)</b>	<b>(2,075,285)</b>	<b>(947,701)</b>	<b>(885,809)</b>	<b>(913,180)</b>				<b>1,636,768</b>	<b>(4,603,400)</b>	<b>(2,988,465)</b>
Exchange variation on cash of foreign subsidiaries	(59,659)	(309,941)	17,849	80,278	(76,168)	(11,374)				20,619	(386,109)	6,475
<b>Increase in cash and cash equivalents</b>	<b>1,202,365</b>	<b>1,103,873</b>	<b>(3,019,858)</b>	<b>53,878</b>	<b>668,671</b>	<b>93,087</b>				<b>1,256,243</b>	<b>1,772,544</b>	<b>(2,926,771)</b>
Represented by												
Cash and cash equivalents at the beginning for the year	4,584,280	3,480,407	6,500,265	963,357	294,686	201,599				5,547,637	3,775,093	6,701,864
Cash and cash equivalents at the end for the year	5,786,645	4,584,280	3,480,407	1,017,235	963,357	294,686				6,803,880	5,547,637	3,775,093
<b>Increase in cash and cash equivalents</b>	<b>1,202,365</b>	<b>1,103,873</b>	<b>(3,019,858)</b>	<b>53,878</b>	<b>668,671</b>	<b>93,087</b>				<b>1,256,243</b>	<b>1,772,544</b>	<b>(2,926,771)</b>

Notes to the consolidated financial statements  
at December 31, 2019

All amounts in thousands, except as otherwise stated

12 Property, plant and equipment

(a) Change

	Land	Buildings and Improvements	Machinery, Equipment and Facilities	Projects and Stoppage in Progress (i)	Other	Total
<b>Balance as of December 31, 2017</b>	<b>500,646</b>	<b>4,570,497</b>	<b>20,583,099</b>	<b>3,274,665</b>	<b>832,703</b>	<b>29,761,610</b>
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)
<b>Balance as of January 1, 2018</b>	<b>569,548</b>	<b>4,411,957</b>	<b>20,656,624</b>	<b>3,461,271</b>	<b>662,210</b>	<b>29,761,610</b>
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
Depreciation, amortization and depletion		(81,492)	(293,309)		(21,831)	(396,632)
Transfers by concluded projects		16,477	1,022,560	(1,106,975)	67,938	
Transfers to intangible				(2,922)	(1,539)	(4,461)
Disposals		(2,009)	(40,503)	(3,873)	(1,675)	(48,060)
Cost		(2,983)	(175,562)	(3,873)	(9,475)	(191,893)
Depreciation, amortization and depletion		974	135,059		7,800	143,833
Depreciation, amortization and 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, amortization and depletion		(2,026,559)	(22,238,530)		(1,165,807)	(25,430,896)
<b>Balance as of December 31, 2018</b>	<b>602,299</b>	<b>4,649,990</b>	<b>20,786,208</b>	<b>5,102,393</b>	<b>619,000</b>	<b>31,759,890</b>
Acquisitions		1,280	61,213	2,658,070	3,701	2,724,264
Capitalized financial charges				198,201		198,201
Foreign currency translation adjustment	11,508	289,118	675,400	105,701	3,536	1,085,263
Cost	11,508	366,939	860,672	105,701	10,109	1,354,929
Depreciation, amortization and depletion		(77,821)	(185,272)		(6,573)	(269,666)
Transfers by concluded projects		21,382	884,606	(993,024)	87,036	
Transfers to inventory				(47,696)	(2,866)	(50,562)
Transfers to intangible				(6,433)		(6,433)
Cost				(6,433)		(6,433)
Disposals		(634)	(223,514)	(7,739)	(3,659)	(235,546)
Cost		(1,178)	(392,033)	(7,739)	(31,264)	(432,214)
Depreciation, amortization and depletion		544	168,519		27,605	196,668
Depreciation, amortization and depletion		(388,869)	(2,534,637)		(138,395)	(3,061,901)
Transfers to right of use of assets					(97,995)	(97,995)
Cost					(125,497)	(125,497)
Amortization					27,502	27,502
Net book value	11,508	(77,723)	(1,136,932)	1,763,008	473,224	32,315,181
Cost	613,807	7,064,972	44,439,196	7,009,473	1,726,026	60,853,474
Accumulated depreciation, amortization and depletion		(2,492,705)	(24,789,920)		(1,255,668)	(28,538,293)
<b>Balance as of December 31, 2019</b>	<b>613,807</b>	<b>4,572,267</b>	<b>19,649,276</b>	<b>7,009,473</b>	<b>470,358</b>	<b>32,315,181</b>

- (i) On December 31, 2019, 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\$1,400,667), capitalized financial charges (R\$419,244), inventories of spare parts (R\$430,418), strategic projects ongoing in Brazil (R\$98,879) and in Braskem America (R\$2,611,034). The remainder corresponds mainly to various projects for maintaining the production capacity of plants.

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.

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Based on the analysis cited in Note 3.2.3(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, of Braskem and its subsidiaries, using: (i) the average rate of the 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 2019, charges amounting to R\$198,201 (R\$178,055 in 2018) were capitalized. The average rate of these charges in the year was 6.47% p.a. (8.78% p.a. in 2018).

In compliance with IFRS 7.43, at December 31, 2019, acquisition of property, plant and equipment with payment installments is R\$ 103,315.

**(b) Property, plant and equipment by country**

	<u>2019</u>	<u>2018</u>
Brazil	15,682,081	16,278,608
Mexico	11,826,309	11,656,910
United States of America	4,545,974	3,539,495
Germany	258,291	273,987
Other	2,526	10,890
	<u><b>32,315,181</b></u>	<u><b>31,759,890</b></u>

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13 Intangible assets

	Goodwill	Brands and Patents	Software licenses	Customers and Suppliers Agreements	Total
<b>Balance as of December 31, 2017</b>	<b>2,058,874</b>	<b>230,087</b>	<b>192,140</b>	<b>246,396</b>	<b>2,727,497</b>
Cost - previously disclosed	3,187,722	349,316	607,528	772,253	4,916,819
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 - previously disclosed	(1,128,848)	(119,229)	(415,388)	(525,857)	(2,189,322)
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)
<b>Balance as of January 1, 2018</b>	<b>2,058,874</b>	<b>227,350</b>	<b>201,239</b>	<b>240,034</b>	<b>2,727,497</b>
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 by projects and stoppage in progress		2,532	1,929		4,461
Disposals				(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)
<b>Balance as of December 31, 2018</b>	<b>2,058,874</b>	<b>246,297</b>	<b>234,132</b>	<b>201,679</b>	<b>2,740,982</b>
Acquisitions		112	61,414		61,526
Foreign currency translation adjustment		12,957	2,704		15,661
Cost		13,919	6,356		20,275
Amortization		(962)	(3,652)		(4,614)
Transfers from property, plant and equipment projects and stoppage in progress			6,433		6,433
Other					
Cost			(4)		(4)
Amortization			4		4
Amortization		(7,751)	(32,747)	(22,016)	(62,514)
Net book value	2,058,874	251,615	271,936	179,663	2,762,088
Cost	3,187,678	451,415	874,159	392,180	4,905,432
Accumulated amortization	(1,128,804)	(199,800)	(602,223)	(212,517)	(2,143,344)
<b>Balance as of December 31, 2019</b>	<b>2,058,874</b>	<b>251,615</b>	<b>271,936</b>	<b>179,663</b>	<b>2,762,088</b>
<b>Average annual rates of amortization</b>		<b>4.96%</b>	<b>12.40%</b>	<b>6.00%</b>	

The Company adopts the following accounting practice for each class of intangible assets:

(a) Goodwill

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 amortized until December 2008. As from 2009, it has been subject to annual impairment tests.

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On December 31, 2019, the Company tested the balances of goodwill shown in the table below for impairment:

	<u>Goodwill</u>
<b>CGU</b>	
Southern petrochemical complex	1,390,741
Northeastern petrochemical complex	475,780
Vinyls unity	192,353

The determination of value in use involves judgements and assumptions to determine the discounted cash flow as described in Note 3.2.3(b). The WACC used was 10.69% p.a. The inflation rate considered for perpetuity was 3.5%.

The recoverable amount is based on the fair value less cost of disposal, future capital expenditure and its associated costs, based on the discounted cash flow consistent with a market participant perspective, less incremental costs directly attributable to the disposal. The main assumptions consider a post-tax discount rate under current market conditions and an average growth rate of 2% p.a.

Given the potential impact on cash flows of the “discount rate” and “perpetuity”, the Company conducted a sensitivity analysis based on changes in these variables considering +0.5% on discount rate and -0.5% on perpetuity. Based on the analyses conducted by Management, there was no need to record impairment losses for the balances of these assets in the year ended December 31, 2019.

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 produced by specialized third party consulting firm, which are reviewed and supplemented based on Management’s experience. Also, 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 specialized third party 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.

**(b) Intangible assets with definite 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 definite 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 are accounted for in profit or loss as they are incurred, and development expenses are capitalized when projects are viable.

**(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 definite 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 definite useful life estimated between 5 and 10 years and is amortized using the straight-line method. Costs associated with maintaining computer software programs are recognized in profit or loss as incurred.

**(c) Intangible assets by country**

	<u>2019</u>	<u>2018</u>
Brazil	2,521,941	2,510,503
Mexico	193,741	178,261
United States of America	24,313	26,791
Germany	22,077	25,373
Other	16	54
	<u>2,762,088</u>	<u>2,740,982</u>

**14 Right-of-use assets and Lease Liability****(a) Right-of-use assets**

The Company leases various offices, railcars, vessels, pieces of equipment and vehicles. Such leases are negotiated individually and are subject to various terms and conditions.

The right-of-use asset is measured at the cost composed of:

- Amount initially measured of the lease liabilities;
- Any payment made up to the start of the lease, deducting any incentive received;
- Any initial direct cost; and
- Renovation costs.

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Changes in right-of-use assets in 2019:

	<u>2018</u>	<u>Transfer of fixed assets</u>	<u>Initial Adoption 01/01/2019</u>	<u>Addition</u>	<u>Depreciation</u>	<u>Disposal</u>	<u>Foreign currency translation adjustment</u>	<u>2019</u>
Buildings and constructions			207,524	153,771	(27,759)	(122,488)	1,122	212,170
Computer equipment and goods		2,726	4,932	6,179	(1,446)		132	12,523
Machinery and equipment		7,956	526,318	344,928	(136,615)		661	743,248
Ships			906,495	150,670	(191,778)			865,387
Rail cars		87,313	633,492	103,169	(132,728)		54,794	746,040
Vehicles			35,479	1,073	(10,493)		227	26,286
<b>Total</b>		<u>97,995</u>	<u>2,314,240</u>	<u>759,790</u>	<u>(500,819)</u>	<u>(122,488)</u>	<u>56,936</u>	<u>2,605,654</u>

The expense for the short-term leases recognized in the 12-month period ended December 31, 2019 was R\$103,929.

The expense related to low-value leases recognized in the 12-month period ended December 31, 2019 was R\$1,070.

To optimize lease costs during the lease term, the Company must provide guaranteed residual amounts for the leased asset. For certain lease agreements for freight cars, which were classified until December 31, 2018 as financial leases, the Company guaranteed any difference between the flow of contractual payments and the fair value of these assets upon the end of the enforceable term, limited to R\$50,622 (US\$12,559) as of December 31, 2019 and R\$48,664 (US\$12,559) as of December 31, 2018.

**(b) Lease Liability**

The lease payments are deducted using the interest rate of the agreement. If this rate cannot be determined, the Company's incremental borrowing rate, which corresponds to the rate the Company would pay to take out any loan with similar term and guarantee, for obtaining a similar asset in a similar economic environment and conditions.

**Extension Options**

Some leases contains extension options exercisable by the Company. The extension options held are exercisable only by the Company and not by the lessors. The Company assesses at lease commencement date whether it is reasonably certain to exercise the options if there is a significant event or significant changes in circumstances within its control.

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Changes in lease liability

	<u>2019</u>
<b>Balance at December 31, 2018</b>	<b>100,557</b>
Initial adoption IFRS 16	2,191,908
<b>Balance at January 01, 2019</b>	<b>2,292,465</b>
Acquired	911,619
Disposals	(122,488)
Interests and monetary and exchange variations, net	121,061
Currency translation adjustments	56,805
Payments	(454,190)
Interest paid	(128,376)
<b>Balance at December 31, 2019</b>	<b>2,676,896</b>
Current liability	676,291
Non-current liability	2,000,605
<b>Total</b>	<b>2,676,896</b>

Payment Schedule

	<u>2019</u>
2021	484,956
2022	421,163
2023	316,218
2024	293,363
2025	177,118
2026 thereafter	307,787
<b>Total</b>	<b>2,000,605</b>

(c) Non-cash investing and financing activity transactions:

Net effect of additions/acquired and disposals of leasing that not affect the cash flow in 2019, in compliance with IFRS 16, is R\$ 580,055.

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15 Trade account payables

	Note	2019	2018
Trade payables:			
Domestic market			
Third parties		1,081,076	1,374,379
Related parties	9	155,980	177,175
		<u>1,237,056</u>	<u>1,551,554</u>
Foreign market			
Third parties	(i)	7,964,536	6,934,598
Present value adjustment - foreign market	(ii)	(80,766)	(107,648)
		<u>9,120,826</u>	<u>8,378,504</u>
Current liabilities		9,116,989	8,341,252
Non-current liabilities		3,837	37,252
		<u>9,120,826</u>	<u>8,378,504</u>

- (i) Considers R\$6.5 billion (R\$5.6 billion in 2018) in raw material purchases due in up to 360 days for which the Company provides letters of credit issued by financial institutions that indicate the suppliers as beneficiaries.
- (ii) The rate for calculating the Present Value Adjustment applied to the external market payments with terms equal to or longer than 90 day is calculated based on the average rate for lengthening the term of trade payables.

**16 Borrowings****(a) Borrowings (i)**

	<u>Annual financial charges</u>	<u>2019</u>	<u>2018</u>
<b>Foreign currency</b>			
Bonds	Note 16 (b)	24,583,325	21,930,575
Export prepayment	Note 16 (c)	863,293	810,542
Working capital	Argentine Peso exchange variation		48
Investments	Note 16 (d)	751,376	620,160
Other	Note 16 (e)	1,952,667	1,147,397
Transactions costs		(499,194)	(346,921)
		<u>27,651,467</u>	<u>24,161,801</u>
Current liabilities		676,831	610,922
Non-current liabilities		26,974,636	23,550,879
<b>Total</b>		<u>27,651,467</u>	<u>24,161,801</u>
<b>Local currency</b>			
Export credit notes	100.00 of CDI + 0.70	405,642	406,258
Commercial notes	100.00 of CDI + 0.85	554,307	
BNDES	4.00	19,998	52,081
BNDES	IPCA + 6.04	270,520	
BNB/ FINEP/ FUNDES/FINISA/FINAME	6.01	78,776	239,969
FINAME	TLP + 6.00	324	555
BNB-FNE (Fundo Constitucional de Financiamentos do Nordeste)	IPCA + interest between 2.39 and 2.78	5,582	
Fundo de Desenvolvimento do Nordeste (FDNE)	6.50	32,152	37,099
Other	19.14	237	426
Transactions costs		(2,029)	(33)
		<u>1,365,509</u>	<u>736,355</u>
Current liabilities		98,093	126,514
Non-current liabilities		1,267,416	609,841
<b>Total</b>		<u>1,365,509</u>	<u>736,355</u>
<b>Foreign currency and local currency</b>			
Current liabilities		774,924	737,436
Non-current liabilities		28,242,052	24,160,720
<b>Total</b>		<u>29,016,976</u>	<u>24,898,156</u>

(i) At December 31, 2109, the Company complied with all covenants.

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## (b) Bonds

Issue date		Issue amount US\$	Maturity	Interest (% per year)	2019	2018
May-2010	(i)	400,000	May-2020	7.00		81,434
May-2010	(i)	350,000	May-2020	7.00		1,370,156
October-2010		450,000	no maturity date	7.38	1,025,428	985,767
April-2011	(i)	750,000	April-2021	5.75		2,676,195
July-2011		500,000	July-2041	7.13	2,078,372	1,997,984
February-2012	(i)	250,000	April-2021	5.75		980,304
February-2012		250,000	no maturity date	7.38	1,025,428	985,767
May-2012	(ii)	500,000	May-2022	5.38	1,175,799	1,954,177
July-2012		250,000	July-2041	7.13	1,039,186	998,992
February-2014		500,000	February-2024	6.45	2,068,790	1,988,773
May-2014		250,000	February-2024	6.45	1,034,395	994,387
October-2017	(iii)	500,000	January-2023	3.50	847,715	1,969,609
October-2017		1,250,000	January-2028	4.50	5,145,440	4,947,030
November-2019	(iv)	1,500,000	January-2030	4.50	6,090,640	
November-2019	(v)	750,000	January-2050	5.88	3,052,132	
<b>Total</b>		<b>8,450,000</b>			<b>24,583,325</b>	<b>21,930,575</b>

(i) Prepaid.

(ii) Partially prepaid (US\$210,735).

(iii) Partially prepaid (US\$293,105).

(iv) The effective interest rate including transaction costs is 4.70% p.a.

(v) The effective interest rate including transaction costs is 5.95% p.a.

The Company and its subsidiaries may, from time to time, acquire in the secondary market bonds issued by the Company and/or its subsidiaries.

## (c) Export pre-payment

Issue date		Initial amount of the transaction (US\$ thousand)	Maturity	Charges (% per year)	2019	2018
January-2013	(i)	200,000	November-2022	US dollar exchange variation + semiannual Libor + 1.10		311,082
September-2017		135,000	March-2027	US dollar exchange variation + semiannual Libor + 1.61	457,712	499,460
October-2019		100,000	October-2024	US dollar exchange variation + semiannual Libor + 1.75	405,581	
<b>Total</b>		<b>435,000</b>			<b>863,293</b>	<b>810,542</b>

(i) Prepaid in November 2019.

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(d) Capital raised for construction of new plant in United States

The subsidiary Braskem America contracted a credit facility in the amount of up to US\$225 million (R\$ 900 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. 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)	2019	2018
July-2018	(i)	179,398	December-2028	Us dollar exchange variation + semiannual Libor + 0.65	751,376	620,160
<b>Total</b>		<b>179,398</b>			<b>751,376</b>	<b>620,160</b>

(i) US\$130,650 released in July 2018, US\$13,677 in September 2018, US\$13,823 in December 2018, US\$7,688 in March 2019, US\$6,231 in June 2019, US\$4,549 in September 2019 and US\$2,780 in December 2019.

(e) Others

Identification	Issue date	Initial amount of the transaction (US\$)	Maturity	Charges (% per year)	2019	2018
SACE	(i) November-2018	295,125	November-2028	Us dollar exchange variation + semiannual Libor + 0.90	1,073,526	1,147,397
SACE	(i) December-2019	150,000	December-2029	Us dollar exchange variation + semiannual Libor + 0.90	605,448	
MONFORTE	(ii) April-2019	72,345	April-2026	Us dollar exchange variation + semiannual Libor + 1.00	273,693	
<b>Total</b>		<b>517,470</b>			<b>1,952,667</b>	<b>1,147,397</b>

(i) Credit facility contracted by the subsidiary Braskem Netherlands B.V. with guarantee from SACE Covered Facility Agreement, an Italian export credit agency.

(ii) Credit facility contracted by Braskem S.A. with a term of 7 years. To consummate this facility, certain assets of the Company's plants were pledged to the financial institution in amount higher than financing.

(f) Payment schedule

The maturity profile of the long-term amounts is as follows:

	2019	2018
2020		1,748,531
2021	380,324	3,933,857
2022	1,549,976	2,256,444
2023	1,416,730	2,355,549
2024	4,418,409	3,336,032
2025	369,725	234,270
2026	350,320	234,296
2027	297,382	205,157
2028	5,314,976	5,028,265
2029	71,326	
2030 and thereafter	14,072,884	4,828,319
<b>Total</b>	<b>28,242,052</b>	<b>24,160,720</b>

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## (g) Guarantees

Braskem gave collateral for part of its borrowings as follows:

Loans	Maturity	Total debt 2019	Total guaranteed	Guarantees
BNB	March-2023	24,542	24,542	Bank surety
BNDES	January-2021	19,998	19,998	Mortgage of plants, land and property, pledge of machinery and equipment
FUNDES	June-2020	15,976	15,976	Mortgage of plants, land and property, pledge of machinery and equipment
FINEP	July-2024	33,783	33,783	Bank surety
FINAME	April-2021	324	324	Pledge of equipment
FINISA	December-2023	4,475	4,475	Bank surety
BNB-FNE	December-2027	5,582	5,582	Bank surety and pledge of reserve liquidity fund.
Other	July-2021	237	237	Pledge of equipment
<b>Total</b>		<b>104,917</b>	<b>104,917</b>	

Braskem S.A. has fully and unconditionally guaranteed the debt securities issued by Braskem Finance, Braskem America Finance and Braskem Netherlands Finance B.V. 100-percent-owned subsidiaries of Braskem. There are no significant restrictions on the ability of Braskem to obtain funds from these subsidiaries.

## 17 Braskem Idesa financing

Identification	Principal amount US\$	Maturity	Charges (% per year)	2019	2018
<b>Project finance</b>					
Project finance I	700,000	February-2027	US dollar exchange variation + quarterly Libor + 3.25 (i)	2,149,002	2,335,825
Project finance II	210,000	February-2027	US dollar exchange variation + 6.17	608,260	657,689
Project finance III	600,000	February-2029	US dollar exchange variation + 4.33 (ii)	1,849,896	1,983,113
Project finance IV	660,000	February-2029	US dollar exchange variation + quarterly Libor + 3.88 (iii)	2,078,545	2,225,042
Project finance V	400,000	February-2029	US dollar exchange variation + quarterly Libor + 4.65 (iv)		1,326,901
Project finance VI	89,994	February-2029	US dollar exchange variation + quarterly Libor + 2.73 (iv)		297,158
Project finance VII	533,095	February-2029	US dollar exchange variation + quarterly Libor + 4.64 (iv)		1,768,389
<b>Total under current liabilities</b>	<b>3,193,089</b>			<b>6,685,703</b>	<b>10,594,117</b>
<b>Bond</b>	<b>900,000</b>	November-2029	US dollar exchange variation + 7.45	<b>3,640,381</b>	
Transactions costs				(344,358)	(89,525)
<b>Total</b>				<b>9,981,726</b>	<b>10,504,592</b>
Current liabilities				744,408	10,504,592
Non-current liabilities				9,237,318	
<b>Total</b>				<b>9,981,726</b>	<b>10,504,592</b>

(i) Partial prepayment of US\$10,344.

(ii) Partial prepayment of US\$8,866.

(iii) Partial prepayment of US\$12,856.

(iv) Prepaid.

On December 2, 2019, Braskem Idesa issued US\$900 million in bonds (R\$3,796 million) with maturity in November 2029 and interest rate of 7.45% p.a. The issue was priced at 99.65% of face value, which represents a yield of 7.5% p.a.

The transaction costs associated with the bond issue, in the amount of approximately US\$71 million (R\$299 million) were registered initially as a reduction in liabilities, so the debt is amortized over the term of the agreement by its effective interest rate (8.24% p.a.).

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The proceeds from the issue were used to fully settle or to partially prepay of installments of the Project Finance debt contracted for the capital expenditures in the Braskem Idesa petrochemical complex.

In line with the Company's Financial Policy, the investment in the Braskem Idesa petrochemical complex was financed under a Project Finance model, under which the construction loan is paid exclusively using the cash generated by the company itself and the shareholders provide limited guarantees. This financing includes the guarantees typical to Project Finance transactions, such as assets, receivables, cash generation and other rights of Braskem Idesa. The financing also contains various other covenants typical to contracts of this kind.

On the reporting date of the consolidated financial statements as of December 31, 2018, certain non-monetary obligations established in the contracts remained unfulfilled. As a result, the Company continued to classify to current liabilities the entire balance of the loan, in the amount of R\$9,554,476, in compliance 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.

On October 9, 2019, a Waivers & Consent package was approved by the Intercreditor Agend 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 according to the original maturity.

The following amortization schedule presents the original long-term maturities on December 31, 2019. In 2018, part of the debt was presented in current liabilities, with early maturities arising from the aforementioned breach of contractual obligations:

	<u>2019</u>	<u>2018</u>
2020		1,016,916
2021	800,752	1,161,108
2022	699,090	968,519
2023	892,568	1,280,154
2024	978,479	1,385,087
2025	883,333	1,381,192
2026	743,566	1,194,964
2027	329,718	582,393
2028	257,117	482,038
2029 and thereafter	3,652,695	102,105
<b>Total</b>	<b><u>9,237,318</u></b>	<b><u>9,554,476</u></b>

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18 Debentures

<u>Issue date</u>	<u>Issuer</u>	<u>Series</u>	<u>Maturity</u>	<u>Annual financial charges (%)</u>	<u>2019</u>	<u>2018</u>
March-2013	DAC	Single	March-2025	IPCA + 6%	202,992	210,506
September-2013	Cetrel	Single	September-2025	126.5% of CDI	71,575	84,003
					<b>274,567</b>	<b>294,509</b>
Current liabilities					46,666	27,732
Non-current liabilities					227,901	266,777
<b>Total</b>					<b>274,567</b>	<b>294,509</b>

(a) Payment schedule

The maturity profile of the long-term debentures is as follows:

	<u>2019</u>	<u>2018</u>
2020		44,811
2021	52,078	50,722
2022	52,100	50,745
2023	52,125	50,769
2024	52,153	50,796
2025	19,445	18,934
<b>Total</b>	<b>227,901</b>	<b>266,777</b>

(b) Guarantees

The issuers entered into agreements for the fiduciary sale of credit rights, in which attached accounts are maintained to cover debt service for the three months of the installments coming due, under the terms of the instruments of assignment.

## 19 Reconciliation of borrowing activities in the statement of cash flow

	Borrowings, debentures and Braskem Idesa financing						Current and non-current
	Borrowings	Debentures	Total borrowings and debentures	Braskem Idesa financing	Lease	Dividends	Other financial liabilities
<b>Balance at December 31, 2018</b>	<b>24,898,156</b>	<b>294,509</b>	<b>25,192,665</b>	<b>10,504,592</b>	<b>100,557</b>	<b>672,395</b>	
Acquired	20,586,103		20,586,103	3,497,622			499,999
Payments	(17,402,284)	(23,125)	(17,425,409)	(4,398,453)	(454,190)	(668,904)	
<b>Cash used in financing activities</b>	<b>3,183,819</b>	<b>(23,125)</b>	<b>3,160,694</b>	<b>(900,831)</b>	<b>(454,190)</b>	<b>(668,904)</b>	<b>499,999</b>
Other changes							
Interest paid	(1,440,754)	(22,488)	(1,463,242)	(646,827)	(128,376)		
Interest and monetary and exchange variations, net	2,292,120	25,671	2,317,791	203,450	121,061		16,934
Initial adoption on January 1, 2019					2,191,908		
Acquired					911,619		
Disposal					(122,488)		
Currency translation adjustments	83,635		83,635	821,342	56,805		
Additional dividends of subsidiary						5,125	
Prescribed dividends						(2,009)	
Other						(105)	
	<b>935,001</b>	<b>3,183</b>	<b>938,184</b>	<b>377,965</b>	<b>3,030,529</b>	<b>3,011</b>	<b>16,934</b>
<b>Balance at December 31, 2019</b>	<b>29,016,976</b>	<b>274,567</b>	<b>29,291,543</b>	<b>9,981,726</b>	<b>2,676,896</b>	<b>6,502</b>	<b>516,933</b>

**20 Financial instruments**

**(a) Recognition and initial measurement**

The Company adopted IFRS 9 - Financial Instruments to replace IAS 39 - Financial Instruments: Recognition and Measurement on January 1, 2018. The changes made to the Company's accounting policies are described below, as well as their impacts on the consolidated financial statements.

**(b) Classification and subsequent measurement**

**Financial Assets**

On initial recognition, a financial asset is classified as measured at: amortised cost; fair value through other comprehensive income (FVOCI) – debt investment; FVOCI – equity investment; or fair value through profit or loss (FVTPL). The standard eliminates the following categories that exist under IAS 39: held to maturity, held for trading, loans and receivables and available for sale.

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at FVTPL:

- (i) It is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- (ii) Its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL:

- (i) Its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

All financial assets not classified as measured at amortised cost or FVOCI as described above are measured at FVTPL.

**Financial assets – Subsequent measurement and gains and losses**

For subsequent measurement purposes, financial assets are classified into four categories:

- (i) Financial assets at amortized cost (debt instruments);
- (ii) Financial assets at fair value through other comprehensive income with reclassification of accumulated gains and losses (debt instruments);
- (iii) Financial assets designated at fair value through other comprehensive income, without reclassification of gains and losses accumulated at the time of derecognition (equity instruments); and
- (iv) Financial assets at fair value through profit or loss.

**Financial liabilities - Classification, subsequent measurement and gains and losses**

Financial liabilities are classified as measured at amortised cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognised in profit or loss. Other financial liabilities are subsequently measured at amortised cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognised in profit or loss. Any gain or loss on derecognition is also recognised in profit or loss.

**(c) Derecognition**

**Financial Asset**

The Company derecognises a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Company neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Company enters into transactions whereby it transfers assets recognised in its statement of financial position, but retains either all or substantially all of the risks and rewards of the transferred assets. In these cases, the transferred assets are not derecognised.

**Financial Liabilities**

The Company derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire. The Company also derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognised at fair value.

On derecognition of a financial liability, the difference between the carrying amount extinguished and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognised in profit or loss.

**(d) Offsetting**

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Company currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

**(e) Derivatives financial instruments and hedge accounting**

The Company holds derivative financial instruments to hedge its foreign currency and interest rate risk exposures.

Embedded derivatives are separated from the host contract and accounted for separately if the host contract is not a financial asset and certain criteria are met.

Derivatives are initially measured at fair value. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are generally recognised in profit or loss.

The Company designates certain derivatives as hedging instruments to hedge the variability in cash flows associated with highly probable forecast transactions arising from changes in foreign exchange rates and interest rates and certain derivatives and non-derivative financial liabilities as hedges of foreign exchange risk on a net investment in a foreign operation.

At inception of designated hedging relationships, the Company documents the risk management objective and strategy for undertaking the hedge. The Company also documents the economic relationship between the hedged item and the hedging instrument, including whether the changes in cash flows of the hedged item and hedging instrument are expected to offset each other.

### Cash flow hedge

When a derivative is designated as a cash flow hedging instrument, the effective portion of changes in the fair value of the derivative is recognised in OCI and accumulated in the hedging reserve.

The effective portion of changes in the fair value of the derivative that is recognised in OCI is limited to the cumulative change in fair value of the hedged item, determined on a present value basis, from inception of the hedge. Any ineffective portion of changes in the fair value of the derivative is recognised immediately in profit or loss.

If the hedge no longer meets the criteria for hedge accounting or the hedging instrument is sold, expires, is terminated or is exercised, then hedge accounting is discontinued prospectively. When hedge accounting for cash flow hedges is discontinued, the amount that has been accumulated in the hedging reserve remains in equity until, for a hedge of a transaction resulting in the recognition of a non-financial item, it is included in the non-financial item's cost on its initial recognition or, for other cash flow hedges, it is reclassified to profit or loss in the same period or periods as the hedged expected future cash flows affect profit or loss.

If the hedged future cash flows are no longer expected to occur, then the amounts that have been accumulated in the hedging reserve and the cost of hedging reserve are immediately reclassified to profit or loss.

## 20.1 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.

**(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.

## 20.2 Non-derivative financial instruments and other liabilities

	<u>Note</u>	<u>Classification by category</u>	<u>Fair value hierarchy</u>	<u>Book value</u>		<u>Fair value</u>	
				<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
<b>Cash and cash equivalents</b>	5						
Cash and banks		Amortized cost		2,303,231	2,228,964	2,303,231	2,228,964
Financial investments in Brazil		Fair value through profit or loss	Level 2	1,963,185	1,754,561	1,963,185	1,754,561
Financial investments abroad		Fair value through profit or loss	Level 2	2,537,464	1,564,112	2,537,464	1,564,112
				<b>6,803,880</b>	<b>5,547,637</b>	<b>6,803,880</b>	<b>5,547,637</b>
<b>Financial investments</b>	6						
<i>LFT's and LF's</i>		Fair value through profit or loss	Level 2	1,588,426	2,247,272	1,588,426	2,247,272
Time deposit investments		Amortized cost	Level 2	38,759	49,630	38,759	49,630
Other		Fair value through profit or loss	Level 2	70,027	70,709	70,027	70,709
				<b>1,697,212</b>	<b>2,367,611</b>	<b>1,697,212</b>	<b>2,367,611</b>
<b>Trade accounts receivable</b>	7	Amortized cost		<b>2,246,248</b>	<b>3,045,463</b>	<b>2,246,248</b>	<b>3,045,463</b>
<b>Trade accounts receivable</b>	7	Fair value through profit or loss	Level 2	<b>60,403</b>	<b>47,540</b>	<b>60,403</b>	<b>47,540</b>
<b>Trade payables</b>	15	Amortized cost		<b>9,120,826</b>	<b>8,378,504</b>	<b>9,120,826</b>	<b>8,378,504</b>
<b>Borrowings</b>	16	Amortized cost					
Foreign currency - Bond			Level 1	24,583,325	21,930,575	25,790,532	22,028,040
Foreign currency - other borrowings			Level 2	3,567,336	2,578,147	3,218,410	2,277,069
Local currency			Level 2	1,367,538	736,388	1,075,803	598,926
				<b>29,518,199</b>	<b>25,245,110</b>	<b>30,084,745</b>	<b>24,904,035</b>
<b>Braskem Idesa borrowings</b>	17	Amortized cost					
Project Finance			Level 2	6,685,703	10,594,117	6,116,434	9,367,878
Bond			Level 1	3,640,381	-	3,892,878	-
				<b>10,326,084</b>	<b>10,594,117</b>	<b>10,009,312</b>	<b>9,367,878</b>
<b>Debentures</b>	18	Amortized cost	Level 2	<b>274,567</b>	<b>294,509</b>	<b>293,282</b>	<b>239,976</b>
<b>Loan to non-controlling shareholder of Braskem Idesa</b>	9	Amortized cost		<b>2,395,887</b>	<b>2,183,830</b>	<b>2,395,887</b>	<b>2,183,830</b>
<b>Leniency agreement</b>	25	Amortized cost		<b>1,742,268</b>	<b>1,842,518</b>	<b>1,742,268</b>	<b>1,842,518</b>
<b>Provision - geological event in Alagoas</b>	26	Amortized cost		<b>3,383,067</b>	-	<b>3,383,067</b>	-
<b>Other financial liabilities</b>	28	Amortized cost		<b>516,933</b>	-	<b>516,933</b>	-

## 20.3 Derivative financial instruments

### 20.3.1 Changes

Identification	Note	Fair value hierarchy	Operation characteristics		Accumulated OCI (equity)	Net	Change in fair value	Financial settlement	Net
			Principal exposure	Derivatives		(Asset)/ Liability 2018			(Asset)/ Liability 2019
<b>Non-hedge accounting transactions</b>									
Exchange swap		Level 2	Argentine peso	Dollar		517	172	(393)	296
NCE swap		Level 2	Real	Dollar		5,231	14,484	5,889	25,604
						<u>5,748</u>	<u>14,656</u>	<u>5,496</u>	<u>25,900</u>
<b>Hedge accounting transactions</b>									
Dollar put option	(a.i)	Level 2	Real	Dollar	2,297	36,139	(38,437)		(2,298)
Dollar swap	(a.ii)	Level 2	Real	Dollar+Fixed rates	(38,620)	183,398	(64,133)	(80,645)	38,620
Interest rate swaps	(a.iii)	Level 2	Libor	Fixed rates	(234,372)	(67,664)	77,998	16,373	26,707
Dollar swap CDI	(a.ii)	Level 2	Real	Dollar+Fixed rates	(107,246)		107,246		107,246
					<u>(377,941)</u>	<u>151,873</u>	<u>82,674</u>	<u>(64,272)</u>	<u>170,275</u>
<b>Derivatives</b>									
Current assets						(27,714)			(4,712)
Non-current assets						(46,664)			(17,877)
Current liabilities						70,305			49,251
Non-current liabilities						161,694			169,513
						<u>157,621</u>			<u>196,175</u>

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, and are necessarily classified as "fair value through profit and loss".

All hedge financial instruments held at December 31, 2019 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, 2019, Braskem held a total notional amount of put options of R\$1.9 billion, with an average strike price of 3.55 R\$/US\$. Simultaneously, the Company also held a total notional amount of call options of R\$1.4 billion, with an average strike price of R\$/US\$4.88. 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.

(a.ii) **Dollar Swap**

In 2018, 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 2019. The amount payable in January 2020 will be subject to the variation in the IPCA index. The remaining maturities are subject to the variation in the CDI. 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.

(a.iii) **Hedge operation by the subsidiary Braskem Idesa related to Project Finance**

**Interest rate swap linked to Libor**

Identification	Nominal value US\$	Hedge (interest rate per year)	Maturity	Fair value, net	
				2019	2018
Swap Libor I to VI	761,153	1.9825%	Aug-2025	26,707	(67,664)
<b>Total</b>	<b>761,153</b>			<b>26,707</b>	<b>(67,664)</b>
<b>Derivatives</b>					
Current assets					(21,000)
Non-Current assets					(46,664)
Current liabilities				5,768	
Non-Current liabilities				20,939	
<b>Total</b>				<b>26,707</b>	<b>(67,664)</b>

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.

## 20.4 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. The main actions carried out in 2019 are detailed below:

- February 2, 2019: Designation of US\$0.2 billion of future sales with maturity in 2025 (hedged exchange rate of US\$1: R\$3.6694).
- May 2, 2019: Designation of US\$0.2 billion of future sales with maturity in 2025 (hedged exchange rate of US\$1: R\$3.9650).
- November 1, 2019: Discontinuation of hedge accounting of US\$1.6 billion of flows between 2021 and 2023 (discontinuation rate of US\$1: R\$3.9786).
- November 1, 2019: Designation of US\$1.8 billion of future sales with maturity between 2030 and 2032 (hedged exchange rate of US\$1: R\$3.9786).

Therefore, on December 31, 2019, exports that were designated not yet realized and not discontinued are shown below:

	<b>Total nominal value</b>
	<b>US\$</b>
2020	724,000
2021	336,000
2023	200,000
2024	688,854
2025	400,000
2028	1,250,000
2030	800,000
2031	800,000
2032	200,000
	<b>5,398,854</b>

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The following table shows the changes in financial instruments designated for this hedge in the year:

	2018	Hedge discontinued	Designations	US\$ 2019
Designated balance	5,550,205	(2,351,351)	2,200,00	5,398,854

The Company considers these exports in the selected period (2020/2032) 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, 2019, the maturities of financial liabilities designated, within the scope of the consolidated balance sheet, were as follows:

	Total nominal value US\$
2020	724,000
2021	336,000
2023	200,000
2024	688,854
2025	400,000
2028	1,250,000
2030	800,000
2031	800,000
2032	200,000
	<b>5,398,854</b>

The following table provides the balance of discontinued hedge accounting in the year ended December 31, 2019 (US\$1,617,371), which is recorded in Braskem Idesa's shareholders' equity under "Other comprehensive income" and will be transferred to financial income (expenses) in accordance with the schedule of future hedged sales:

	Total nominal value US\$	Conversion rate at Inception RS/US\$	Closing rate RS/US\$	Gross nominal value
Hedge discontinued - Fourth quarter 2019	1,617,371	2.0017	3.9786	3,197,381
	<b>1,617,371</b>			<b>3,197,381</b>

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To ensure the continuity of the hedging relationship, the Company plans to refinance and/or replace 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, 2019:

	Total nominal value US\$	Conversion rate at Inception R\$/US\$	Closing rate R\$/US\$	Gross nominal value
First quarter	150,000	2.0017	3.7448	261,465
Second quarter	183,495	2.0017	3.9043	349,118
Third quarter	183,495	2.0017	3.7734	325,098
Fourth quarter	216,990	2.0017	4.0729	449,430
	<b>733,980</b>			<b>1,385,111</b>

The changes in foreign exchange variation and Income Tax and Social Contribution under "Other comprehensive income" of this hedge are as follows:

	Exchange variation	Income tax and social contribution	Net effect
<b>At December 31, 2018</b>	<b>(8,937,217)</b>	<b>3,038,653</b>	<b>(5,898,564)</b>
Exchange variation recorded in the period on OCI / Income tax and social contribution	(856,068)	291,063	(565,005)
Exchange variation transferred to profit or loss / Income tax and social contribution	1,385,121	(470,941)	914,180
<b>At December 31, 2019</b>	<b>(8,408,164)</b>	<b>2,858,775</b>	<b>(5,549,389)</b>

The realization expected for 2020 will occur through the payments of financial instruments in conformity with exports made, and the exchange variation recorded in "Other comprehensive income" will be recycled to the financial results. For all quarters of the year, realization will be made at the discounted cash flow rates. The quarterly schedule of hedged exports in the next quarter of 2020 follows:

	Total nominal value US\$
First quarter	181,000
Second quarter	181,000
Third quarter	181,000
Fourth quarter	181,000
	<b>724,000</b>

**(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 lenders 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 probably 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 17). Therefore, the existence of the debit is directly associated with the highly probable nature of the future sales in U.S. dollar.

As of December 31, 2019, designated and unrealized sales were as follows:

	<b>Nominal value</b>
	<b>US\$</b>
2020	179,982
2021	208,901
2022	183,300
2023	230,967
2024	251,869
2025	227,716
2026	192,592
2027	89,963
2028	71,898
2029	15,219
2030	225,000
2031	225,000
2032	225,000
2033	225,000
	<u>2,552,407</u>

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The following table shows the changes in financial instruments designated for this hedge in the year:

	2018	Discontinued hedge	Realization of the discontinued hedge	New designations	US\$ 2019
Designated balance	2,708,856	(1,056,869)	420	900,000	2,552,407

In 2019, the designated financial liabilities to hedge future sales were distributed as follows:

	Nominal value US\$
2020	179,982
2021	208,901
2022	183,300
2023	230,967
2024	251,869
2025	227,716
2026	192,592
2027	89,963
2028	71,898
2029	15,219
2030	225,000
2031	225,000
2032	225,000
2033	225,000
	<u><u>2,552,407</u></u>

The following table provides the amounts of hedge accounting discontinued in the year ended December 31, 2019 (US\$838,596), 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:

	Total nominal value US\$	Conversion rate at Inception MXN/US\$	Closing rate MXN/US\$	Total nominal value MXN	Gross nominal value
Hedge discontinued in May-2016	10,996	13.4541	17.9915	49,893	10,647
Hedge discontinued in Dec-2019	795,533	13.6663	19.6113	4,729,441	1,009,263
Hedge discontinued in Dec-2019	32,066	13.4541	19.3247	188,247	40,172
	<u><u>838,595</u></u>			<u><u>4,967,581</u></u>	<u><u>1,060,082</u></u>

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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, 2019:

	Total nominal value US\$	Conversion rate at Inception MXN/US\$	Closing rate MXN/US\$	Total nominal value MXN	Gross nominal value
First quarter	56,383	13.6544	19.2153	313,540	60,811
Second quarter	56,383	13.6544	19.0768	305,731	63,995
Third quarter	57,629	13.6547	19.6178	343,647	70,181
Fourth quarter	58,875	13.6549	19.3564	335,676	72,159
	<u>229,270</u>			<u>1,298,594</u>	<u>267,146</u>

The changes in foreign exchange variation and Income Tax and Social Contribution under "Other comprehensive income" are as follows:

	Exchange variation	Income tax	Net effect
<b>At December 31, 2018</b>	<b>(3,292,388)</b>	<b>988,451</b>	<b>(2,303,937)</b>
Exchange variation recorded in the period on OCI / Income tax	464,806	(139,442)	325,364
Exchange variation transferred to profit or loss / Income tax	267,146	(80,144)	187,002
<b>At December 31, 2019</b>	<b><u>(2,560,436)</u></b>	<b><u>768,865</u></b>	<b><u>(1,791,571)</u></b>

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.

The realization expected for 2020 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 2020:

	Nominal value US\$
First quarter	61,369
Second quarter	65,612
Third quarter	69,855
Fourth quarter	69,855
	<u>266,691</u>

## 20.5 Credit quality of financial assets

### (a) Trade accounts receivable

Virtually none of Company's clients have risk ratings assigned by credit rating agencies. For this reason, the Company developed its own credit rating system for all accounts receivable from clients in Brazil and abroad.

On December 31, 2019 and 2018, considering the stages 1, 2 and 3 of expected credit losses, the percentage of trade accounts receivable by risk ratings was as follows:

	2019	2018
1 Minimal Risk	74.23	67.50
2 Low Risk	14.89	18.60
3 Medium Risk	7.82	7.61
4 High Risk	1.06	5.02
5 Very High Risk	(i) 1.99	1.27

(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:

	Domestic market	Last 12 months External market
December 31, 2019	0.05%	0.17%
December 31, 2018	0.08%	0.45%
December 31, 2017	0.08%	0.19%

This calculation considers the amount of accounts receivable overdue more than 30 days, divided by consolidated gross revenue in the last 12 months.

**(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, the Company 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>2019</u>	<u>2018</u>
<b>Financial assets with risk assessment</b>		
AAA	5,475,075	4,294,100
AA+	109,933	1,175,098
AA		79,136
AA-	1,458,424	1,076
A+	159,848	1,103,647
A	121,132	165,899
A-	1,171,746	169,580
BBB+		917,541
BB+		252
BB-		29
	<u>8,496,158</u>	<u>7,906,358</u>
<b>Financial assets without risk assessment</b>		
Other financial assets with no risk assessment	(i) 4,934	8,890
	<u>4,934</u>	<u>8,890</u>
<b>Total</b>	<u><b>8,501,092</b></u>	<u><b>7,915,248</b></u>

(i) Investments approved by the Management of the Company, in accordance with the financial policy.

**20.6 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, 2019, the main risks that can affect the value of Company's financial instruments are:

- U.S. dollar/Brazilian real exchange rate;
- Mexican peso/Brazilian real exchange rate;
- Euro/Brazilian real exchange rate;
- U.S. dollar/Euro exchange rate;
- Libor floating interest rate;
- Selic interest rate;
- CDI interest rate;
- TJLP interest rate; and
- IPCA interest rate.

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For the purposes of the risk sensitivity analysis, the Company 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.

**(b) Value at risk**

The value at risk of the derivatives held by the Company which is defined as the loss that could result in one month as from December 31, 2019, with a probability of 5%, and under normal market conditions, was estimated by the Company at US\$15,885 for put options and call options (Note 20.3.1 (a.i)), US\$4,456 for the swap of Libor related to Braskem Idesa project, US\$32,646 for Dollar swap (Note 20.3.1(a.ii)) and US\$8,226 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 31, 2019. According to the Market Readout, at the end of 2020, the U.S. dollar will remain at approximately R\$4.08, while the Selic rate should remain at 4.50% p.a. The Selic rate is used as benchmark for sensitivity analysis of the CDI rate.

The probable scenario for the TJLP is remaining at the current level of 5.09%.

Since the Market Readout survey does not include consensus forecasts for the Libor rate, the average projection of the U.S. Federal Reserve for the Federal Funds rate was used, published in December 2019, plus the historical difference between such rate and Libor. For adverse scenarios, increases of 25% and 50% from current market levels were adopted.

## (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%)
<b>Brazilian real/U.S. dollar exchange rate</b>			
Bonds	(345,206)	(7,055,927)	(14,111,853)
Braskem Idesa borrowings	(81,773)	(1,671,426)	(3,342,851)
Export prepayments	(10,559)	(215,823)	(431,647)
Investments	(9,190)	(187,844)	(375,688)
SACE	(20,536)	(419,744)	(839,487)
Dollar put option	(9,931)	(478,958)	(1,685,285)
Dollar swap	(4,033)	(82,372)	(164,742)
Swap NCE	(5,271)	(107,743)	(215,486)
Dollar swap x CDI	(16,809)	(345,832)	(691,949)
Financial investments abroad	(45,323)	(926,395)	(1,852,791)
<b>Libor floating interest rate</b>			
Export prepayments	(7,625)	(38,124)	(76,248)
Swaps	(5,730)	37,283	73,854
Braskem Idesa borrowings	(89,189)	(445,944)	(891,887)
<b>CDI interest rate</b>			
Export credit notes	12,982	(20,906)	(41,331)
Debentures	5,778	(6,495)	(13,154)
Financial investments in local currency		41,830	83,679
<b>IPCA interest rate</b>			
Debentures	11,644	(18,569)	(37,943)
<b>TLP interest rate</b>			
FINAME		(4)	(7)
<b>Selic interest rate</b>			
Leniency agreement		(53,042)	(106,946)

## 21 Taxes payable

	<u>2019</u>	<u>2018</u>
<b>Brazil</b>		
IPI	58,945	64,672
ICMS	184,728	239,126
PIS and COFINS	150,664	145,090
Other	37,857	36,454
<b>Other countries</b>		
Value-added tax	11,933	7,482
Other	8,112	25,085
<b>Total</b>	<u>452,239</u>	<u>517,909</u>
Current liabilities	322,886	432,005
Non-current liabilities	129,353	85,904
<b>Total</b>	<u>452,239</u>	<u>517,909</u>

## 22 Income tax ("IR") and social contribution ("CSL")

## (a) Reconciliation of the effects of income tax and social contribution on profit and loss

	<u>2019</u>	<u>2018</u>	<u>2017</u>
<b>Income (loss) before IR and CSL</b>	<b>(4,603,068)</b>	<b>3,604,736</b>	<b>5,264,577</b>
IR and CSL at the rate of 34%	1,565,043	(1,225,610)	(1,789,956)
<b>Permanent adjustments to the IR and CSL calculation basis</b>			
IR and CSL on equity in results of investees	3,469	(302)	2,201
Thin capitalization	(221,337)		
Deferred tax losses and negative base			39,092
Tax benefits (Sudene and PAT)			87,186
Difference of rate applicable to each country	(i) 293,647	468,129	250,130
Fine in leniency agreement	(25,390)		(117,140)
Other permanent adjustments	347,238	21,232	170,805
<b>Effect of IR and CSL on results of operations</b>	<u>1,962,670</u>	<u>(736,551)</u>	<u>(1,357,682)</u>
<b>Breakdown of IR and CSL:</b>			
<b>Current IR and CSL expense</b>			
Current year	(251,641)	(512,951)	(869,493)
Changes in estimates related to prior years	22,696	3,177	
	<u>(228,945)</u>	<u>(509,774)</u>	<u>(869,493)</u>
<b>Deferred IR and CSL expense</b>			
Origination and reversal of temporary differences	2,062,501	(369,546)	(488,189)
Tax losses (IR) and negative base (CSL)	129,114	142,769	
	<u>2,191,615</u>	<u>(226,777)</u>	<u>(488,189)</u>
<b>Total</b>	<u>1,962,670</u>	<u>(736,551)</u>	<u>(1,357,682)</u>
<b>Effective rate</b>	<b>42.6%</b>	<b>20.4%</b>	<b>25.8%</b>

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- (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:

	<b>Headquarters (Country)</b>	<b>Official rate - % 2019</b>
Braskem Alemanha	Germany	31.18
Braskem America e Braskem America Finance	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

**(b) Deferred income tax and social contribution**

Deferred income 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 operations, except to the extent they relate to items directly recorded in equity.

**(b.i) Changes in balances of deferred tax assets and liabilities**

<b>Assets</b>	<b>As of December 31, 2017</b>	<b>Impact on the P&amp;L</b>	<b>Impact on the equity</b>	<b>As of December 31, 2018</b>	<b>Impact on the P&amp;L</b>	<b>Other comprehensive income</b>	<b>Other</b>	<b>As of December 31, 2019</b>
Tax losses (IR) and negative base (CSL)	1,878,809	142,769		2,021,578	129,114			2,150,692
Goodwill amortized	59,335	(20,053)		39,282	(17,605)			21,677
Exchange variations	388,293	(348,334)		39,959	1,092,392			1,132,351
Temporary adjustments (i)	155,540	646,630		802,170	1,555,097			2,357,267
Business combination	183,785	(24,213)		159,572	(74,033)			85,539
Tax credits		176,290		176,290	110,080		(236,537)	49,833
Other					62,288			62,288
	<b>2,665,762</b>	<b>573,089</b>		<b>3,238,851</b>	<b>2,857,333</b>		<b>(236,537)</b>	<b>5,859,647</b>
<b>Liabilities</b>								
Amortization of goodwill based on future profitability	712,873	10,463		723,336	(651)			722,685
Tax depreciation	960,202	49,710		1,009,912	893,115			1,903,027
Exchange variations								
Temporary adjustments	231,822	44,878		276,700	155,887			432,587
Business combination	9,664	(8,362)		1,302				1,302
Present value adjustment and amortized cost	67,072	(9,905)		57,167	(45,891)			11,276
Hedge accounting		700,351	(700,351)		(419,269)	419,269		
Amortization of fair value adjustments on the assets from the acquisition of Braskem Qpar	519,623	(75,548)		444,075	(50,302)			393,773
Long term incentive plan - LTI		(2,072)	2,072		(5,843)	5,843		
Health care					43,734	(43,734)		
Other	4,273	90,351	(90,841)	3,783	94,938	(93,284)		5,437
	<b>2,505,529</b>	<b>799,866</b>	<b>(789,120)</b>	<b>2,516,275</b>	<b>665,718</b>	<b>288,094</b>	<b>(236,537)</b>	<b>3,470,087</b>
<b>Net</b>	<b>160,233</b>	<b>(226,777)</b>	<b>789,120</b>	<b>722,576</b>	<b>2,191,615</b>	<b>(288,094)</b>	<b>(236,537)</b>	<b>2,389,560</b>
Presentation in the balance sheet:								
Non-current assets	1,165,726			1,104,158				2,662,596
(-) Non-current liabilities	1,005,493			381,582				273,036

- (i) Temporary adjustments refers to the provision for geological events in Alagoas, contingencies, impairment of assets, among other provisions.

## (b.ii) Offset for the purpose of presentation in the balance sheet

				2019
Headquarters		IR and CSL		
(Country)	Tax calculation	Offsetting	Balance	
<b>Assets</b>				
Braskem S.A.	Brazil	3,679,547	(2,072,130)	1,607,417
Braskem Argentina	Argentina	1,010		1,010
Braskem Alemanha	Germany	28,176		28,176
Braskem Chile	Chile	162	(162)	-
Braskem Idesa	Mexico	2,056,723	(1,117,641)	939,082
Braskem México Serviços	Mexico	9,677		9,677
Cetrel	Brazil	24,313	(5,846)	18,467
DAC	Brazil	60,039	(1,272)	58,767
		<b>5,859,647</b>	<b>(3,197,051)</b>	<b>2,662,596</b>
<b>Liabilities</b>				
Braskem S.A.	Brazil	2,072,130	(2,072,130)	
Braskem America	USA	271,285		271,285
Braskem Chile	Chile	1,913	(162)	1,751
Braskem Idesa	Mexico	1,117,641	(1,117,641)	
Cetrel	Brazil	5,846	(5,846)	
DAC	Brazil	1,272	(1,272)	
		<b>3,470,087</b>	<b>(3,197,051)</b>	<b>273,036</b>
				2018
Headquarters		IR and CSL		
(Country)	Tax calculation	Offsetting	Balance	
<b>Assets</b>				
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
		<b>3,238,851</b>	<b>(2,134,693)</b>	<b>1,104,158</b>
<b>Liabilities</b>				
Braskem S.A.	Brazil	2,239,727	(2,126,658)	113,069
Braskem America	USA	268,513		268,513
Braskem Chile	Chile	268	(268)	
Cetrel	Brazil	6,645	(6,645)	
DAC	Brazil	1,122	(1,122)	
		<b>2,516,275</b>	<b>(2,134,693)</b>	<b>381,582</b>

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## (c) Realization of deferred income tax and social contribution

Assets	Note	Balance at	Realization						
		December 31, 2019	2020	2021	2022	2023	2024	2025 to 2027	2028 thereafter
Tax losses (IR) and negative base (CSL)	(i)	2,150,692	166,865	287,200	200,515	219,314	449,772	818,425	8,601
Goodwill amortized		21,677	2,223	2,223	2,223	2,223	2,223	2,224	8,338
Exchange variations	(ii)	1,132,351	107,843	107,843	107,843	107,843	166,325	387,626	147,028
Temporary adjustments	(iii)	2,357,267	536,934	660,491	113,454	66,930	495,380	484,078	
Business combination	(iv)	85,539	28,510	28,510	28,510				9
Tax credits	(v)	49,833	35,746	14,087					
Other		62,288							62,288
		<b>5,859,647</b>	<b>878,121</b>	<b>1,100,354</b>	<b>452,545</b>	<b>396,310</b>	<b>1,113,700</b>	<b>1,692,353</b>	<b>226,264</b>
<b>Liabilities</b>									
Amortization of goodwill based on future profitability	(vi)	722,685							722,685
Tax depreciation	(vii)	1,911,214	135,128	135,128	135,128	135,128	135,128	135,128	1,100,446
Business combination	(ix)	1,302							1,302
Present value adjustment and amortized cost	(x)	11,276	6,959	4,317					
Amortization of fair value adjustments on the assets from the acquisition of Braskem Qpar		393,773	44,825	44,825	44,825	44,825	44,825	44,825	124,823
Other		5,437							5,437
		<b>3,470,087</b>	<b>283,581</b>	<b>303,184</b>	<b>200,379</b>	<b>192,003</b>	<b>269,141</b>	<b>267,106</b>	<b>1,954,693</b>
<b>Net</b>		<b>2,389,560</b>	<b>594,540</b>	<b>797,170</b>	<b>252,166</b>	<b>204,307</b>	<b>844,559</b>	<b>1,425,247</b>	<b>(1,728,429)</b>

## Basis for constitution and realization:

- (i) In Brazil, the use of tax losses is limited to 30% of the taxable profit for the year; however, the balance does not expire. Meanwhile, in Mexico there is no limit on the amount that can be used in the year; however, the tax losses expire in 10 years. The realization of Tax Losses consider the taxable profit expected by the company over a 10-year horizon.
- (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, which results in the recognition of 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. For 2019, the provisioning of expenses with contingencies and damages in Alagoas produced a material impact.
- (iv) Refers to: tax-related goodwill and contingencies recognized from business combinations. Tax realization of goodwill occurs 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 the balance of tax paid on profit abroad and the worker's food program.
- (vi) Goodwill for the future profitability of the merged companies is 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) 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, upon adoption of Law 11,638/07, of property, plant and equipment, whose tax realization is based on the depreciation of assets, as well as adjustment to present value of assets and liabilities overdue more than 89 days.

Annually, the Company revises its projection of taxable income based on its Business Plan (Note 3.2.1). If this projection indicates that the taxable income will not be sufficient to absorb the deferred taxes, the amount corresponding to portion of the deferred tax that will not be recovered is written off.

Notes to the consolidated financial statements  
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23 Sundry provisions

	<u>2019</u>	<u>2018</u>
Provision for customers rebates	84,110	88,026
Provision for environmental damages	365,155	307,546
Other	55,941	28,970
<b>Total</b>	<b><u>505,206</u></b>	<b><u>424,542</u></b>
Current liabilities	203,134	191,536
Non-current liabilities	302,072	233,006
<b>Total</b>	<b><u>505,206</u></b>	<b><u>424,542</u></b>

(a) Client bonus

Some sales agreements of Braskem provide for a rebate, in products, should certain 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) Provision for environmental damages

Braskem has a provision for 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>
<b>December 31, 2017</b>	<b>87,913</b>	<b>300,249</b>	<b>25,510</b>	<b>413,672</b>
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)
<b>December 31, 2018</b>	<b>88,026</b>	<b>307,546</b>	<b>28,970</b>	<b>424,542</b>
Additions, inflation adjustments and exchange variation, net	74,299	144,617	34,194	253,110
Write-offs through usage and payments	(78,215)	(87,008)	(7,223)	(172,446)
<b>December 31, 2019</b>	<b><u>84,110</u></b>	<b><u>365,155</u></b>	<b><u>55,941</u></b>	<b><u>505,206</u></b>

## 24 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 3.2.4. Proceedings assessed as having a possible chance of loss are not provisioned for.

In addition, Braskem also is a plaintiff to several lawsuits. In these cases, the Company discloses the contingent asset when the receipt of economic benefits is probable, see note 10.c. However, when the realization of the benefit is virtually certain, the related asset no longer constitutes a contingent asset, and as such amount is recognized.

Any changes in the court's understanding of the position could cause future impacts on the consolidated financial statements of the Company due to such proceedings.

### 24.1 Claims with probable chance of loss and contingent liabilities arising from business combinations

		<u>2019</u>	<u>2018</u>
Labor claims	(a)	315,437	177,751
Tax claims	(b)		
Normal operations			
IR and CSL		22,284	20,717
PIS and COFINS	(i)	196,356	156,796
ICMS		70,645	64,468
Other tax claims		18,475	23,237
		<u>307,760</u>	<u>265,218</u>
Business Combination			
IR and CSL		3,581	1,500
PIS and COFINS	(ii)	63,291	59,739
ICMS - interstate purchases	(iii)	297,456	280,622
		<u>364,328</u>	<u>341,861</u>
Corporate claims	(c)	118,485	111,049
Civil claims and other		45,514	69,438
		<u>1,151,524</u>	<u>965,317</u>

#### (a) Labor claims

The provision on December 31, 2019 is related to 604 labor claims, including occupational health and security cases (477 in 2018). The Management of Braskem, based on its assessment and of its external 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, 2019, 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"), mainly related to the following topics:

- Offsetting Statements ("DCOMPs"), with credits in amounts that exceeded those declared in the respective Statement of Calculation of Social Contributions ("DACONS");
- freight expenses: not associated with sales operations and/or operations without proven association and contracted in the country, but concerning imported products;
- credits arising from the acquisition of property, plant and equipment mostly related to acquired companies, whose documentation was not found;
- taxation of taxable revenues incorrectly classified as tax exempt, subject to zero tax rate or not taxed.

On December 31, 2019, the balance of this provision was R\$193,139 (R\$154,673 in 2018).

The Management of Braskem, based on its assessment and of its 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 2022.

There are no deposits or any other type of guarantee for these procedures, since they are still being discussed at the administrative level.

**(ii) PIS and COFINS taxes**

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.

On December 31, 2019, the balance of this provision was R\$63,291 (R\$59,739 in 2018).

The Management of Braskem, based on its assessment and of its external legal advisors, assessed that the disputes related to the highlighted matters have a likelihood of loss greater than 50%, estimated the conclusion of administrative proceedings in 2023 and of court decisions in 2030.

Guarantees were offered for these claims in the form of bank guarantee and finished products, which, together, cover the amount of court claims.

**(iii) 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 2015, 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 debt being reduced by 20% and (ii) in the other claim, the tax liability was suspended.

On December 31, 2019, the balance of this provision was R\$297,456 (R\$280,622 in 2018).

The Management of Braskem, based on its assessment and of its external legal advisors, have assessed that the disputes related to the highlighted matters have a likelihood of loss greater than 50% and estimated the conclusion of legal proceedings in 2025. These lawsuits are secured by a guarantee insurance.

**(c) Corporate claims**

On December 31, 2019, 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 dissolved company Salgema Indústrias Químicas S.A.

Once the claims were granted, the amount effectively owed by Braskem began to be calculated. During this phase, the judge recognized that dividends and bonus related to the years prior to 1987 had become time-barred. However, the Alagoas State Court of Appeals reviewed the decision and considered that amounts related to such period also were owed by Braskem. 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. In April 2019, the case was distributed and held by the Judge-Rapporteur under advisement.

On December 31, 2019, Braskem recognized a provision of R\$64,305.

**(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>
<b>December 31, 2017</b>	<b>250,075</b>	<b>632,177</b>	<b>135,779</b>	<b>74,614</b>	<b>1,092,645</b>
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)
<b>December 31, 2018</b>	<b>177,751</b>	<b>607,079</b>	<b>111,049</b>	<b>69,438</b>	<b>965,317</b>
Additions, inflation adjustments and exchange variation	322,102	98,618	7,436	11,465	439,621
Payments	(83,189)	(6,348)		(3,918)	(93,455)
Reversals	(101,227)	(27,261)		(31,471)	(159,959)
<b>December 31, 2019</b>	<b><u>315,437</u></b>	<b><u>672,088</u></b>	<b><u>118,485</u></b>	<b><u>45,514</u></b>	<b><u>1,151,524</u></b>

## 24.2 Claims with possible chance of loss

	Note	2019	2018
Civil claims - Alagoas	26	33,973,320	
Civil claims - Other	(a)	769,126	691,636
Tax claims	(b)	6,199,283	7,125,071
Labor claims		642,229	860,061
Other lawsuits	(c)	546,743	643,982
<b>Total</b>		<b>42,130,701</b>	<b>9,320,750</b>

### (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, involving the amount of R\$61.2 million. The action seeks to indemnify the country for collective pecuniary damages and pain and suffering. A decision was rendered in the principal case denying all claims made by the Federal Prosecution Office (MPF). Against such decision, the MPF filed a civil appeal, which was dismissed by majority of the Fifth Panel of the Regional Federal Appellate Court – 1st Region. Therefore, under Article 942 of the Brazilian Code of Civil Procedure, the record was referred to the 5th Extended Panel, which also, by majority vote, dismissed the MPF's appeal and upheld the decision. The MPF filed special appeal, which was dismissed. Against such decision, the MPF filed interlocutory appeal in special appeal, which was received by the STJ and registered as AREsp 1614987/DF. Since November 18, 2019, the case has been held by the Chief Justice of the STJ under advisement.

#### (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, 2019, totaled R\$65.8 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.

#### (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, 2019, the damages claimed in the lawsuit amounted to R\$204.6 million.

The Management of Braskem, based on its assessment and of its external legal advisors, 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 inflation-adjusted amount of R\$126.5 million. The term for filing an answer has not yet begun, which will happen only after all defendants have been summoned.

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) Recourse action of insurer**

Action for indemnity filed by the insurer of a client of the Company. The insurer seeks, in recourse, reimbursement for the amount paid to the client under the insurance agreement entered into with the client, whose amount adjusted as of December 31, 2019 is R\$77.7 million. According to the Insurer, the losses sustained by the client, reimbursed by the insurer, allegedly were caused by products supplied by Braskem outside of specifications.

The Management believes, supported by the opinion of external legal counsels responsible for handling the cases, that the lawsuits possibly will be dismissed within a period of up to eight years.

No judicial deposit or any other type of guarantee has been made for this case.

**(b) Tax**

**(i) PIS, COFINS, IR and CSL: 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.

In November 2018, the tax-deficiency notice related to IRPJ/CSL was fully denied in a final and unappealable decision issued by CARF.

In August 2019, part of the notification related to PIS/COFINS taxes was denied in a final and unappealable decision issued by CARF.

On December 31, 2019, the updated value of the assessment amounted R\$883 million.

The Management of Braskem, based on its assessment and of its external legal advisors, estimates that the administrative proceeding should be concluded by 2020.

There are no deposits or any other type of guarantee for this procedure, since it is still being discussed at the administrative level.

**(ii) IR and CSL – Charges with goodwill amortization**

The Company was served by the 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 and November 2019, two of the proceedings was deemed partially invalid in a final and unappealable decision issued by CARF, which reduced liabilities by R\$403 million. On December 31, 2019, the updated value of the tax deficiency notices amounted to R\$1 billion.

The assessment of possible loss 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 Management of Braskem, based on its assessment and of its external legal advisors, estimates 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 at the administrative level.

**(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; (iv) extemporaneous credits from various acquisitions; and (v) property, plant and equipment. These matters have already been contested at the administrative level and comprise the period from 2006 to 2016.

On December 31, 2019, the amount under discussion of these notices is R\$1.2 million.

The Management of Braskem, based on its assessment and of its external legal advisors, estimates that: (i) the administrative proceedings should be concluded by 2024, while the lawsuits should be concluded by 2030; 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.

There is no deposit or any other type of guarantee for proceedings that are still pending in the administrative instance, and the only lawsuit is secured by a guarantee insurance in the amount of R\$30 million.

**(iv) Income Tax (IR) and Social Contribution (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 Corporate Income Tax and Social Contribution liabilities in merger operations, respectively, in November 2017, September 2008 and August 2013.

In April 2019, one of the notices was dismissed in full by a final and unappealable decision issued by CARF, which resulted in a reduction of this contingency by R\$407 million. On December 31, 2019, the updated value of the remaining tax deficiency notices 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, Pernambuco and Alagoas.

On December 31, 2019, the adjusted amounts of these claims total R\$740 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;
- 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.

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The Management of Braskem, based on its assessment and of its external legal advisors, estimates 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 guarantee insurance in the amount of R\$148 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, 2019, was R\$167 million. The Company offered a guarantee of R\$59 million.

The Company's external legal advisors estimate that the claims in the judicial sphere will be concluded by 2024.

**(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 – Federal Laws 2,445 and 2,449; and (v) the COFINS tax arising from the undue payment or payment in excess.

On December 31, 2019, the adjusted amounts involved of these assessments total R\$148 million.

The Management of Braskem, based on its assessment and of its external legal advisors, estimates that: (i) these judicial proceedings are expected to be terminated in 2024; and (ii) in the event of an unfavorable decision to the Company, 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 in guarantee, that cover the amount exclusively involved in the claim.

**(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, 2019, 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\$133 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, 2019, the restated value of this deficiency notice amounted to R\$103 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.

**(x) Isolated fine – failure to ratify DCOMPS**

In 2016 through 2019, the Company received notifications of individual fines imposed due to the use of credits from: i) non-cumulative PIS/COFINS taxes; ii) negative balances of IRPJ/CSLL taxes; iii) REINTEGRA credits; and iv) other credits, for offsets not approved by the Brazilian Federal Revenue.

The matter is assessed as having a possible chance of loss due to favorable court precedents on the matter.

On December 31, 2019, the restated value of these deficiency notices amounted to R\$289 million.

The Company's external legal counsels estimate that the conclusion in the administrative level will occur in 2024.

No deposit or other form of security was accrued for most of these claims, as they are still being discussed administratively.

**(xi) IRPJ/CSLL – Negative Balance – Offset**

The Company claims, at the administrative level, that RFB denies offsets seeking to settle federal taxes with credits arising from negative balance of IRPJ and CSLL.

On December 31, 2019, the restated value of the taxes whose offset was not approved amounted to R\$196 million.

The Company's external legal advisors estimate that the administrative proceeding should be concluded by 2024.

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.

After the administrative proceeding was concluded with an unfavorable decision for the Company, the case was filed in the courts.

On December 31, 2019, the restated value of the tax credit under discussion recorded amounted to R\$82 million.

The Company's external legal advisors estimate that the lawsuit should be concluded by 2030.

The Company offered to the Court a guarantee insurance that secures the entire amount in dispute.

**(xiii) PIS and COFINS – DCide-Fuels Tax Offset**

The Company is a party to lawsuits claiming PIS and COFINS tax liabilities arising from their offset using Cide-Fuels tax credits, as authorized under Federal Law 10,336/2001.

On December 31, 2019, the adjusted value of these cases was R\$144 million.

The Company's legal advisors estimate that these lawsuits will be concluded by 2030.

The Company offered property in guarantee of all liabilities related to this matter.

**(xiv) Exports – Customs Fine – Fraudulent Interposition – IRPJ/CSLL – Income Not Reported**

In November 2018, the Company received a tax deficiency notice claiming corporate income tax (IRPJ) and social contribution on profits (CSLL) on products exported by Braskem Qpar S/A to Braskem Incorporated Limited, which resold such products abroad. The Federal Revenue Service understands that Braskem Incorporated Limited failed to report revenue when it made sales to clients abroad in an amount above that recorded in its accounting records. This allegedly unreported revenue was attributed directly to the Company, as the successor by merger of Braskem Qpar. Subsequently, based on this premise of income not reported, the tax authorities issued a second tax deficiency notice to impose a fine arising from the interposition of exports.

On December 31, 2019, the adjusted value of these deficiency notices was R\$75 million.

The external legal advisors of the Company estimate that the administrative proceedings should be concluded by 2023.

No deposit or other type of guarantee for these proceedings have been made, since they are still pending in the administrative instance.

**(c) Corporate**

The Company currently is subject to a settlement of judgment related to a 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 liquidation aims to assess the amount of the award, as determined by the court.

The plaintiffs filed interlocutory appeal, which has not yet been tried, given the decision ordering an expert examination.

The parties are currently awaiting the expert examination in the principal lawsuit.

The Management of Braskem, based on its assessment and of its external legal advisors, the amount of provision on December 31, 2019 is R\$15,345 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 approximately R\$53 million, on December 31, 2019.

This loss is deemed as possible in the administrative court, in view of prior decisions by the Administrative Council of Tax Appeals (CARF) and the evidence provided by the Company.

The Company's external legal advisors estimate that the administrative proceeding should be concluded still in 2020.

**(ii) Social security – hazardous agents**

The Company is a party to other administrative proceedings and lawsuits, which claim: (i) payments related to tax-deficiency notices for additional contribution for Occupational Accident Risk ("RAT") to fund the special retirement plan due to the alleged exposure of workers to hazardous agents; as well as financial penalty for not disclosing it in GFIP (from April 1999 to February 2006); and (ii) the claim in a tax foreclosure, of said additional payment for RAT (periods from November 2000 to January 2001 and from November 2001 to June 2002). The total approximate amount involved in these proceedings, as of December 31, 2019, is R\$47 million.

The external legal advisors of the Company estimate that these administrative proceedings should be concluded by 2022, and the only lawsuit should be concluded by 2027.

No deposit or any other type of guarantee for the proceedings still pending in the administrative instance have been made, and the only lawsuit is secured by a guarantee insurance in the amount of R\$3.7 million.

## 25 Leniency agreement

### Global Settlement with authorities

In the context of allegations of undue payments in connection with Operation Car Wash in Brazil, the Company hired external experts in investigation to conduct an independent investigation into such allegations (“Investigation”) and to report their findings. The Company cooperated and continues to cooperate with government authorities from various jurisdictions, including the Department of Justice of the United States (DoJ), the Securities and Exchange Commission of the United States (SEC), the Federal Prosecution Office (MPF) and the Swiss Office of the Attorney General (OAG).

In December 2016, the Company entered into Leniency Agreements with the Federal Prosecution Office (“MPF Agreement”) and with U.S. and Swiss authorities (“Global Settlement”), in the approximate amount of US\$957 million (approximately R\$3.1 billion, at the time), which were officially ratified as follows:

1. In Brazil, the MPF Agreement was ratified by the 5<sup>th</sup> Coordination and Review Chamber of the MPF on December 15, 2016, with ratification by the 13<sup>th</sup> 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 (“Plea Agreement”).
3. The agreement with the Securities and Exchange Commission (“SEC”) was confirmed on February 28, 2017.
4. The agreement with the Swiss authorities did not require ratification to produce effects; on December 21, 2016, the OAG concluded its investigations and issued an order to conclude the case based on the Company’s collaboration.

Of the aggregate amount of the Global Settlement, the Company already has paid approximately R\$2.2 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;
7. R\$278,034 to the MPF, related to the second of six annual installments payable until 2023, paid on January 30, 2019; and
8. CHF16,065 (R\$58,034) to the Swiss Office of the Attorney General, related to the second of four annual installments payable until 2021, paid on June 27, 2019.
9. R\$257,256 paid on January 30, 2020 to the Federal Government corresponding to the annual installment of the leniency agreements entered into with the MPF and with the CGU and AGU, as described above.

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In this sense, as informed to the market on July 10, 2018 and as per the material fact notice on May 27, 2019, the Company engaged in a process of cooperation and negotiation with the Ministry of Transparency and the Office Of The Federal Controller General (“CGU”) and the Office of the Attorney General (“AGU”), which culminated in the execution of the leniency agreement with such authorities on May 31, 2019 (“CGU/AGU Agreement” and, jointly with the Global Settlement, “Agreements”).

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 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. The outstanding installments of the MPF Agreement will benefit from CGU/AGU Agreement and will now be restated by the variation in 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 AGU, CGU and MPF agreed to allocate most of the amounts received under the Agreements to the reparation of victims of the wrongdoings, including other public authorities and agencies, and to adopt monitoring measures of such third parties with which Braskem comes to start negotiations in connection with the matters under the Agreements, seeking to avoid the duplication of compensation.

The amount of outstanding installments, after the CGU/AGU Agreement, discounting the installment paid on January 30, 2020, is approximately R\$1.5 billion and will be paid as follows:

1. CHF32,130 (R\$ 133,428) to the Swiss Office of the Attorney General, corresponding to four outstanding annual installments of CHF16,065 (R\$ 66,714) due on June 30 of each year as from 2020;
2. Approximately R\$900 million under the MPF Agreement and CGU/AGU Agreement, in three annual, equal and successive installments adjusted by the variation in the SELIC rate, payable on January 30 of each year as from 2021. To guarantee payment of the installments of these installments coming due, Braskem gave as collateral assets from its property, plant and equipment corresponding to one annual installment; and
3. R\$409,876 under the CGU/AGU Agreement, adjusted by the variation in the SELIC rate as from the execution date of such agreement, with the first installment of R\$284,665 payable on January 30, 2024 and the second, of R\$125,211, payable on January 30, 2025.

The Company also began negotiations with the Bahia State Prosecution Office, which also adhered to the MPF Agreement. The Company also began negotiations with the Rio Grande do Sul State Prosecution Office, which also adhered to the MPF Agreement. No additional payment is expected to be made by the Company to both offices. The Company concluded the process of adherence of authorities to the MPF Agreement. It will continue to collaborate with the competent authorities, while observing the confidentiality requirement established in said agreements.

The Agreements do not exempt the company from other third parties, with legitimate interest, seeking indemnity for damages caused by the facts covered by the Agreements, including other authorities that seek to impose new pecuniary sanctions or fines or initiate new investigations into the Company. Therefore, even if the Company does not anticipate the need for any additional payment, it cannot guarantee that the total amount agreed will be sufficient for full reparation of all victims.

The Company will continue to cooperate with the competent public authorities, while improving its compliance and anti-corruption practices.

In March 2020, based on the certification report issued by the independent monitors, the MPF confirmed the end of the monitorship, the effectiveness of the Company's compliance program and the fulfillment of the obligations under the MPF Agreement.

Subsequently, on May 13, 2020, the DoJ and the SEC confirmed the conclusion of the monitorship established under the agreements signed on December 21, 2016 ("Agreements") with said authorities. As per the Material Fact notice disclosed by the Company at the time, "the decision of the DoJ and SEC was based on a final report by the independent monitors that attested to the implementation, by the Company, of all the recommendations for structuring and executing its compliance program and that found said program in compliance with the standards established in the Agreements.

The Company is in compliance with all of its obligations under the Agreements.

## 26 Geological phenomenon - Alagoas

The Company operated, until May 2019, salt mining wells located in the city of Maceió, state of Alagoas, with the purpose of supplying raw material to its chlor-alkali and dichloroethane plant. Right after a geological phenomenon in the region in March 2018, the Company started studies through independent specialist institutions to identify the causes of the geological phenomenon and measures to be taken.

In May 2019, the Brazilian Geological Service (CRPM) issued a report on the phenomenon claiming its causes were related to Braskem's salt mining operations. This geological phenomenon of unknown causes is being investigated, which requires a series of studies. Given the soil instability in the districts of Pinheiro, Mutange, Bebedouro and Bom Parto and the risk for residents in the region, on May 9, 2019, Braskem decided to suspend its salt mining activities and the operation of its chlor-alkali and dichloroethane plant.

With support from independent institutions and nationally and internationally renowned specialists, the Company conducted and has been conducting studies focusing on (i) identifying the causes of the geological phenomenon; and (ii) analyzing the situation of the wells. The studies have been shared with the National Mining Agency (ANM), with which the Company has been maintaining constant dialogue.

On November 14, 2019, Braskem presented to the ANM measures for definitively shutting down its salt mining activities in Maceió, with the closure of its wells, and proposed the creation of a protective area surrounding certain wells as a precautionary measure to ensure public safety. These measures are based on a study conducted by the Institute of Geomechanics of Leipzig (IFG), in Germany, an international reference in the geomechanics of salt wells, and are being adopted in coordination with the Brazilian Civil Defense and other authorities.

On December 31, 2019, based on its assessment and on that of its external legal advisors, and considering the existing information, the dialogue with authorities and the best estimate of expenses with the various safety measures for residents, the Company recorded a provision of R\$3,383.067, of which R\$1,450.476 is under current liabilities and R\$1,932,591 is under non-current liabilities. Due to the inherent change in the assumptions related to the provisions arising from new facts and circumstances, execution time and extent of the action plans, the findings of future studies conducted by experts and the outcome of pending lawsuits, the provision may be adjusted over time to reflect new developments.

The aggregate amount of this provision could vary in accordance with the current phase of ongoing negotiations with the authorities for reaching a potential environmental agreement involving especially a solution for stabilizing the salt wells located in the region affected by the geological phenomena. For Braskem, the goal of a potential agreement is to afford greater legal security for its plan involving the actions being studied, with the suspension and/or termination of the processes currently in place for this material. The potential agreement is still highly uncertain and subject to the conclusion of ongoing negotiations and to approval by the Company and the competent Authorities. Therefore, the provisions recognized in these consolidated financial statements do not include the result of this potential agreement, since it is not possible to reliably estimate the amount or to ensure that the ongoing negotiations will be successful. The estimate of the economic impact of the potential agreement will depend on (i) any agreement on the environmental recovery plan and a detailed assessment of the estimates of the amounts to be disbursed, (ii) an analysis of the detailed scope of this plan to determine its correspondence to the initiatives and amounts for which provisions already have been accrued; and (iii) the moment of the execution of the plan and expenditures, which will impact the present value of obligations. All accounting impacts, if any, will be recognized in the period in which such agreement is executed.

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The main factors of the provision result from:

- a. Support for relocating and compensation for the residents of the Risk Areas, under the Agreement entered into with the State Prosecution Office (MPE), the State Public Defender's Office (DPE), the Federal Prosecution Office (MPF) and the Federal Public Defender's Office (DPU), see details of the Agreement entered into in item (i) below, as well as of the Protection Area, which was demarcated based on the extension of the radius of the wells with anomalies that were identified using sonar.

The provision in the amount of R\$1,687,700 encompasses expenses with actions such as:

- Reallocation, rent allowance, household goods transportation and furniture storage;
  - Negotiation of individual settlements for compensation of the residents affected.
- b. Actions for closing and monitoring the salt wells: based on the findings of sonars and geomechanics studies, Braskem has planned stabilization and monitoring actions for all 35 existing salt mining wells:
    - For four of them, the recommendation is that they be filled with solid material, a process that should take three years;
    - For the other 31 wells, the recommended actions are conventional closure, confirmation of the status of natural filling and monitoring;
    - For 15 wells, including the four to be filled with solid material, the recommendation is that a protection area be created in the surrounding area and that they be monitored.

The total expenses estimated for implementation of these measures in the 35 wells is R\$1,011,695, calculated based on the existing techniques and possible solutions for the current conditions of the wells, which could change in the future based on new studies and natural alterations in the structure of the wells over time;

- c. Other measures not covered by the Agreement are (i) actions related to the Technical Cooperation Agreements entered into with the Civil Defense; (ii) agreement with the Labor Prosecution Office (MPT) in the amount of R\$40 million (note 26.1 (ii)); (iii) matters classified as a present obligation for the Company, even if not yet formalized; and (iv) expenses with engaging external advisors and experts to conduct studies for understanding the geological phenomenon and supporting the execution of the actions recommended by the studies. The expenses estimated and included in the accounting provision related to these additional measures amount to R\$683,672 and are subject to changes as the studies and actions in the region advance.

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Under the terms of the Agreement, after the transfer of ownership of the properties, the Company undertakes to hire a third party specialized in private surveillance for the care and safety of the area and to adopt necessary measures to prevent proliferation of vectors of diseases to people and animals. The definition of the necessary measures for the recovery of areas potentially impacted by salt mining activities depends on diagnosis of the area and further discussion between the Company and the competent authorities (including ANM).

All obligations assumed under the Agreement do not constitute the recognition of culpability or liability by the Company for the relocation of the people from the risk areas. Braskem will continue to collaborate with the authorities, with the support of independent experts, to identify the causes of the geological events and the implementation of actions to ensure the safety of the communities in the affected districts.

The Company is negotiating with its insurers the coverage of its insurance policies. These negotiations are in the early stages. Therefore, the payment of compensation will depend on an assessment of the insurance coverage under these policies. Given the uncertainties regarding the matter, no payment of compensation was recognized in the consolidated financial statements of the Company.

## 26.1 Lawsuits pending

In the context of this event, the following lawsuits were filed against the Company:

### (i) Public-Interest Civil Action (ACP) filed by the Alagoas State Prosecution Office (MPE) and the Alagoas State Public Defender's Office (DPE) – Reparation for residents

This action sought a preliminary injunction for the freezing of R\$3.7 billion and the award of damages for losses caused to the residents of the districts of Pinheiro, Mutange and Bebedouro, which was estimated by Plaintiffs at R\$7.1 billion.

On January 3, 2020, the court ratified the Agreement to Support the Relocation of People in Risk Areas ("Agreement"), entered into by Braskem and the State Prosecution Office ("MPE"), the State Public Defender's Office ("DPE"), the Federal Prosecution Office ("MPF") and the Federal Public Defender's Office ("DPU"). The Agreement was ratified by the Federal Judge of the 3<sup>rd</sup> Court of the State of Alagoas and produced the following effects:

- (i) Unfreezing of R\$3.7 billion (\*) previously frozen from the cash balance of Braskem in the context of the Public-Interest Civil Action,
- (ii) Substitution of the guarantee insurance already offered by the Company to the Court, in the amount of approximately R\$6.4 billion, by two guarantee insurance in the aggregate amount of approximately R\$3 billion, of which R\$2 billion is to secure the Public-Interest Civil Action filed by the DPE and MPE and R\$1 billion is to secure the Public-Interest Civil Action filed by the MPF;
- (iii) Elimination of the risk of another freezing of accounts in connection with the Public-Interest Civil Action;
- (iv) Dismissal of the action in part with regard to the residents of the area envisaged in the Agreement who opt to enter into individual settlements with the Company to receive financial compensation for relocating from the area.

(\*) The unfreezing took place in January 2020. On December 31, 2019, the updated amount is presented in the caption judicial deposits in current assets in the amount of R\$2,571,683 and in non-current assets in the amount of R\$1,174,424 corresponding to the long-term portion of the payment schedule.

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The Agreement aims to regulate cooperative actions for the relocation of residents from the risk areas and for ensuring their safety without any recognition of fault or causal connection between the geological phenomenon and the activities of the Company. The Agreement area encompasses approximately 4,500 real properties and 17,000 residents, who will be benefited by the Financial Compensation and Support for Relocation Program (“Program”) previously implemented by Braskem only for residents affected by the implementation of the protection area.

The Program provides for relocation allowance, rent allowance, household goods transportation, costs with real estate agency, furniture storage costs and assistance from psychologists and social workers. A Residents Center was created with a structure dedicated exclusively to serving and supporting the residents of the districts located in the risk area.

Three Technical Cooperation Agreements were entered into with the Municipal Government of Maceió and the Civil Defense with the aim of establishing a mutual cooperation between the parties for activities to mitigate risks and to ensure public safety. The agreements encompass the execution of studies to understand the phenomenon (high-resolution seismic survey, analysis and seismic survey of the lake, airborne gravimetry, etc.), structure of the monitoring network in the districts and region of the salt wells, installation of a meteorological station, donation of equipment to the Municipal Civil Defense, among other things.

To implement the actions envisaged in the Agreement, the Company undertook to maintain R\$1.7 billion in a checking account, with minimum working capital of R\$100 million, whose transactions will be verified by an external audit company.

**(ii) Public-Interest Civil Action filed by the Alagoas State Labor Prosecution Office (MPT-AL) – Reparation for workers**

Public-Interest Civil Action with a preliminary injunction to freeze a total of R\$2.5 billion to guarantee any indemnification for material damages to workers affected by the geological phenomenon. In said lawsuit, the MPT-AL also claims indemnification of the workers for moral damages of R\$1 billion and other obligations in the amount of R\$125 million, totaling the value of R\$3.6 billion.

On October 10, 2019, the tenured judge of the lawsuit denied the injunction sought by the MPT-AL.

On February 14, 2020, the Company entered into an agreement with the Labor Prosecution Office (MPT) in the amount of R\$40 million for implementation of the Program for Recovery of Business and Promotion of Educational Activities for residents and workers from the districts affected by the geological phenomenon. The program consists of support for the construction of daycare centers and schools and for administering professional training programs, as well as support for the Civil Defense to hire skilled professionals to continue monitoring the risk areas in the districts affected.

With the agreement, the MPT agreed to end the public-interest civil action, releasing Braskem from all claims after the Company makes a judicial deposit of R\$40 million, which will be done within 10 business days as from ratification of the agreement by the judge, what occurred on March 3, 2020.

**(iii) Public-Interest Civil Action filed by the Alagoas State Federal Prosecution Office (MPF-AL) – Social-environmental reparation**

Public-Interest Civil Action against Braskem and other defendants seeking approximately R\$28.7 billion for social, environmental and property damages, as well as various other corrective and environmental compliance measures, safety plans and the suspension of the Company's government benefits.

In the preliminary injunction phase, the following main claims were made: (i) the accrual of an own private fund in the initial amount of R\$3.1 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\$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; (iv) a court-ordered freeze of any profits not distributed as of the date hereof; and (v) a suspension of financing with the Brazilian Development Bank (BNDES) and of government incentives, as well as on the prepayment of financial transactions with the BNDES.

In January 2020, the judge of the 3<sup>rd</sup> Federal Court of Alagoas denied the preliminary requests of the Alagoas State Federal Prosecution Office against the Company stated above.

The Management, supported by the opinion of the external legal advisors, classifies the probability of loss in this case as possible.

**(iv) Action for Damages – Pinheiro District Property**

Action for Damages filed by Construtora H. Lobo (under court-supervised reorganization), a Contractor that claimed it suffered damages and loss of profits due to an agreement to purchase from Braskem a property in the District of Pinheiro. Said agreement was terminated by Braskem due to lack of payment by the Contractor. Nevertheless, the Contractor claims that Braskem omitted information on the existence of structural problems in the deactivated salt mining wells located on said property. The plaintiff is claiming damages of R\$141 million.

The Management, supported by the opinion of the external legal advisors, classifies the probability of loss in this case as possible.

**26.2 Other expenses**

Due to the shutting down of its salt mining activities, the Company written-off the property, plant and equipment related to the wells in the amount of R\$35,078.

**26.3 Industrial activity**

Since the shutdown of its salt mining activities, the Company has been working to adapt its chlor-alkali plant to operate with solid salt to be acquired in the domestic market and/or imported from other regions. The Company expects to resume its industrial activities during the first half of 2020.

## 27 Benefits offered to team members

### 27.1. Short-term benefits

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Health care	181,466	162,338	140,553
Private pension	90,687	84,525	67,008
Transport	67,761	64,714	58,825
Feeding	35,677	33,537	30,916
Life insurance	7,997	5,964	
Training	26,261	27,463	18,285
Other	12,164	12,307	16,173
	<u><b>422,013</b></u>	<u><b>390,848</b></u>	<u><b>331,760</b></u>

### 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 13, 2019, the Board of Directors approved a new program, the "ILP Plan 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 approximately 573,000 shares. The program's grant date is March 19, 2019. 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 calculated in accordance with the origin of the agreement. For eligible persons of the Braskem S.A., the fair value is based on the quoted price of the class "A" preferred shares (R\$53.75). For eligible persons of subsidiaries abroad, the fair value is based on the quoted price of the American Depository Receipts - ADR (US\$14.80) at December 31, 2019.

The fair value, net of taxes, recorded on equity at December 31, 2019, is R\$13,573 (R\$6,406 at December 31, 2018).

## 27.2. Post-employment benefits

### 27.2.1. Retirement plans and health plans

For each of the below plans, the Company engaged a specialized company to prepare an actuarial report for measuring its future obligations. The assumptions adopted comply in full 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. On December 31, 2019, the plan had 38 active participants and 171 assisted participants (38 active participants and 172 assisted participants in 2018). Braskem America, due to the current financing level of the pension plan, was not required to contribute during 2019. Therefore, there were no contributions in 2019 (R\$20,544 in 2018). During 2019 and 2018, there were no contributions from participants.

#### (b) Braskem Alemanha (“Germany”)

The subsidiary Braskem Alemanha is the sponsor of the defined benefit plans and defined contribution plans of its employees. At December 31, 2019, the plan has 158 participants (152 in 2018) and no contributions were made by Braskem Alemanha in 2019 and 2018. The participants made no contributions in 2019 and 2018.

#### (c) Braskem Holanda (“Netherlands”)

The subsidiary Braskem Holanda is the sponsor of the defined contribution plans of its employees. At December 31, 2019, the plan has 8 participants (6 in 2018) and no contributions were made by Braskem Holanda in 2019 and 2018. The participants made no contributions in 2019 and 2018.

#### (d) Braskem Idesa

The subsidiary Braskem Idesa is the sponsor of defined benefit plan for its team members. On December 31, 2019, the plan was composed of 823 active participants (821 in 2018). The contributions Braskem Idesa made in the year amounted to R\$2,056 (R\$2,343 in 2018). During 2019 and 2018, there were no contributions from participants.

#### (e) 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).

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## (i) Amounts in balance sheet

	2019	2018
<b>Defined benefit</b>		
Novamont Braskem America	80,593	68,904
Braskem Idesa	11,408	
Braskem Alemanha and Netherlands	153,564	114,705
	<u>245,565</u>	<u>183,609</u>
<b>Health care</b>		
Bradesco saúde	224,852	90,679
	<u>224,852</u>	<u>90,679</u>
<b>Total obligations</b>	<u><b>470,417</b></u>	<u><b>274,288</b></u>
<b>Fair value of plan assets</b>		
Novamont Braskem America	(79,784)	(66,073)
Braskem Alemanha	(1,558)	(1,842)
	<u>(81,342)</u>	<u>(67,915)</u>
<b>Consolidated net balance (non-current liabilities)</b>	<u><b>389,075</b></u>	<u><b>206,373</b></u>

## (ii) Change in obligations

	2019	2018	2017
Balance at beginning of year	274,366	240,190	201,516
Health care	5,817	7,446	11,334
Current service cost	8,233	5,842	5,058
Interest cost	14,796	4,906	4,139
Benefits paid	(4,677)	(3,845)	(3,399)
Change plan	4,948	1,391	
Actuarial losses (gain)	161,250	(3,713)	9,661
Exchange variation	5,684	22,149	11,881
Balance at the end of the year	<u><b>470,417</b></u>	<u><b>274,366</b></u>	<u><b>240,190</b></u>

## (iii) Change in fair value plan assets

	2019	2018	2017
Balance at beginning of year	67,993	46,415	39,380
Actual return on plan assets	14,329	(3,200)	5,115
Employer contributions	285	20,544	4,069
Benefits paid	(3,966)	(3,712)	(2,915)
Exchange variation	2,701	7,868	766
Balance at the end of the year	<u><b>81,342</b></u>	<u><b>67,915</b></u>	<u><b>46,415</b></u>

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## (iv) Amounts recognized in profit and loss

	2019	2018	2017
Health care	5,817	7,446	11,334
Current service cost	8,233	5,842	5,058
Interest cost	14,796	4,906	4,139
Actuarial losses		2,077	6,041
	<u>28,846</u>	<u>20,271</u>	<u>26,572</u>

## Actuarial assumptions

	2019					2018					2017			
	Health insurance	United States	Mexico	Germany	Netherlands	Health insurance	United States	Germany	Netherlands	Health insurance	United States	Germany	Netherlands	
Discount rate	3.60	3.35	7.25	2.00	2.00	5.03	4.45	2.00	2.00	5.45	3.70	2.00	2.00	
Inflation rate	4.00	n/a	4.00	2.00	2.00	4.50	n/a	2.00	2.00	4.50	n/a	n/a	n/a	
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	n/a	
Rate of increase in future salary levels	n/a	n/a	5.00	3.00	3.00	n/a	n/a	3.00	3.00	n/a	n/a	2.50	2.50	
Rate of increase in future pension plan	n/a	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	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	n/a	3.50	n/a	n/a	n/a	3.50	n/a	n/a	n/a	
Duration	15.32	n/a	n/a	n/a	n/a	19.66	n/a	n/a	n/a	18.84	n/a	n/a	n/a	

## (v) Fair value of assets hierarchy

On December 31, 2019, 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.

## (vi) Sensitivity analysis

	Impact on the defined benefit obligation														
	Premise change					Premise increase					Premise reduction				
	Health insurance	United States	Mexico	Germany	Netherlands	Health insurance	United States	Mexico	Germany	Netherlands	Health insurance	United States	Mexico	Germany	Netherlands
Discount rate	1.0%	1.0%	1.0%	0.5%	0.5%	27,923	8,999	1,040	15,037	766	(34,866)	(11,012)	(1,246)	(16,701)	(852)
Real medical inflation	n/a	n/a	n/a	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	n/a	0.5%	0.5%	n/a	n/a	n/a	9,033	460	n/a	n/a	n/a	(8,519)	(434)
Rate of increase in future pension plan	1%	n/a	n/a	0.25%	0.25%	(5,559)	n/a	n/a	4,452	227	5,559	n/a	n/a	(4,320)	(220)
Life expectancy	1%	n/a	n/a	1 year	1 year	42,480	n/a	n/a	3,819	195	(33,494)	n/a	n/a	(3,986)	(203)
Mortality rate	n/a	10%	n/a	n/a	n/a	n/a	2,554	n/a	n/a	n/a	n/a	(2,814)	n/a	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%	739	157	(967)	(41)
Life expectancy	1.0%	1.0%	614	3,290	(511)	(2,594)
Rate of increase in future pension plan	1.0%	1.0%	116	430	(116)	(430)

## 27.2.2. Retirement plan - defined contribution

The Braskem S.A. and the subsidiaries in Brazil sponsor a defined contribution plan for its team members managed by Vexity, a private pension plan entity. Vexity 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.

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At December 31, 2019, the number of active participants in Vexy totals 5,550 (5,725 in 2018) and the contributions made by the sponsors in the year amount to R\$49,866 (R\$50,610 in 2018) and the contributions made by the participants amounted to R\$72,970 (R\$69,058 in 2018).

**28 Other financial liabilities**

The Company received, in June 2019, R\$499,999 from the assignment of an agreement for the supply of ethylene to a client. The product must be supplied from January to December 2020, and such supply is considered “highly probable” given the ongoing relationship with the client in terms of volumes higher than the supply flow of such agreement. The Company is not responsible for the solvency of the client.

The assignment of this agreement has no recourse or co-obligation for the Company, which is not responsible for repaying to the assignee, a financial agent, the amount received for the assignment if it complies with its obligation to supply ethylene.

**29 Equity**

**(a) Capital**

On December 31, 2019, 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		Amount of shares	
	Common shares	%	Preferred shares class A	%	Preferred shares class B	%	Total	%
Odebrecht	226,334,623	50.11	79,182,498	22.95			305,517,121	38.33
Petrobras	212,426,952	47.03	75,761,739	21.96			288,188,691	36.15
ADR (i)			33,984,766	9.85			33,984,766	4.26
Alaska			21,898,500	6.35			21,898,500	2.75
Other	12,907,077	2.86	132,995,570	38.53	500,230	100.00	146,402,877	18.36
Total	<b>451,668,652</b>	<b>100.00</b>	<b>343,823,073</b>	<b>99.64</b>	<b>500,230</b>	<b>100.00</b>	<b>795,991,955</b>	<b>99.85</b>
Treasury shares			1,226,599	0.36			1,226,599	0.15
Total	<b>451,668,652</b>	<b>100.00</b>	<b>345,049,672</b>	<b>100.00</b>	<b>500,230</b>	<b>100.00</b>	<b>797,218,554</b>	<b>100.00</b>

(i) American Depository Receipts traded on the New York Stock Exchange (USA).

**(b) Capital reserves**

This reserve includes part of the shares issued in Subsidiary's several capital increases. This reserve can be used to absorb losses, to redeem, reimburse or purchase shares, and to incorporate into the capital stock.

**(c) Profit reserve**

**(i) 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.

**(ii) Profit retention**

Under Brazilian Corporation Law, portions of the net income of the year not allocated for distribution to the shareholders or other reserve accounts must be allocated to the income retention account.

At the end of the year 2019, the Company used R\$2,767,965 of the balance of this reserve to absorb the adjusted loss in the period of 2019. On December 31, 2019, the balance of this reserve was R\$1,174,301.

**(d) 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. As common shares, only class "A" preferred shares will have the same claim on the remaining profit that exceed the minimum mandatory dividend of 6% 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. 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 the period, 8,159 treasury shares were delivered as payment for the LTI Program for employees who left the Company.

**(e) Profit allocation and dividends proposed to fiscal year 2018**

On October 3, 2019, the Annual Shareholders Meeting approved (i) the payment of the minimum mandatory dividends regarding the net profit assessed for the year 2018, in the amount of R\$667,419, paid on December 30, 2019; (ii) the capital budget for 2019; and (iii) the retention of R\$2,002,255, under Article 196 of Brazilian Corporation Law.

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## (f) Other comprehensive income

	Attributed to shareholders' interest							Non-controlling interest in Braskem Idesa	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
<b>On December 31, 2016</b>	<b>206,703</b>		<b>(9,404)</b>	<b>(7,105,377)</b>	<b>(539,518)</b>	<b>(43,351)</b>	<b>1,169,088</b>	<b>(6,321,859)</b>	<b>(548,601)</b>	<b>(6,870,460)</b>
Additional indexation										
Realization by depreciation or write-off assets	(40,678)							(40,678)		(40,678)
Income tax and social contribution	13,831							13,831		13,831
Deemed cost of jointly-controlled investment										
Realization by depreciation or write-off assets	(1,459)							(1,459)		(1,459)
Income tax and social contribution	496							496		496
Foreign sales hedge										
Exchange rate				(42,507)				(42,507)	118,179	75,672
Transfer to result				1,145,602				1,145,602	40,924	1,186,526
Income tax and social contribution				(355,960)				(355,960)	(47,731)	(403,691)
Fair value of Cash flow hedge										
Change in fair value					876,636			876,636	6,513	883,149
Transfer to result					(287,576)			(287,576)	9,632	(277,944)
Income tax and social contribution					(198,343)			(198,343)	(4,844)	(203,187)
Fair value of cash flow hedge from jointly-controlled					3,534			3,534		3,534
Actuarial loss with post-employment benefits, net of taxes						(8,654)		(8,654)		(8,654)
Goodwill on the acquisition of a subsidiary under common control										-
Foreign currency translation adjustment							51,445	51,445	(52,047)	(602)
<b>On December 31, 2017</b>	<b>178,893</b>		<b>(9,404)</b>	<b>(6,358,242)</b>	<b>(145,267)</b>	<b>(52,005)</b>	<b>1,220,533</b>	<b>(5,165,492)</b>	<b>(477,975)</b>	<b>(5,643,467)</b>
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)		(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					(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 (RPR)					(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) gain from investments			(65)					(65)	65	
<b>On December 31, 2018</b>	<b>151,214</b>	<b>5,957</b>	<b>(9,469)</b>	<b>(7,626,515)</b>	<b>(257,508)</b>	<b>(53,574)</b>	<b>2,166,875</b>	<b>(5,623,020)</b>	<b>(565,902)</b>	<b>(6,188,922)</b>

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	Attributed to shareholders' interest								Non-controlling interest in Braskem Idesa	Total
	Deemed cost and additional indexation of PP&E	Fair value adjustments of trade accounts receivable	Gain (loss) on interest in subsidiary	Foreign sales hedge	Fair value of hedge	Defined benefit plans actuarial Gain (loss)	Foreign currency translation adjustment	Total Braskem shareholders' interest		
	(ii)	(iii)	(i)	(iv)	(iv)	(v)	(vi)	interest		
<b>On December 31, 2018</b>	<b>151,214</b>	<b>5,957</b>	<b>(9,469)</b>	<b>(7,626,515)</b>	<b>(257,508)</b>	<b>(53,574)</b>	<b>2,166,875</b>	<b>(5,623,020)</b>	<b>(565,902)</b>	<b>(6,188,922)</b>
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	(1,338)							(1,338)		(1,338)
Income tax and social contribution	455							455		455
Fair value adjustments										
Accounts receivable		15						15		15
Foreign sales hedge										
Exchange rate				(507,464)				(507,464)	116,202	(391,262)
Transfer to result				1,585,480				1,585,480	66,787	1,652,267
Income tax and social contribution				(344,567)				(344,567)	(54,897)	(399,464)
Fair value of Cash flow hedge										
Change in fair value					7,150			7,150	(23,078)	(15,928)
Transfer to result					54,450			54,450	16,752	71,202
Income tax and social contribution					(21,703)			(21,703)	1,898	(19,805)
Fair value of cash flow hedge from jointly-controlled (RPR)					(978)			(978)		(978)
Actuarial loss with post-employment benefits, net of taxes						(109,492)		(109,492)		(109,492)
ILP Plan fair value										
Change in fair value		19,415						19,415	348	19,763
Income tax and social contribution		(5,842)						(5,842)		(5,842)
Foreign currency translation adjustment							220,228	220,228	(83,506)	136,722
Loss on interest in subsidiary							(50)	(50)	(34)	(84)
Effect of CPC 42 / IAS 29 - hyperinflation							(3,561)	(3,561)		(3,561)
<b>On December 31, 2019</b>	<b>123,614</b>	<b>19,545</b>	<b>(9,469)</b>	<b>(6,893,066)</b>	<b>(218,589)</b>	<b>(163,066)</b>	<b>2,383,492</b>	<b>(4,757,539)</b>	<b>(525,430)</b>	<b>(5,282,969)</b>

(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.

**30 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 29(e), 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 29(d) 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.

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The table below shows the reconciliation of profit or loss for the period adjusted for the amounts used to calculate basic and diluted earnings (loss) per share.

	2019	2018	Basic and diluted 2017
(Loss) profit for the year attributed to Company's shareholders of continued operations	(2,540,995)	2,827,650	3,856,564
<b>Distribution of priority dividends attributable to:</b>			
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 price of common shares		273,840	273,827
<b>Distribution of excess profits, by class:</b>			
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>
<b>Reconciliation of income available for distribution, by class (numerator):</b>			
Common shares	(1,441,839)	1,605,353	2,189,632
Preferred shares class "A"	(1,097,559)	1,221,994	1,666,581
Preferred shares class "B"	(1,597)	303	351
	<u>(2,540,995)</u>	<u>2,827,650</u>	<u>3,856,564</u>
<b>Weighted average number of shares, by class (denominator):</b>			
Common shares	451,668,652	451,668,652	451,668,652
Preferred shares class "A"	343,820,162	343,808,699	343,775,864
Preferred shares class "B"	500,230	512,660	578,330
	<u>795,989,044</u>	<u>795,990,011</u>	<u>796,022,846</u>
<b>(Loss) earnings per share (in R\$)</b>			
Common shares	(3.1922)	3.5543	4.8479
Preferred shares class "A"	(3.1922)	3.5543	4.8479
Preferred shares class "B"	(3.1922)	0.5910	0.6069

## Weighing of shares

	2019	
	Preferred shares	
	Class "A"	Class "B"
	Outstanding shares	Weighted average
Amount at beginning of year	343,814,914	343,814,914
Incentive long term plan payments with treasury shares	8,159	5,248
Amount at the end of the year	<u>343,823,073</u>	<u>343,820,162</u>

	2018			
	Preferred shares			
	Class "A"		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>

## 31 Net revenues

	2019	2018	2017
<b>Sales revenue</b>			
Domestic market			
Revenue	38,391,132	42,189,365	34,983,265
Rebates	(57,315)	(45,290)	(35,538)
	<u>38,333,817</u>	<u>42,144,075</u>	<u>34,947,727</u>
Foreign market			
Revenue	23,998,067	26,577,433	23,297,304
Rebates	(47,723)	(58,188)	(60,990)
	<u>23,950,344</u>	<u>26,519,245</u>	<u>23,236,314</u>
	<u>62,284,161</u>	<u>68,663,320</u>	<u>58,184,041</u>
<b>Sales and services deductions</b>			
<b>Taxes</b>			
Domestic market	(9,704,712)	(10,219,138)	(8,663,707)
Foreign market	(31,427)	(36,562)	(33,798)
<b>Sales returns</b>			
Domestic market	(138,749)	(148,918)	(125,153)
Foreign market	(85,748)	(258,836)	(100,789)
	<u>(9,960,636)</u>	<u>(10,663,454)</u>	<u>(8,923,447)</u>
<b>Net sales and services revenue</b>	<u>52,323,525</u>	<u>57,999,866</u>	<u>49,260,594</u>

Sales revenues represent the fair value of the amount received or receivable from the sale of products and services during the normal course of the Company's activities.

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 received 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 is 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>2019</u>	<u>2018</u>	<u>2017</u>
Brazil	28,523,327	31,801,222	26,147,559
United States	9,416,558	9,887,701	8,539,972
Mexico	2,335,198	4,168,140	3,408,385
Singapore	1,162,432	756,069	542,866
Germany	1,157,431	1,385,482	1,192,287
Argentina	1,104,044	1,166,191	1,336,440
Switzerland	759,189	315,254	415,729
Italy	690,422	650,605	604,546
Chile	610,454	686,646	554,237
Peru	551,967	540,495	493,654
China	542,209	884,233	692,558
Luxembourg	526,768	546,524	247,007
Netherlands	516,409	293,315	333,134
United Kingdom	359,937	366,328	202,830
Uruguay	359,049	155,571	122,251
Spain	344,433	329,458	282,854
Sweden	296,601	270,062	256,911
South Korea	279,900	314,517	339,430
Japan	240,579	245,208	126,956
Bolivia	231,848	250,048	163,862
France	225,986	135,094	166,314
Canada	201,635	290,453	235,612
Poland	200,563	260,449	231,716
Colombia	200,370	363,497	340,396
Paraguay	194,859	214,959	174,783
Taiwan	191,593	274,566	301,692
Belgium	179,648	122,230	324,222
Ecuador	119,070	313,857	316,134
Other	801,046	1,011,692	1,166,258
	<u>52,323,525</u>	<u>57,999,866</u>	<u>49,260,594</u>

**(b) Net revenue by product**

	<u>2019</u>	<u>2018</u>	<u>2017</u>
PE/PP	34,287,597	37,979,148	33,105,714
Ethylene, Propylene	3,743,581	4,283,709	3,351,805
PVC/Caustic Soda/EDC	2,692,778	3,167,390	3,066,879
Benzene, toluene and xylene	2,503,667	2,785,400	2,683,406
ETBE/Gasoline	2,319,253	2,928,993	2,433,360
Butadiene	1,609,264	2,023,465	1,819,387
Cumene	723,469	909,409	578,482
Naphtha, condensate and crude oil	505,804	476,311	135,165
Solvents	676,044	248,313	401,455
Other	3,262,068	3,197,728	1,684,941
	<u><u>52,323,525</u></u>	<u><u>57,999,866</u></u>	<u><u>49,260,594</u></u>

**(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 2019, 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

**32 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 2019, 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 2019, the amount was R\$67,796 (R\$81,863 in 2018).

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33 Other income (expenses), net

	Note	2019	2018	2017
	2.7		Restated	
<b>Other income</b>				
PIS and COFINS credits - exclusion of ICMS from the calculation basis	10(c)	1,904,206	235,919	
Fine on supply contract of raw material, net	(i)	375,020	386,020	
Insurance indemnity		18,286	100,876	
Fixed assets disposal results		11,140	93,814	
Tax Credits recovery		3,094	46,179	
Capital gain - sale of Quantiq				276,816
Other		96,688	164,414	38,118
		<u>2,408,434</u>	<u>1,027,222</u>	<u>314,934</u>
<b>Other expenses</b>				
Provision - geological event in Alagoas	26	(3,383,067)		
Leniency agreement	25			(375,476)
Provision for losses on the fixed asset		(158,320)	(44,420)	(205,929)
Recovery of environmental damage		(141,536)	(89,396)	(102,466)
Allowance for judicial claims		(136,135)	(83,280)	(119,919)
Programmed stop in plants		(108,192)	(91,380)	
Fine on sales contracts		(104,179)	(49,487)	
Other		(415,513)	(196,750)	(366,024)
		<u>(4,446,942)</u>	<u>(554,713)</u>	<u>(1,169,814)</u>

(i) The contractual penalty charged from a supplier for failing to supply feedstock to the subsidiary Braskem Idesa is R\$335,281 (R\$338,125 in 2018).

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## 34 Financial results

	2019	2018	2017
<b>Financial income</b>			
Interest income	708,542	530,007	512,051
Other	142,012	59,045	91,579
	<b>850,554</b>	<b>589,052</b>	<b>603,630</b>
<b>Financial expenses</b>			
Interest expenses	(2,191,765)	(2,084,780)	(2,219,503)
Monetary variations on fiscal debts	(232,612)	(33,429)	(191,101)
Discounts granted	(80,404)	(141,223)	(137,389)
Loans transaction costs - amortization	(465,000)	(89,982)	(64,771)
Adjustment to present value - appropriation	(348,930)	(296,065)	(284,992)
Interest expense on leases	(137,903)		
Other	(426,171)	(362,072)	(849,461)
	<b>(3,882,785)</b>	<b>(3,007,551)</b>	<b>(3,747,217)</b>
<b>Exchange rate variations, net</b>			
On financial assets	(31,137)	1,268,741	216,381
On financial liabilities	(1,693,383)	(3,525,724)	(1,015,143)
	<b>(1,724,520)</b>	<b>(2,256,983)</b>	<b>(798,762)</b>
<b>Total</b>	<b>(4,756,751)</b>	<b>(4,675,482)</b>	<b>(3,942,349)</b>

## 35 Expenses by nature and function

	2019	2018	2017
<b>Classification by nature:</b>		<b>Restated</b>	
Raw materials other inputs	(37,380,310)	(38,889,949)	(29,364,996)
Personnel expenses	(3,004,762)	(2,412,118)	(2,173,640)
Outsourced services	(3,242,373)	(2,306,048)	(2,120,001)
Depreciation, amortization and depletion	(3,632,265)	(2,990,577)	(2,928,855)
Freights	(2,204,453)	(2,275,375)	(2,058,574)
Costs of idle industrial plants	(309,742)	(138,242)	(67,593)
Provision - geological event in Alagoas	(3,383,067)		
PIS and COFINS credits - exclusion of ICMS from the calculation basis	1,904,206		
Leniency agreement			(375,476)
Other general and administrative expenses	(927,294)	(706,451)	(1,004,489)
<b>Total</b>	<b>(52,180,060)</b>	<b>(49,718,760)</b>	<b>(40,093,624)</b>
<b>Classification by function:</b>			
Cost of products sold	(45,879,118)	(46,576,657)	(36,177,408)
Selling and distribution	(1,783,455)	(1,689,179)	(1,446,153)
(Loss) reversals for impairment of trade accounts receivable	(7,069)	87,008	(13,455)
General and administrative	(2,224,180)	(1,793,185)	(1,434,272)
Research and development	(247,730)	(219,256)	(167,456)
Other income	2,408,434	1,027,222	314,934
Other expenses	(4,446,942)	(554,713)	(1,169,814)
<b>Total</b>	<b>(52,180,060)</b>	<b>(49,718,760)</b>	<b>(40,093,624)</b>

### 36 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.

The Company does not disclose assets by segment since this information is not presented to its Chief Operating Decision Maker ("CODM").

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## (b) Results by segment

	2019						
	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	Consolidated
<b>Reporting segments</b>							
Chemicals	27,172,288	(25,349,921)	1,822,367	(1,069,867)		(269,363)	483,137
Vinyls	2,692,778	(3,069,301)	(376,523)	(437,153)		(3,673,139)	(4,486,815)
Polyolefins	21,191,851	(18,494,520)	2,697,331	(1,439,229)		(151,351)	1,106,751
USA and Europe	10,044,306	(8,233,079)	1,811,227	(786,096)		9,215	1,034,346
Mexico	3,051,440	(2,504,012)	547,428	(351,199)		324,682	520,911
<b>Total</b>	<b>64,152,663</b>	<b>(57,650,833)</b>	<b>6,501,830</b>	<b>(4,083,544)</b>		<b>(3,759,956)</b>	<b>(1,341,670)</b>
Other segments	296,286	(188,335)	107,951	(44,548)		3,364	66,767
Corporate unit				(217,958)	10,218	1,775,246	1,567,506 (i)
<b>Braskem consolidated before eliminations and reclassifications</b>	<b>64,448,949</b>	<b>(57,839,168)</b>	<b>6,609,781</b>	<b>(4,346,050)</b>	<b>10,218</b>	<b>(1,981,346)</b>	<b>292,603</b>
Eliminations and reclassifications	(12,125,424)	11,960,050	(165,374)	83,616		(57,162)	(138,920)
<b>Total</b>	<b>52,323,525</b>	<b>(45,879,118)</b>	<b>6,444,407</b>	<b>(4,262,434)</b>	<b>10,218</b>	<b>(2,038,508)</b>	<b>153,683</b>
	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	Consolidated
<b>Reporting segments</b>							<b>Restated</b>
Chemicals	31,111,650	(27,523,702)	3,587,948	(784,450)		(52,006)	2,751,492
Vinyls	3,167,390	(2,908,371)	259,019	(177,344)		8,403	90,078
Polyolefins	22,483,866	(19,295,855)	3,188,011	(1,328,047)		(35,020)	1,824,944
USA and Europe	11,724,776	(9,152,847)	2,571,929	(642,006)		68,733	1,998,656
Mexico	3,770,506	(2,333,845)	1,436,661	(313,526)		322,588	1,445,723
<b>Total</b>	<b>72,258,188</b>	<b>(61,214,620)</b>	<b>11,043,568</b>	<b>(3,245,373)</b>		<b>312,698</b>	<b>8,110,893</b>
Other segments	292,435	(173,608)	118,827	(34,819)		(103)	83,905
Corporate unit	265,438		265,438	(334,420)	(888)	159,914	90,044
<b>Braskem consolidated before eliminations and reclassifications</b>	<b>72,816,061</b>	<b>(61,388,228)</b>	<b>11,427,833</b>	<b>(3,614,612)</b>	<b>(888)</b>	<b>472,509</b>	<b>8,284,842</b>
Eliminations and reclassifications	(14,816,195)	14,811,571	(4,624)				(4,624)
<b>Total</b>	<b>57,999,866</b>	<b>(46,576,657)</b>	<b>11,423,209</b>	<b>(3,614,612)</b>	<b>(888)</b>	<b>472,509</b>	<b>8,280,218</b>
	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 Consolidated
<b>Reporting segments</b>							
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
<b>Total</b>	<b>61,351,881</b>	<b>(48,000,599)</b>	<b>13,351,282</b>	<b>(3,123,950)</b>		<b>(531,532)</b>	<b>9,695,800</b>
Other segments	83,720	(65,743)	17,977	(13,391)		(2,430)	2,156
Corporate unit				(61,384)	39,956	(320,918)	(342,346) (ii)
<b>Braskem consolidated before eliminations and reclassifications</b>	<b>61,435,601</b>	<b>(48,066,342)</b>	<b>13,369,259</b>	<b>(3,198,725)</b>	<b>39,956</b>	<b>(854,880)</b>	<b>9,355,610</b>
Eliminations and reclassifications	(12,175,007)	11,888,934	(286,073)	137,389			(148,684)
<b>Total</b>	<b>49,260,594</b>	<b>(36,177,408)</b>	<b>13,083,186</b>	<b>(3,061,336)</b>	<b>39,956</b>	<b>(854,880)</b>	<b>9,206,926</b>

(i) Includes the amount of R\$1,904,206 related to PIS and COFINS tax credits – exclusion of ICMS from the calculation base (Nota 10(c)).

(ii) Includes gain from sale of “Chemicals distribution” segment in the amount of R\$276,816.

## (c) Property, plant and equipment and intangible assets by segment

	2019	2018
<b>Reporting segments</b>		
Chemicals	10,410,524	10,916,874
Polyolefins	5,077,335	4,985,337
Vinyls	2,121,085	2,334,270
USA and Europe	4,852,760	3,875,566
Mexico	12,020,051	11,835,170
<b>Total</b>	<b>34,481,755</b>	<b>33,947,217</b>
Unallocated amounts	595,514	553,655
<b>Total</b>	<b>35,077,269</b>	<b>34,500,872</b>

## 37 Insurance coverage

Braskem contracts insurance policies to cover 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) and Environmental Civil Liability, 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, Mexico and the United States/Germany and Mexico, which are valid through October 2021.

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.

	Maturity	Maximum indemnity limit		Amount insured	
		US\$ million	R\$ million	US\$ million	R\$ million
Units in Brazil	October 8, 2021	3,500	18,195	27,962	145,364
Units in United States and Germany	October 8, 2021	480	2,495	2,189	11,381
Units in Mexico	October 8, 2021	2,642	13,735	5,679	29,524
<b>Total</b>				<b>35,830</b>	<b>186,269</b>

The risk assumptions adopted are not part of the audit scope and, therefore, were not subject to audit by our independent auditors.

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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.

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 both Operational Risks and Environmental and General Civil Liability policies.

**38 Subsequent events**

- (a) As disclosed in note 26.1(i), in January 2020 there was the unfreezing of R\$3.7 billion previously frozen from the cash balance of Braskem, and in note 26.1(ii), on February 14, 2020, the Company entered into an agreement with the Labor Prosecution Office (MPT) in the amount of R\$40 million for implementation of the Program for Recovery of Business and Promotion of Educational Activities for residents and workers from the districts affected by the geological phenomenon. The program consists of support for the construction of daycare centers and schools and for administering professional training programs, as well as support for the Civil Defense to hire skilled professionals to continue monitoring the risk areas in the districts affected.
- (b) On March 19, 2020, the Board of Directors approved a new program, the "ILP Plan 2020," 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 2020, after the vesting period and subject to compliance with all necessary requirements, is approximately 1,548,000 shares. The program's grant date is April 1, 2020. The shares to be delivered by the Company to participants 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.
- (c) Braskem has been closely monitoring the impacts from the COVID-19 pandemic on its business and surrounding communities. As disclosed in the Notice to the Market dated March 20, 2020, Braskem has formed a crisis committee to establish global procedures focusing mainly on the health of people and the continuity of its operations. Some of the measures taken by the Company follow:
- (i) Recommending that all team members and contractors work from home;
  - (ii) Reducing by around 50% the number of team members and contractors working on its industrial assets, with operations using the smallest possible teams, while considering all rules for ensuring personal safety and maintaining operational reliability;
  - (iii) Recommending the suspension of visits by non-routine third parties and suppliers to Braskem's facilities, and banning access to Braskem's facilities by visitors or third parties returning from high risk areas;
  - (iv) Creating an agenda with clients and local communities to verify the products in its portfolio with a view to support the fight against the pandemic.

Moreover, in line with its primary value, Safety, the Company started operating its industrial assets with minimal teams. Capacity utilization rates in Brazil and the United States were temporarily reduced to adjust for the weaker demand and the destocking trends in the petrochemical and plastics production chains. The capacity utilization rates will accompany market demand and any new export opportunities that arise in other regions, especially with the restart of economies in Asia. The main effects were:

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- Brazil: ethylene production reduced to approximately 65% of the total annual capacity of 3.6 million tons;
- United States: polypropylene production reduced to approximately 85% of the total annual capacity of 1.6 million tons.

In this context, the Company has been adopting a series of cash-preservation measures to ensure the financial solidity and resilience of its business, which include:

- Drawing down the Revolving Credit Facility in the amount of US\$1 billion (R\$5.2 billion on March 31, 2020), which is due in 2023;
- Reducing fixed costs by around 10%;
- Paring back the investments planned for 2020 from US\$721 million (R\$3.7 billion) to approximately US\$600 million (R\$3.1 billion);
- Postponing the payment of social contribution charges in Brazil; and
- Optimizing working capital.

The Company also highlights the actions carried out jointly with its clients and partner companies to transform chemicals and plastic resins into items that are essential for combatting COVID-19, which include surgical masks, packaging for liquid and gel alcohol, bleach and 3D printing of bands for protective face shields; donations of LPG to field hospitals; actions to support the chain of clients and suppliers, particularly small and mid-sized companies; and donations of hygiene kits and food staples to local communities.

In the first quarter of 2020, the Brazilian real depreciated 29% against the U.S. dollar. The negative exchange variation will produce a cash effect upon maturity of the Company's liabilities, and as such is concentrated in the long term given the debt maturity profile and does not put at risk the liquidity position in context of the efforts to contain the COVID-19 pandemic.

Due to the uncertainties arising from the COVID-19 pandemic with regard to the global economy, it is not possible to accurately predict the adverse impacts on the equity and financial position of the Company and its subsidiaries after the reporting date. The following areas are more susceptible to impacts resulting from COVID-19 pandemic given the significant changes in the risks to which the company is exposed, among others: accounting estimates for the realization of assets, including the estimates for losses on trade accounts receivables, inventory impairment loss, deferred tax assets and other assets, or those related to the provision for liabilities.

(d) Naphtha Agreements with Petrobras

In June 2020, Braskem entered into new agreements with Petrobras for the supply of petrochemical naphtha to Braskem's industrial units in Bahia and Rio Grande do Sul. The agreements, which term is around five years after the expiration date of the current agreement, establish the supply of a minimum annual volume of 650 kton and, at the option of Petrobras, an additional volume of up to 2.8 million tons per year, at the price of 100% of the international reference ARA.

In addition, to guarantee access to the naphtha logistics system in Rio Grande do Sul, Braskem also renewed the storage agreement with Petrobras and the transport and storage agreement with Petrobras Transporte S.A.